

Heritage Statement

in support of Heritage Western Cape Notification of Intent to Develop (HWC NID
– Section 38)

(HWC Case No.: HWC25062705 and DEA&DP Ref. No. 16/3/3/6/7/1/D6/35/0133/25)

Proposed Tergniet Residential Development on Farm Portion 38/136, Mossel Bay Municipality, Western Cape Province

for

The Applicant: Pieter De Clerk, Portion 38 of farm 136, Tergniet – Robertson Avenue, Phone: 0825543274, Email: pietdc@stagafrican.com on behalf of Marthinus Theodorus Janse van Rensburg & Martha Maria Aletta Janse van Rensburg (1/7 share) and Heanesch BK, Reg no CK 93/23747/23 (6/7 share)

by



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30 June 2025, revised with inputs on 2 July 2025

Summary - Conclusions & Recommendations

The following conclusions and recommendations are arrived at after reviewing information obtained through:

- previous heritage studies and HWC applications in the vicinity of 38/136,
- Consultation with Mr Hannes Lourens of Element Consulting Engineers regarding geology and geotechnical studies in the vicinity of 38/136,
- Prof John Pether's palaeontological inputs,
- SG Diagrams,
- historic and Google Earth aerial photographs, and
- a site inspection (archaeological walk-through).

"Palaeontological Sensitivity of the widespread Qg coversands generally is rated as LOW by SAHRIS. The Waenhuiskrans Formation is rated VERY HIGH due to previous fossil bone finds in calcreted aeolianites in coastal developments" (Pether 2025, pg. 3). "Due to the thickness of the Qg coversands the volume of disturbance of the Waenhuiskrans Fm. is unlikely to be substantial, reducing the possibility of fossil bone finds and reducing the potential palaeontological impact of the proposed development on the Waenhuiskrans Fm. to a LOW level" (Pether 2025, pg. 3).

"The intensity of impact of the proposed development on fossil resources is rated as LOW and further palaeontological interventions are not necessary at this stage. Although sparse, an occurrence of fossil material, or buried archaeological material, cannot be entirely dismissed. It is advisable that a protocol for finds of bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the project, basically "If fossil shells or bones are uncovered during the Construction Phase, temporarily stop work at the spot and report to Heritage Western Cape"" (Pether 2025, pg. 3).

Links to the HWC FFP are as follows:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

https://www.hwc.org.za/sites/default/files/3_12%20Fossil%20Finds%20Poster.pdf

The study area has been impacted by agricultural activities and cultivation since at least 1939 and likely considerably earlier. The entire site is heavily impacted by mole activity affecting surface sediments to a depth of about 1 to 1.5 meters and thus compromising the context of surface sediments. Two roads have run through the property in colonial and modern times as have bulk services infrastructure and a railway line lies immediately south of 38/136. It follows that the site is transformed and is situated amidst existing and pending residential developments.

This basic investigation has determined that no colonial or pre-colonial heritage resources of value occur on 38/136. The historic railway to the south and old house on 30/136 to the west are protected by the NHRA but will not be impacted by the proposed development.

Heritage studies conducted by this author a few hundred meters to the east of 38/136 and in the same spatial, environmental and geological setting yielded no heritage resources (Nilssen 2007 / in prep. 2021). Similarly, an archaeological investigation conducted by this author some 2 km to the ENE yielded no tangible heritage resources (Nilssen 2022c). In the unlikely event that Stone Age implements are present on or in surface sediments, then they are expected to be of low local significance (Grade IIIC) and Not Conservation Worthy.

Because no significant heritage resources are associated with 38/136, the site does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

The site is not visible from the R102 or N2 (nearest scenic routes) and is only visible from Robertson Avenue and the immediate surroundings, which consists of residential developments. Nevertheless, the pre-colonial / agricultural / rural landscape and aesthetic value of Tergniet is already transformed and compromised by a variety of developments in the area over the last 80 years or so. Consequently, the proposed residential development of 38/136 is in keeping with surrounding developments and will have a negligible to zero impact on the visual / aesthetic value of the area.

The positive socio-economic impact, including short-, medium- and long-term jobs as well as the growing need for residential and commercial (mixed use) space in the Mossel Bay area outweigh the negligible to zero negative impacts this project may have on heritage resources.

Because of the above, and because there is no reason to believe that heritage resources of value will be impacted by the proposed activity on 38/136, it is recommended that the proposed activity be approved in full, and that a Heritage Impact Assessment is not warranted for the project.

Nevertheless, it is recommended that Heritage Western Cape consider and/or require that the following be included in the Environmental Authorisation / Environmental Management Program, if the project is approved:

- although not requiring further Palaeontological investigation, in accordance with inputs from Prof Pether, the chance finds or Fossil Finds Procedure (FFP – see links above) should be included in the Environmental Authorisation / Environmental Management Program (EMPr) for the Construction Phase of the project,
- due to the findings of this and previous archaeological studies and geotechnical test excavations, archaeological monitoring is NOT recommended, but,
- if any human remains or significant archaeological materials are exposed during mining 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.

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1. Name, Bio-sketch and Declaration of Specialist

I, Peter Nilssen (PhD in archaeology, University of Cape Town, 2000), herewith confirm that I am a Professional member - in good standing - of the Association of Southern African Professional Archaeologists (ASAPA), including the Cultural Resource Management section of the same association since 1989 (ASAPA professional member # 097). I am an accredited Principal Investigator for archaeozoology (specialist analysis), coastal, shell midden and Stone Age archaeology; Field Director for Colonial Period archaeology; and Field Supervisor for Iron Age archaeology and Rock Art. I have worked as a professional archaeologist in Cultural Resource Management since 1989 and have completed more than 310 heritage-related impact assessments and mitigation projects as Principal Investigator.

As the appointed independent specialist (archaeologist) for this project hereby declare that I:

- act as an independent specialist in this application,
- regard the information contained in this report as it relates to my specialist input/study to be true and correct,
- do 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 and will not have no vested interest in the proposed activity proceeding,
- 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,
- am 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, and
- am aware that a false declaration is an offence in terms of regulation 48 of GN No. R. 982.



Signature of the specialist:

Date: **30 June 2025**

2. Introduction & Background

The proposed development of Farm Portion 38/136 (hereafter 38/136) is described in detail in the HWC NID application form and is not repeated here. The project entails 144 residential erven on ~6 ha on either side of Robertson Avenue in Tergniet, Mossel Bay Municipality. The environmental application, currently a Pre-Application Basic Assessment process, is being facilitated by Natalie Sharp of Digital Soils Africa (hereafter DSA) who compiled a Screening Tool Report for the project (Sharp 2025). Because the proposed development footprint is larger than 5000 m², Section 38(1)(c)(i) of the National Heritage Resources Act (Act 25 of 1999, NHRA) is triggered, resulting in the requirement for a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC). Through DSA, the applicant, Mr Pieter De Clerk appointed this author to assist with the heritage process and application to HWC.

This document is not a Heritage Impact Assessment, but rather, is a scoping report that provides additional information in support of the NID application and motivates the recommendations made therein.

This Heritage Statement and the accompanying NID application form serve to inform HWC about the proposed development activity and to make recommendations regarding the potential impact on heritage resources and the requirement for any further specialist investigations. This report, the NID application form, and accompanying documentation should be read together as information is not always repeated.

The purpose of this Heritage Statement is to report the results of a basic palaeontological investigation, a site inspection and basic review of background information and previous heritage-related studies with the aim to:

- 1) assist HWC in their decision-making process to ensure that potentially significant heritage resources are investigated and not overlooked, and that unnecessary heritage studies are not undertaken, and
- 2) to assist the applicant with the heritage application process, to avoid expenses on unnecessary specialist studies, and to avoid or minimize later delays and costs resulting from the chance discovery of previously undetected and significant heritage resources.

For the above reasons, HWC recommends that NID applications should be prepared with the assistance of suitably qualified and accredited heritage professionals.

Based on information submitted here as well as its own sources and expertise, HWC will decide and advise on the way forward regarding the protection and management of heritage resources in accordance with the NHRA.

3. Site Location and Development Proposal

38/136 is located on either side of Robertson Avenue in the suburb of Tergniet, some 14 km NNE of central Mossel Bay in the Western Cape Province with the centre of the property at approximately 34° 4'0.02"S 22° 11'45.22"E (WGS 84, see Locality Map and Figures 1 & 2). 38/136 is bounded by an existing sewer line and several residential Erven in the North including RE/790, 832 through 838, and 856 through 858, Erven 859 and 860 as well as Galjoen Street in the East, the railway reserve (5/136) in the South, and a road reserve and 30/136 in the West (Figure 3). 38/136 is 6.32 ha in extent and consists of two combined properties registered to Marthinus Theodorus Janse van Rensburg & Martha Maria Aletta Janse van Rensburg (1/7

share under Title Deed T6155/2016) and Heanesch BK, Reg no CK 93/23747/23 (6/7 share under Title Deed T45499-95) as indicated in SG Diagram 4652/47. Both owners are represented in this application by Mr. Pieter De Clerk (ID 5706235017081). See accompanying proof of ownership and letter of mandate for Mr Pieter de Clerk.



Locality Map. General location of the study area (yellow marker) NNE of Mossel Bay, Western Cape Province. Courtesy of Google Earth 2025.



Figure 1. Enlarged from Locality Map showing the location of 38/136 (green polygon) in Tergniet and relative to the N2 and R102 roads, Western Cape Province. Courtesy of Cape Farm Mapper. (A4 version below)



Figure 2. Enlarged portion of 1:50 000 topographic map 3422AA 1998 Mossel Bay showing 38/136 (yellow marker and red polygon). Courtesy of the Chief Directorate Surveys and Mapping, Mowbray and Google Earth 2025. (A4 version below)



Figure 3. Area enlarged from Figure 1 showing 38/136 (green polygon) and surrounding properties and developments. Courtesy of Cape Farm Mapper. (A4 version below)

The environmental application classification selected for this project is the Transformation of land | Indigenous vegetation for the purpose of a residential development (Sharp 2025). The layout of the proposed development of 144 erven on roughly 6 ha of land on either side of Robertson Avenue is shown in Figure 4. As mentioned above, a more detailed description of the proposed development is given in the accompanying HWC NID application form and is not repeated here.



Figure 4. Proposed residential development on 38/136. Courtesy of the applicant. (A4 version below)

4. Study Area

38/136 is currently zoned agriculture, but is impacted by transport and bulk services infrastructure, surrounded by transport and bulk services infrastructure as well as residential developments and thus the proposed development is in keeping with developments in the immediate surroundings. One small holding (30/136) is situated to the west of the road reserve bounding 38/136 in the west (Figure 3). In addition to the above, the property was transformed by agricultural activities from at least 1939 (see below) resulting in the regrowth of a mixture of indigenous and exotic plant species as well as the disturbance of surface sediments.

Vegetation cover is near total though sufficient areas were accessed on foot and archaeological visibility was sufficient for the purpose of this investigation and assessment. The property is situated between two roughly parallel coastal dunes with its bulk lying in the depression between the dunes. The slopes are gentle to moderate and suitable for development. Surface sediments are dune cover sands with a moderate humic content near the surface and there are no gravels, calcretes, aeolianites or hard geological inclusions. Mole activity is significant across the entire site and hence surface sediments are heavily

bioturbated. Further details on geological sediments are given below as copied from Prof Pether's brief palaeontological report (Pether 2025).

Examples of the immediate surroundings, study area, and affected environment are shown in Figures 5 through 15. Further locational and contextual information is shown in Figure 3. Directions of views are indicated on photographs with abbreviated compass bearing names such as E = East, SE = South-East, ENE = East-North-East, and so on.



Figure 5. Top: View toward 38/136 from Blesbok Street with part of 38/136 distantly visible amid existing developments (white ellipse). Bottom: View toward 38/136 from Robertson Avenue.



Figure 6. Panoramic views onto 38/136 from near the northern (top) and southern boundaries (bottom).



Figure 7. Panoramic views onto 38/136 from the proximity of property corners.



Figure 8. Panoramic view onto 38/136 from the SE corner of the property.

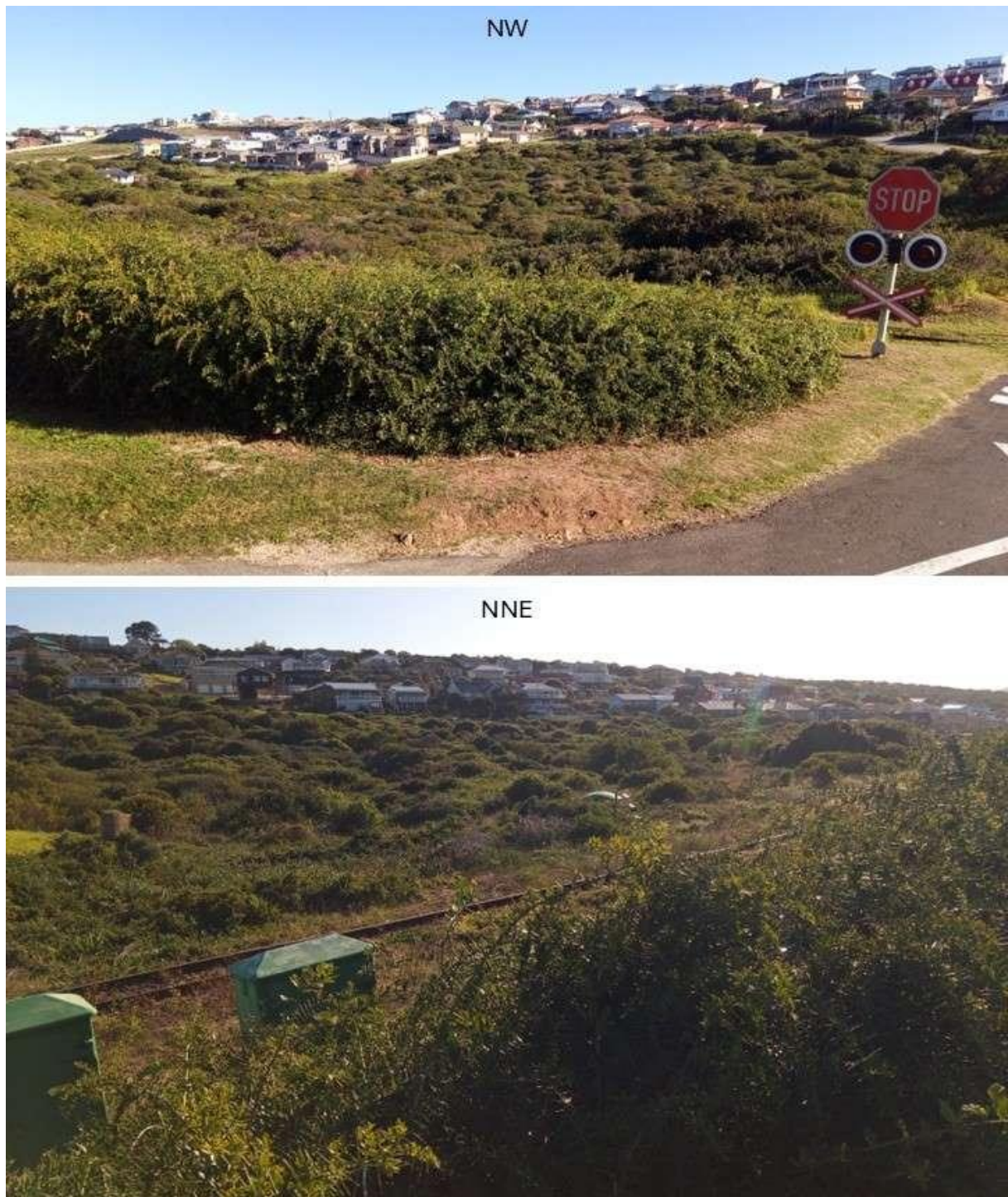


Figure 9. Examples of the receiving environment showing surrounding developments, vegetation cover and topography. Both images taken from South of the railway line.



Figure 10. Example of the receiving environment showing storm water outlet with resulting erosion gully, vegetation cover and topography.



Figure 11. Examples of the receiving environment showing vegetation cover, mole heaps, exposed surfaces and topography.



Figure 12. Examples of the receiving environment showing existing bulk service infrastructure, vegetation cover, exposed surfaces and mole heaps.



Figure 13. Examples of the receiving environment showing dense vegetation cover (top) and exposed surfaces with mole heaps (bottom).



Figure 14. Examples of the receiving environment showing existing bulk services infrastructure, vegetation cover, and exposed surfaces with mole heaps.



Figure 15. Examples of the receiving environment showing vegetation cover, exposed surfaces with mole heaps (top) and imported gravels exposed in mole heaps that are likely associated with the early road that transected the property in a N-S trajectory from at least 1939 to 1974 (bottom).

5. Background Information, Previous Heritage Studies & Heritage Resources

Palaeontology

A DFFE screening tool report was obtained by DSA as part of the initial stages of the environmental application process (Sharp 2025). The screening tool map shown in Figure 16 indicates that the palaeontology sensitivity is MODERATE.

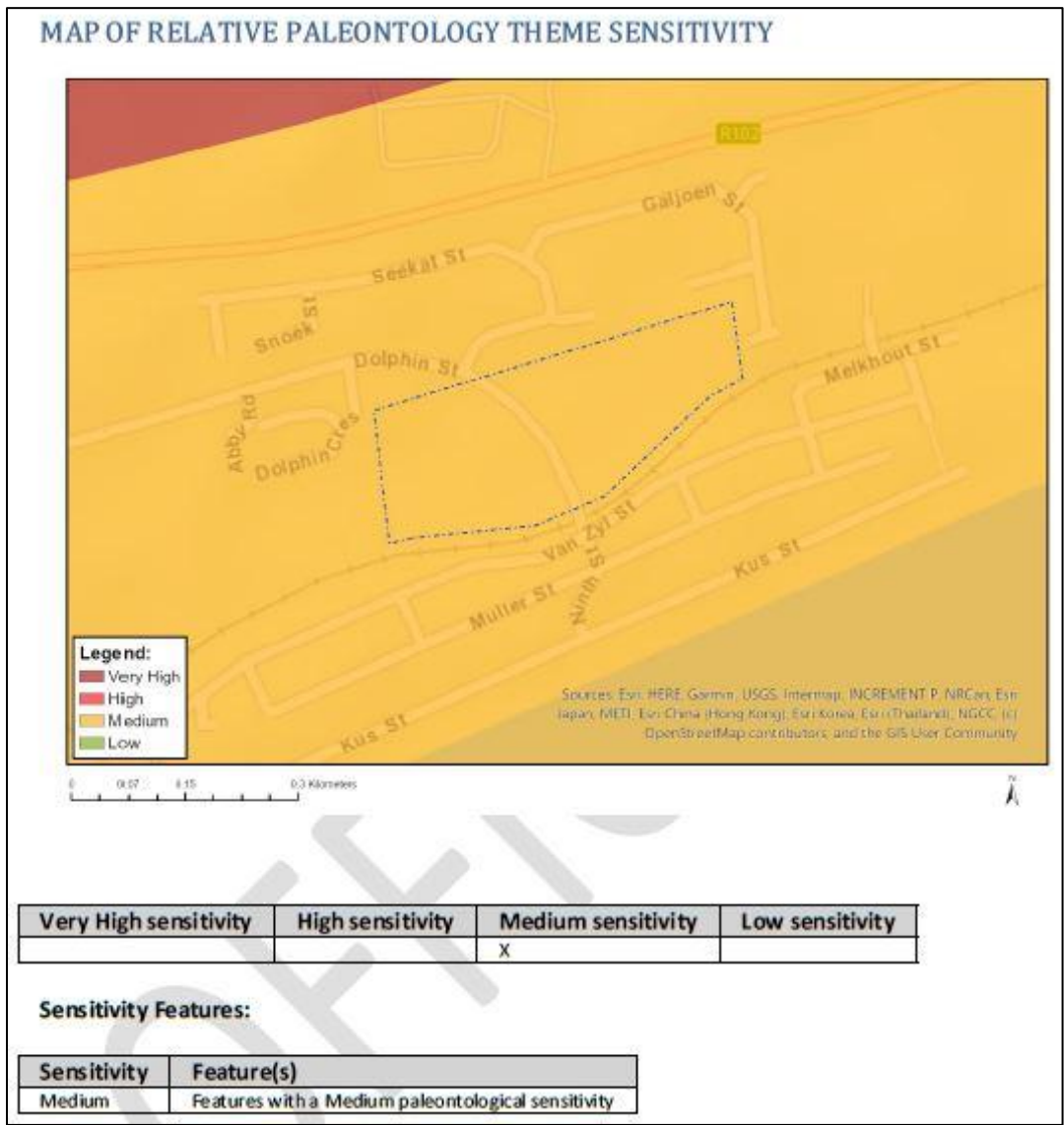


Figure 16. Map of relative palaeontology theme sensitivity from the DFFE screening tool report (Sharp 2025). 38/136 is represented by the dashed blue line.

The SAHRIS PalaeoSensitivity map shows that the property is clear / unshaded, meaning that sensitivity is unclassified and that a minimum of a desktop Palaeontological study is required (Figure 17). Consequently, Prof John Pether was commissioned for professional input (Pether 2025).

The following palaeontological inputs were obtained and are copied in full and verbatim from Prof John Pether’s brief palaeontological impact statement, but figure numbers are altered to

follow the sequence of this report (Pether 2025). Prof Pether's complete report is included with this submission and reads as follows:



Figure 17. SAHRIS PalaeoSensitivity Map shows that 38/136 (red polygon) is clear / unshaded (Pether 2025, Figure 3).

Affected Formations

The site is a seaward slope extending from about 40 m asl. down to a swale about 23-25 m asl. behind the higher ground of the Holocene dune cordon. The affected formations are primarily the surficial, loose Qg coversands and potentially the buried upper capping calcrete and uppermost part of the underlying Waenhuiskrans Fm. aeolianite (Figure 18). Deep excavations at lower elevations for sewerage pump stations are unlikely to intersect the marine deposits which occur at greater depth.

Anticipated Impacts

The development site is situated on "Aeolian sand" according to the Oudtshoorn geological map. The "Aeolian sand" and "Fixed dunes and dune rock" polygons of the outdated 250k Oudtshoorn geological map have been left Unclassified/clear on the SAHRIS Palaeo Map (Figure 17). However, in the wider region, the Palaeontological Sensitivity of the widespread Qg coversands generally is rated as LOW by SAHRIS. The Waenhuiskrans Formation is rated VERY HIGH due to previous fossil bone finds in calcreted aeolianites in coastal developments.

The shallow depths of most of the development excavations for construction and infrastructure will primarily affect the Qg coversands. The capping calcrete and uppermost part of the underlying Waenhuiskrans Fm. aeolianite could possibly be intersected in places, but would seem unlikely in most of the construction excavations due to the thickness of the Qg coversands. Notably, evidence of unearthed calcrete is lacking in adjacent built developments.

Whereas in developments where the calcrete is intersected in foundation and infrastructure excavations chunks of calcrete are in evidence, such as along road verges, as rockery features, used in wall features and in vacant lots. Due to the thickness of the Qg coversands the volume of disturbance of the Waenhuiskrans Fm. is unlikely to be substantial, reducing the possibility of fossil bone finds and reducing the potential palaeontological impact of the proposed development on the Waenhuiskrans Fm. to a LOW level.

Fossil bones are overall scarce in the coversands, but are more common in the near-coastal setting, often in an archaeological context or in hyaena bone accumulations. The fossils are expected to be of the mainly extant, late Quaternary fauna. The late Quaternary fauna is fairly well known from archaeological sites, sites associated with water sources and hyaena lairs and includes species which became extinct at the end of the Last Ice Age 13-6 thousand years ago and extant species which no longer occur in the region.

Mr Hannes Lourens of Element Consulting Engineers has done work related to geological sediments in the immediate surroundings of 38/136 since 2008 and concurs with Prof Pether's assessment and has not seen any palaeontological or archaeological resources in the sands of the surrounding area up to a maximum depth of up 5 m below ground surface (Lourens pers. comm. 2025).

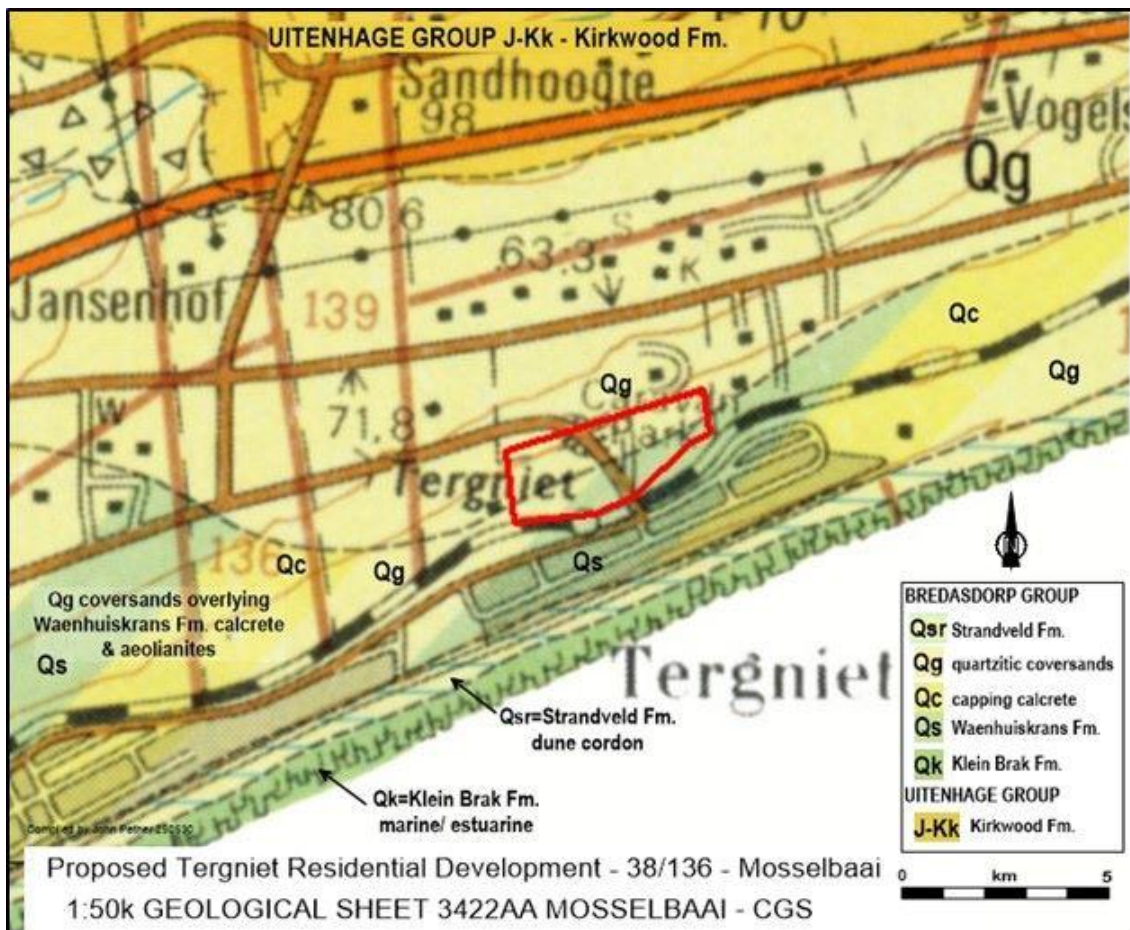


Figure 18. Geological context of the proposed development. The coastal zone surface geology is a mix of coversands (Qg) and capping calcrete outcrops (Qc) of the Waenhuiskrans Formation aeolianite (Qs), depicted as a generalized hatch pattern. The dune cordon ridge (Strandveld Fm.) overlies the eroded edge of the Waenhuiskrans Fm. aeolianites and the underlying Klein Brak Fm. raised beach deposits which are exposed along the shoreline. (Pether 2025, Figure 2).

Recommendations

The intensity of impact of the proposed development on fossil resources is rated as LOW and further palaeontological interventions are not necessary at this stage.

Although sparse, an occurrence of fossil material, or buried archaeological material, cannot be entirely dismissed. It is advisable that a protocol for finds of bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the project, basically “If fossil shells or bones are uncovered during the Construction Phase, temporarily stop work at the spot and report to Heritage Western Cape.

Links to the HWC FFP are below:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

Heritage Western Cape will assess the information and liaise with an archaeological or palaeontological specialist, as appropriate.

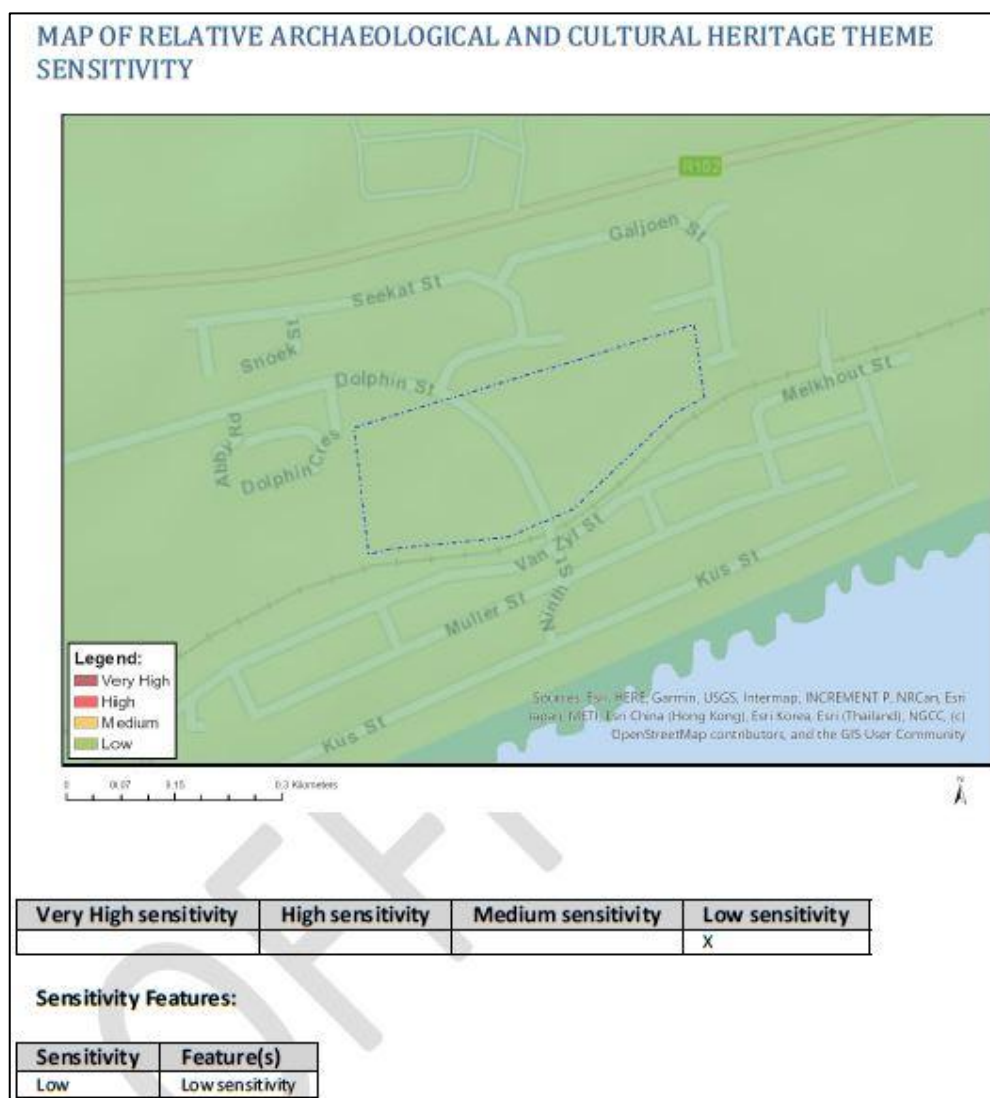


Figure 19. Map of relative archaeological and cultural heritage theme sensitivity from the DFFE screening tool report (Sharp 2025). 38/136 is represented by the dashed blue line.

Archaeology

The DFFE screening tool map and table for the archaeological and cultural heritage theme sensitivity shown in Figure 19 indicates that the proposed development footprint falls within an area of low sensitivity (Sharp 2025). The findings of the basic investigation conducted here concurs with the DFFE screening tool report's attribution of LOW sensitivity with respect to archaeological and cultural heritage resources on 38/136.

While a detailed desktop study is beyond the scope of a NID application, updated extracts of an existing desktop study and literature review done for a project in the general area is pasted below for interest and to provide broader context regarding heritage resources (Nilssen 2022a, Pg. 23 to 27, also see Nilssen 2025).

Nevertheless, a few studies done in the immediate surroundings of 38/136 identified no heritage resources (Nilssen 2007 & 2022c and Kaplan 2003b) while a few Stone Age implements field-rated as Grade IIIC and Not Conservation Worthy were identified to the NE and north of the N2 (Nilssen 2025, see Figure 20).



Figure 20. Annotated SAHRIS Finds Report Map with added study on far right (Nilssen 2022c). Heritage-related studies in the immediate surroundings of 38/136 (yellow marker & red polygon) include 25146 (Nilssen 2025), MAPID 01912 (Nilssen 2007) and MAPID 02792 (red octagon – Kaplan 2003).

“This author has worked in the Mossel Bay area for more than 20 years and has considerable experience with the archaeological record of the coastal and near-coastal regions of the Western and Eastern Cape provinces of South Africa. In general, the coastal strip is rich in archaeological remains due to predictable and reliable food sources in the intertidal zone as well as an abundance of fresh water sources such as rivers, streams, seeps and springs. Shell middens are mostly found adjacent to rocky intertidal zones, and within a few hundred meters of the present shoreline. Archaeological sites occur either in the open or in caves, rock shelters and overhangs. The latter contexts provide the best opportunities for the accumulation and preservation of remains, while open sites are generally more dispersed and prone to disturbance, erosion and poor preservation of organic remains.

In descending age, the archaeological record in the area includes:

- Early Stone Age (ESA) stone implements such as hammer stones, cores, flakes and core tools (hand axes, cleavers, etc), but at this time no ESA sites with associated organic remains are known to occur in this area,
- Middle Stone Age (MSA) sites with stone artefacts, cultural and food remains are found in caves, such as those in the Provincial Heritage Site of the Pinnacle Point Site Complex west of Mossel Bay, but when they occur in the open, they are normally lacking in organic remains,
- Later Stone Age (LSA) sites with artefacts, cultural and food remains are also present in some of the fore-mentioned caves as well as open sites such as shell middens normally associated with rocky intertidal zones,
- pastoralist or herder (pottery period) sites may occur in caves or in the open and pottery and the remains of sheep are also commonly found in shell middens; and
- colonial period sites include shipwrecks, farmsteads, structures, transport infrastructure, middens, burials and cemeteries among others.

Prehistoric human burials, usually of LSA or more recent age, may occur anywhere in the landscape where soft sediments are present, and are sometimes at or near sites of human occupation both in the open and in caves or rock shelters.

The approximate dates for these phases of hominin and human occupation of the coastal and near coastal zone of the Western and Eastern Cape provinces is as follows:

- ESA = from about 2 million years ago till about 300 000 years ago,
- MSA = 300 000 years ago till between about 40 000 and 20 000 years ago,
- LSA = from between about 40 000 and 20 000 years ago till about 2000 years ago,
- pastoralist or herder = 2000 years ago till present or arrival of colonists, and
- colonial period = from late 15th Century (1488 landfall of the seafarer Bartolomeu Dias at Mossel Bay) till present" (Nilssen 2022a Pg. 23 & 24).

"In archaeological circles, and before significant discoveries were made at the Pinnacle Point Site Complex (now a Provincial Heritage Site and pending World Heritage Site status), Mossel Bay was perhaps best known for having hosted one of the earliest archaeological excavations in South Africa. The Provincial Heritage Site of Cape St. Blaize Cave (CSBC) is situated beneath the lighthouse at The Point of Mossel Bay. The cave was first excavated by George Leith in 1888 and then again by Goodwin and Malan in 1932 (Leith, 1898 and Goodwin & Malan, 1935).

Leith's work in 1888 consisted primarily of collecting certain stone artefacts and excavating a few holes (Leith 1898). Collectively, the stone artefacts recovered by Goodwin, Malan and Leith, among others, were used to describe and define the MSA Industry from Cape St. Blaize Cave. As a result, the Mossel Bay region is well known in Stone Age studies because it lent its name to one of the first formally recognized stone tool industries in South Africa, namely, the Mossel Bay Industry.

The last archaeological excavations in CSBC by Goodwin and Malan in 1932 revealed that the upper deposits are badly disturbed, but that part of the lower MSA material, dating to around 60 000 years ago or earlier, is still intact (Goodwin & Malan 1935). No LSA material or microlithic stone artefacts dating to the last 20 000 years were found and the excavators do not mention the presence of pottery, which would indicate the presence of KhoeKhoen (KhoeKhoen) pastoralists during the last 2000 years. These early excavations used coarse,

and now outdated excavation techniques, and excavated material was sieved through coarse or large-grain sieves. Excavated material included stone artefacts, animal bones and a few fragments of human bone. Shellfish was not found in the MSA layers suggesting that when occupied in the MSA, the sea was a considerable distance from the cave. Due to large rock-falls from the cave ceiling, the excavations could not reach bedrock, but they suggest that earlier occupations are likely to be preserved in the cave. After these investigations, archaeological research in and around Mossel Bay effectively stopped until 2000.

Since the initial discovery of numerous Stone Age archaeological sites some 9 km west of Mossel Bay by Kaplan and Nilssen in 1997 (Kaplan, 1997), Pinnacle Point has been under rigorous archaeological and palaeo-scientific research that began in 2000 (Marean & Nilssen, 2002 and Marean *et al.* 2004). Dozens of research articles were published on the archaeological, geological and palaeo-environmental work undertaken at Pinnacle Point. Among the most significant discoveries contributing to our understanding of the origins of modern human behaviour are 1) early evidence for the consumption of substantial quantities of marine foods, 2) early evidence for the use of ochre, and 3) early evidence for using heat as an engineering tool to improve the fracturing qualities of silcrete (Marean *et al.* 2007 and Brown *et al.* 2009). These finds are dated to between about 100 000 and 160 000 years ago and led to the declaration of the Pinnacle Point Site Complex (PPSC) as a Provincial Heritage Site in 2012. As mentioned above, PPSC was nominated for World Heritage Site status in January 2023 and was inscribed as a UNESCO World Heritage Site in July 2024.

CRM excavations in mitigation have revealed that the most recent shell middens in the Pinnacle Point Site Complex date to the last 3000 years, including one midden containing Cape coastal pottery as evidence of pastoralists in the landscape from at least 1200 years ago (McGrath *et al.* 2015). At the other extreme, archaeological monitoring during construction has identified the presence of numerous ESA implements in soft sediments above the cliffs. Some of these implements are reminiscent of the Oldowan or developed Oldowan type, suggesting that they may date from between about 2, 6 and 1, 7 million years ago, while others are of Acheulean type and may date to around 1, 5 and 1, 3 million years ago (Nilssen 2005c). Materials like these were recorded during earlier archaeological assessments and archaeological monitoring in the surrounding area (Hart 2005, Henderson 2019, Kaplan 2009, Nilssen 2006, 2009a, 2009d & 2023b).

In addition to archaeological research and CRM work described above, much of the information gained about the archaeological record of the surroundings is from archaeological and heritage-related impact assessments conducted for a range of development proposals in terms of the NHRA. The archaeological record has shown that indigenous societies and predecessors of modern humans have occupied the area for about two million years since the Early Stone Age. The following is a chronological account of the types of archaeological resources documented in the area starting with the Early Stone Age and ending with the colonial period.

ESA stone implements are quite common in the landscape, and particularly in higher lying areas and away from the present shoreline (Hart 2005, Henderson 2019, Kaplan 2003a, 2007 & 2009, Nilssen 2006, 2009a, 2009b, 2009d, 2023b, 2025, Pelser 2021 and Thompson 2006). ESA pieces are mostly made in quartzite. Artefacts include flaked cobbles, cores, flakes, hammer stones, hand axes and cleavers (Hart 2005, Kaplan 2009 and Nilssen 2006, 2009a, 2009c & 2023b). Due to their low densities, temporal mixing with Middle Stone Age and indeterminate aged Stone Age materials, open and disturbed contexts as well as the complete absence of associated cultural and organic remains, the ESA pieces are of low significance

and Not Conservation Worthy (NCW). To date, there are no known ESA sites in this area that preserve any other cultural or organic remains in addition to stone artefacts.

Apart from *in situ* MSA deposits (including cultural and organic remains) preserved in sites like cave 13B in the Pinnacle Point Site Complex, the MSA in the area is most commonly represented by stone implements such as flakes, blades, cores, and points; often with faceted or prepared striking platforms, that most commonly occur *ex situ* in disturbed areas and in agricultural lands, and without any associated cultural or organic remains (Hart 2005, Kaplan 1997, 2003a, 2005 & 2006, Nilssen 2005a, 2005b, 2005c, 2006, 2009a, 2009b, 2009d, 2023b & 2025, Pelser 2021 and Thompson 2006). MSA pieces are mostly found in isolation or at best in low density scatters, but medium density scatters do occur (personal observations). While present in lower numbers than those of ESA age, MSA pieces are present in the same context as the ESA and are thus temporally mixed and of low significance or NCW.

Isolated stone tools or low-density scatters of LSA stone implements have been identified but are less common than ESA and MSA pieces in this area (Kaplan 1996 & 2003a, Nilssen 2005a, 2009c and Orton 2021). In the absence of caves or rock shelters, the most common LSA sites that preserve other cultural, and food remains are shell middens (Kaplan 1996 & 2003a, McGrath *et al.* 2015 and Orton 2021). Shell middens are most commonly found in association with rocky intertidal zones and are usually situated close to the shoreline and rarely more than a few hundred meters inland of the high-water mark. It is not surprising, therefore, that shell middens or LSA materials were not documented further from the shoreline (Hart 2005, Kaplan 2009 and Nilssen 2006, 2009a, 2009d, 2023b & 2025), but they were also absent in the immediate surroundings of 38/136 (Nilssen 2022c, 2007/2021 in prep. and Kaplan 2003b).

Although indigenous pastoralists, often referred to as KhoeKhoe, were present in the area since about 2000 years ago, archaeological sites with definitive evidence of their presence - pottery and/or sheep - in the surroundings are rare. Only a few sites, including shell middens that contain shards of pottery were recorded in the wider area, but none in the vicinity of 38/136 (Kaplan 1996, McGrath *et al.* 2015 and Nilssen 2005a).

The colonial period was initiated in the Mossel Bay area by the landfall of Bartolomeu Dias in 1488. Due to the sheltered bay, the presence of freshwater springs, and meat available from local pastoralists, the area was immediately attractive to early explorers and travellers. Despite this early arrival of colonists, the Dutch Governor of the Cape Colony only planted a "possession stone" in 1734, and the granary, the first colonial building in Mossel Bay was only built in 1787 and is situated at today's site of the Dias Museum (https://en.wikipedia.org/wiki/Mossel_Bay#History). As one of the few sheltered bays on South Africa's south-eastern coastline, Mossel Bay has served as a maritime port since the first shipment of wheat from the area sailed from Mossel Bay in 1788 (*ibid*). Numerous structures protected by the NHRA as well as colonial period Provincial Heritage Sites are scattered throughout the town of Mossel Bay.

Early colonists met indigenous societies comprised of pastoralists, foragers and people practicing a mixture of these two economies / lifestyles. An overview of the social context, perceptions, relationships and conflicts involving foragers (hunter-gatherers), pastoralists and colonists is given by Henshilwood & Yates (2001) and is not repeated here. While both pastoralists and colonists had a devastating impact on foraging societies (including government authorised and permitted genocide up to 1927), it is thought that smallpox was responsible for killing up to 90% of the KhoeKhoe population in 1713, thus opening the land for easier colonial settlement (Henshilwood & Yates 2001).

The built environment – colonial period structures, homesteads, outbuildings, features and transport infrastructure - is the most common evidence for the presence of colonists in the area from roughly the early to mid 18thC. While colonial period structures are common in Mossel Bay and smaller villages in the surrounding area, not many structures were recorded in previous heritage-related studies consulted for this project. Exceptions include the protected historic water furrow in Great Brak River (Kaplan 2008) and the Not Conservation Worthy colonial period ruins between the Hartenbos and Klein Brak rivers (Nilssen 2005a). Colonial period farmsteads with associated structures, infrastructure and cemeteries are scattered throughout the rural areas of the Mossel Bay district.” (Nilssen 2022a, Pg. 23 to 27)

None of the above-mentioned Provincial Heritage Sites or any other known significant heritage sites or resources will be impacted by the proposed development on 38/136.

Based on the above information and findings, and particularly from studies conducted in close proximity and with similar spatial and sedimentary contexts as that of 38/136, it is anticipated that the most likely archaeological resources to occur here are isolated Stone Age implements of mainly ESA and MSA origin with the occasional LSA piece, or at best, low to medium density scatters of the same materials (De Kock 2022, Hart 2005, Henderson 2019, Kaplan 2009, Malan 2022, Nilssen 2005b, 2005c, 2006, 2009a, 2009d, 2022a, 2023b & 2023c and Pelser 2021). It is more likely, however, that significant heritage resources are not present on 38/136 (Nilssen 2007/2021 in prep., 2022c and Kaplan 2003b). Due to their low densities, temporal mixing, the complete absence of associated cultural and organic remains, and in this case significantly disturbed context, such finds are of low to no archaeological value and hence attributed Grade IIIC or Not Conservation Worthy status.

6. SG Diagrams, Historic Aerial Photographs and Results of Site Inspection

All available SG Diagrams, high resolution historic aerial photographs, and historic Google Earth imagery were carefully examined for indications and traces of heritage resources such as built structures, roads, features and evidence for ploughing and human-related impacts. A detailed history of ownership and subdivision of the original Farm 136 is beyond the scope of this basic investigation, but a basic overview is given below.

According to early SG Diagram 32/1876 the original, larger Farm 136 (also referred to as Lot No.1), originally Crown Land was first applied for and granted to J.J. van Rensburg in 1876 (Figures 21 & 22).

Lot E, which included portion 38 of Farm 136 was deducted in 1898 (Figure 23). Plan A 230-1924 shows ““ZANDRUG” a portion of Lot E of Lot No 1 transferred to J.T.J. van Rensburg on the 5th of April 1898” (Figure 24). Note that, on this diagram, Zandrug is referred to as Portion 28 of Farm 136 and it is the first time we see the early road indicated on the drawing.

The site was cleared of natural vegetation by 1939 - and likely much earlier - and used for agricultural purposes until the mid-1970s (see historic aerial photographs below in Figures 27 through 31). Residential development in the surroundings began by at least the early 1900s and apart from a small holding to the west (30/136), portion 38/136 is now surrounded by residential / urban developments on all sides. The house on 30/136, older than 60 years, and the historic railway line will not be impacted by the proposed residential development on 38/136. In addition to early agricultural activities, the site is heavily impacted by mole burrowing.

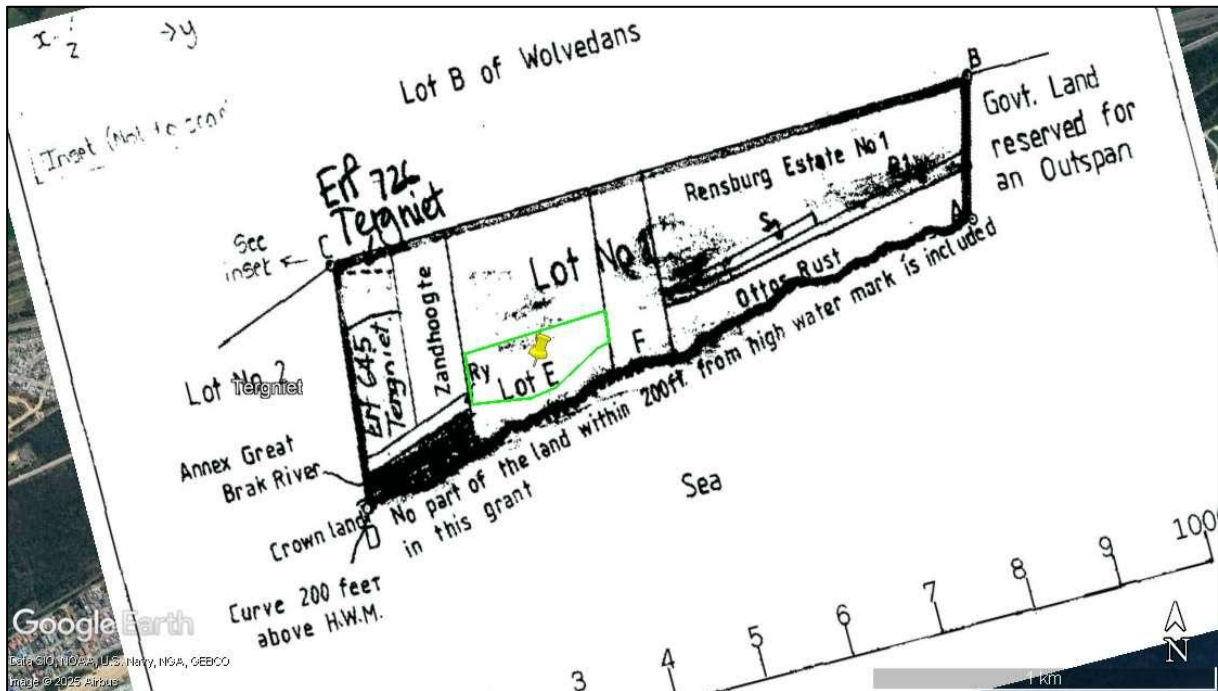


Figure 21. A cropped portion of Surveyor General Diagram SG 32/1876 superimposed via Google Earth shows the approximate location of 38/136 (yellow marker and green polygon) as part of Lot E of the larger Lot No. 1 (Farm 136) also shown on the 1880-1900 map in Figure 22.

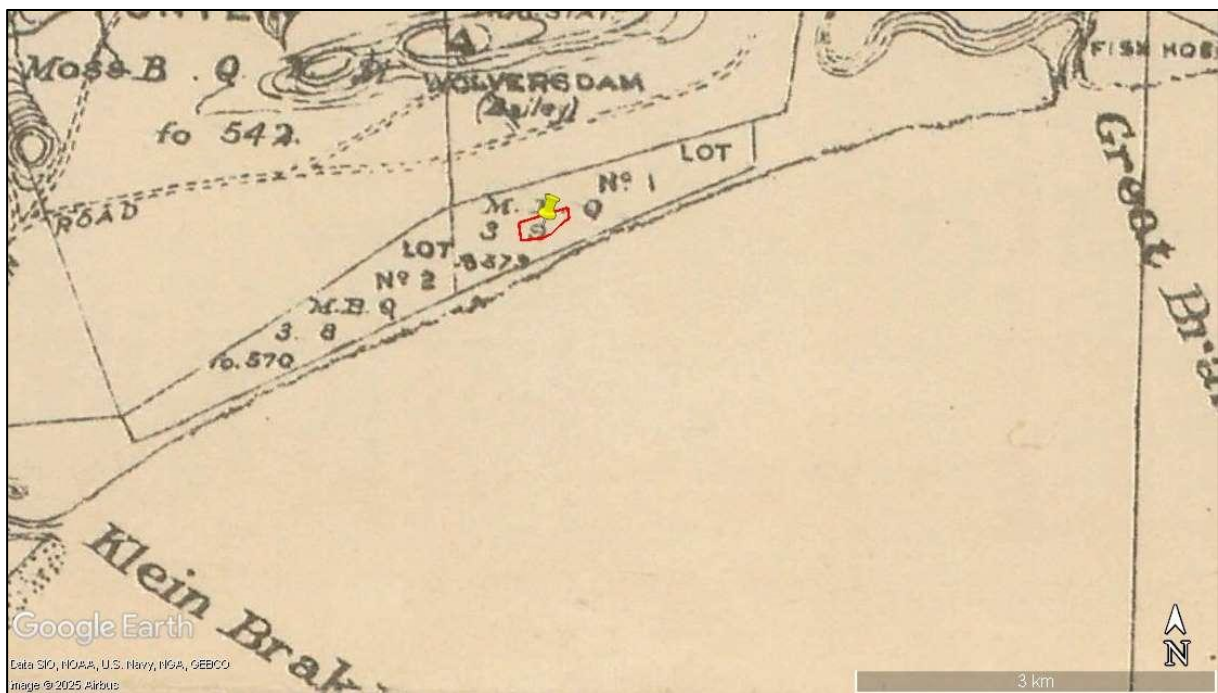


Figure 22. Approximate location of 38/136 (yellow marker and red polygon) in relation to (±1880-1900) boundaries of the early freehold farm Lot No. 1 (Farm 136) (see Figure 21 - source NGSI, annotated). Early map superimposed via Google Earth.

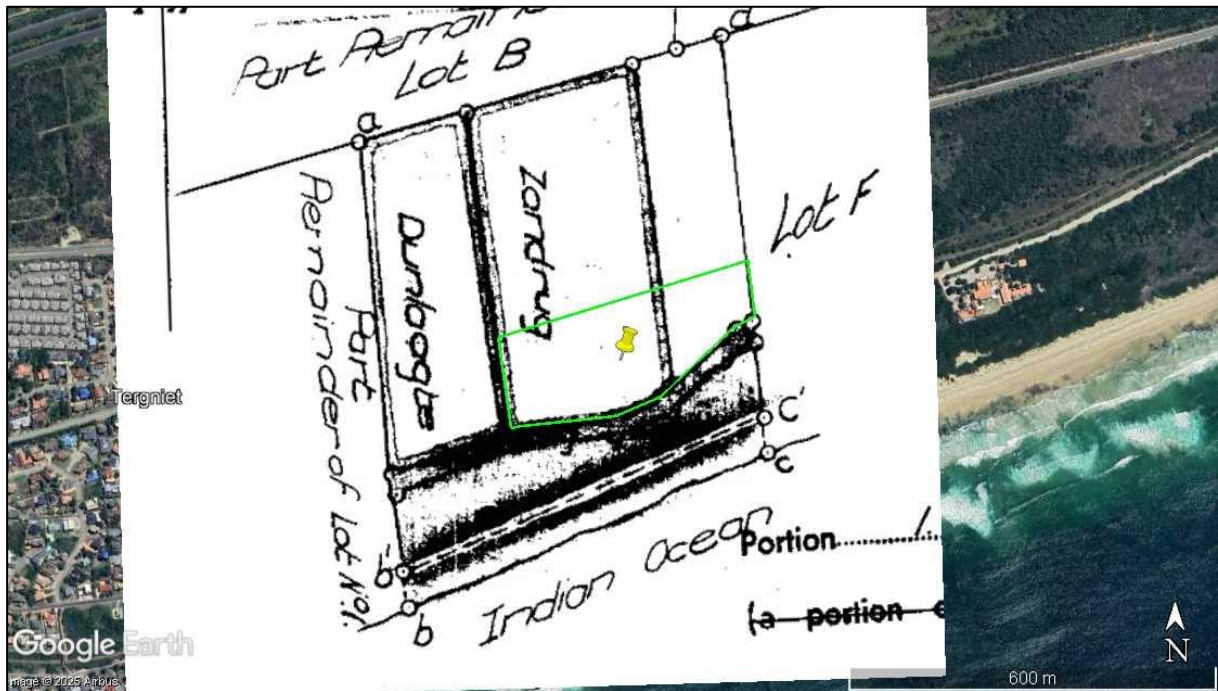


Figure 23. Cropped portion of Surveyor General Diagram SG 3349/1896 superimposed via Google Earth with the approximate location of 38/136 indicated by the yellow marker and green polygon.



Figure 23. Cropped portion of Surveyor General Plan A 230 - 1924 superimposed via Google Earth with the approximate location of 38/136 indicated by the yellow marker and green polygon. Note red line indicating early road.

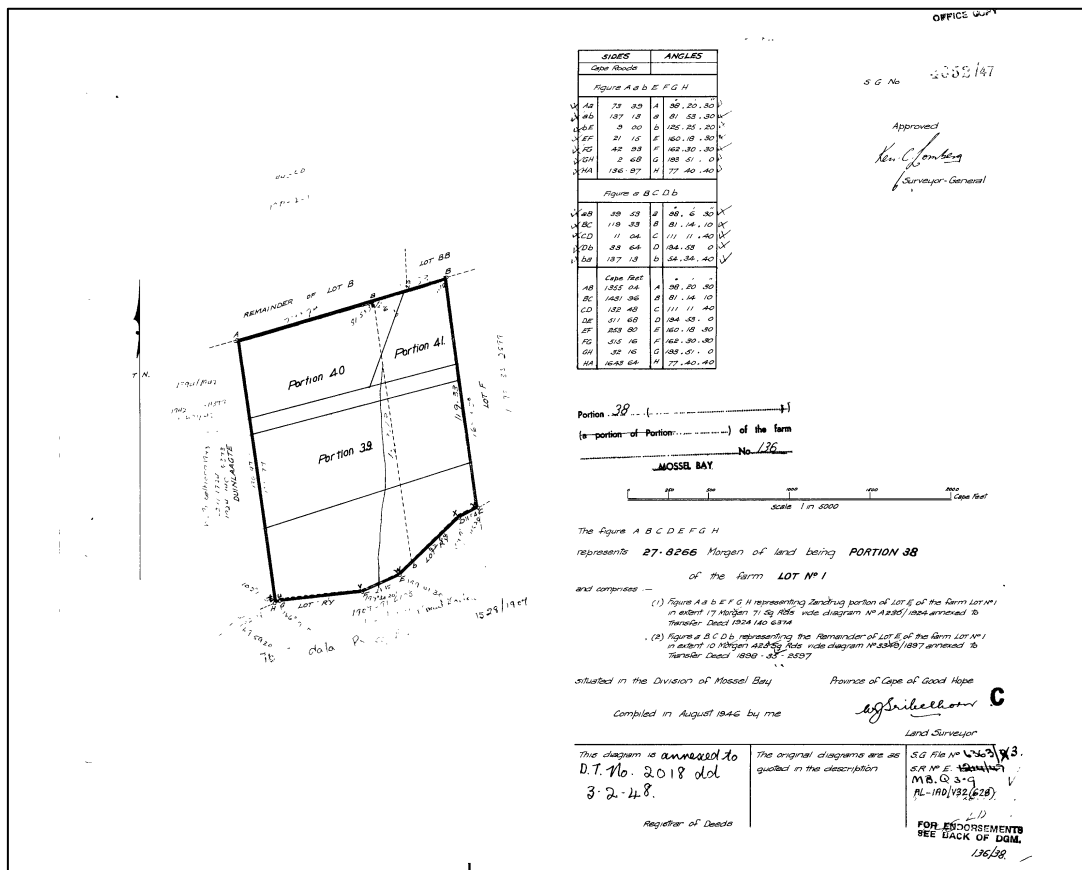


Figure 25. The current Surveyor General Diagram SG 4652/47 (1947) is cropped and enlarged in Figure 25 to show the extent of 38/136. (A4 version below)

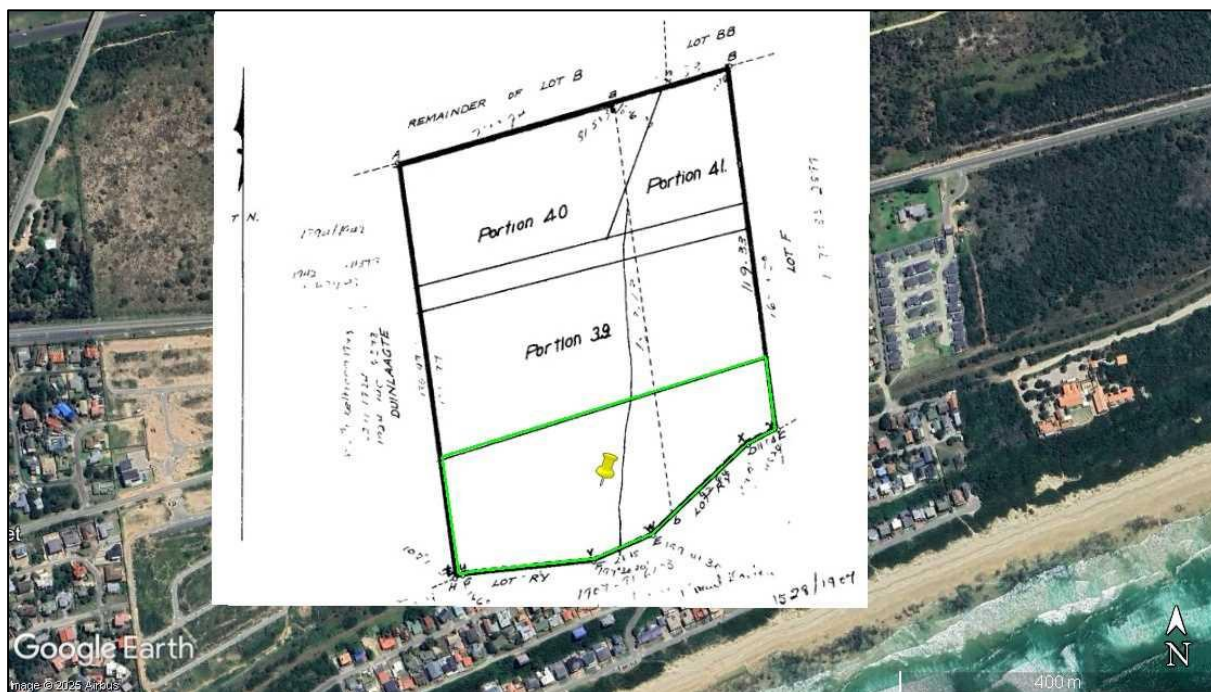


Figure 26. Cropped portion of the current Surveyor General Diagram SG 4652/47 (1947) superimposed via Google Earth showing extent of 38/136 (yellow marker & green polygon). Note old road running

through 38/136 and line tuvwxycDEFG represents the 10 m wide water pipeline servitude on the southern boundary.



Figure 27. Historical aerial photograph of 1939 superimposed with Google Earth showing 38/136 (green polygon). Note the site is cleared of vegetation, the alignment of the R102 road is in place (top left), the railway line is in place, and several coastal cottages occur south of the railway line and are accessed from the R102 by the early road crossing 38/136. There are no colonial period structures in the affected area.



Figure 28. Historical aerial photograph of 1957 superimposed with Google Earth showing 38/136 (green polygon). Note somewhat increased agricultural activity and surrounding developments with the cottage / house on 30/136 to the west of 38/136 built some time before 1957.

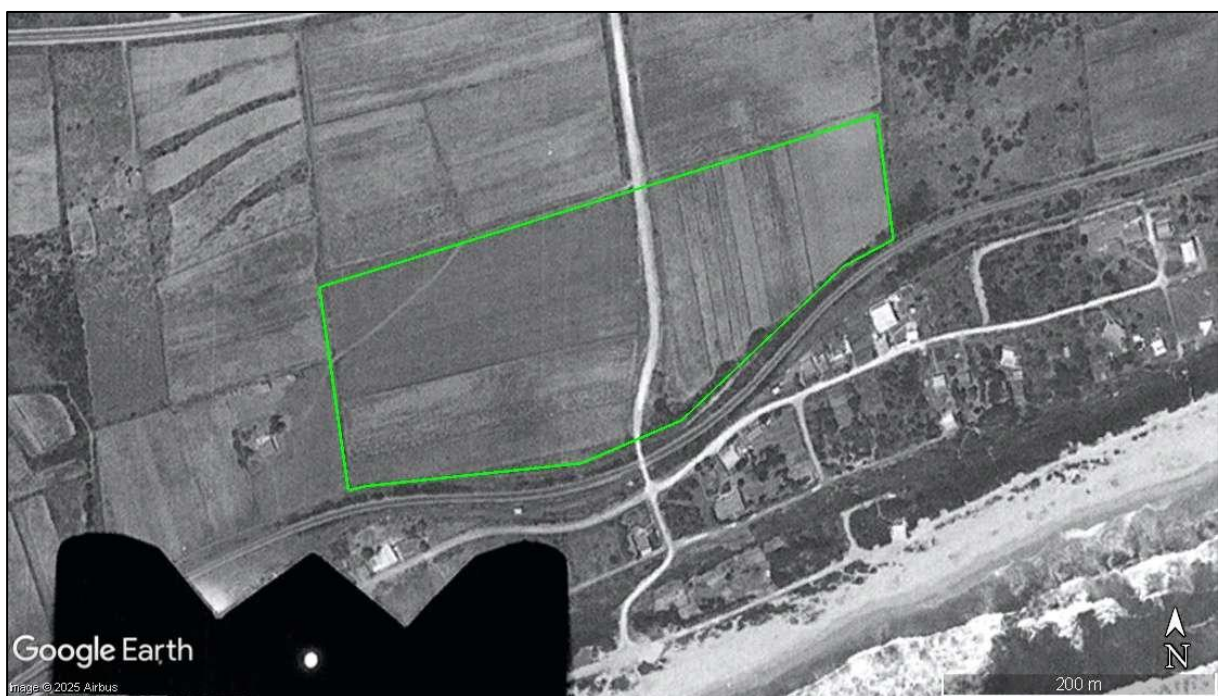


Figure 29. Historical aerial photographs of 1963 (top) and 1968 (bottom) superimposed with Google Earth showing 38/136 (green polygon). Note marginal increase in surrounding developments, but 38/136 is still under cultivation.

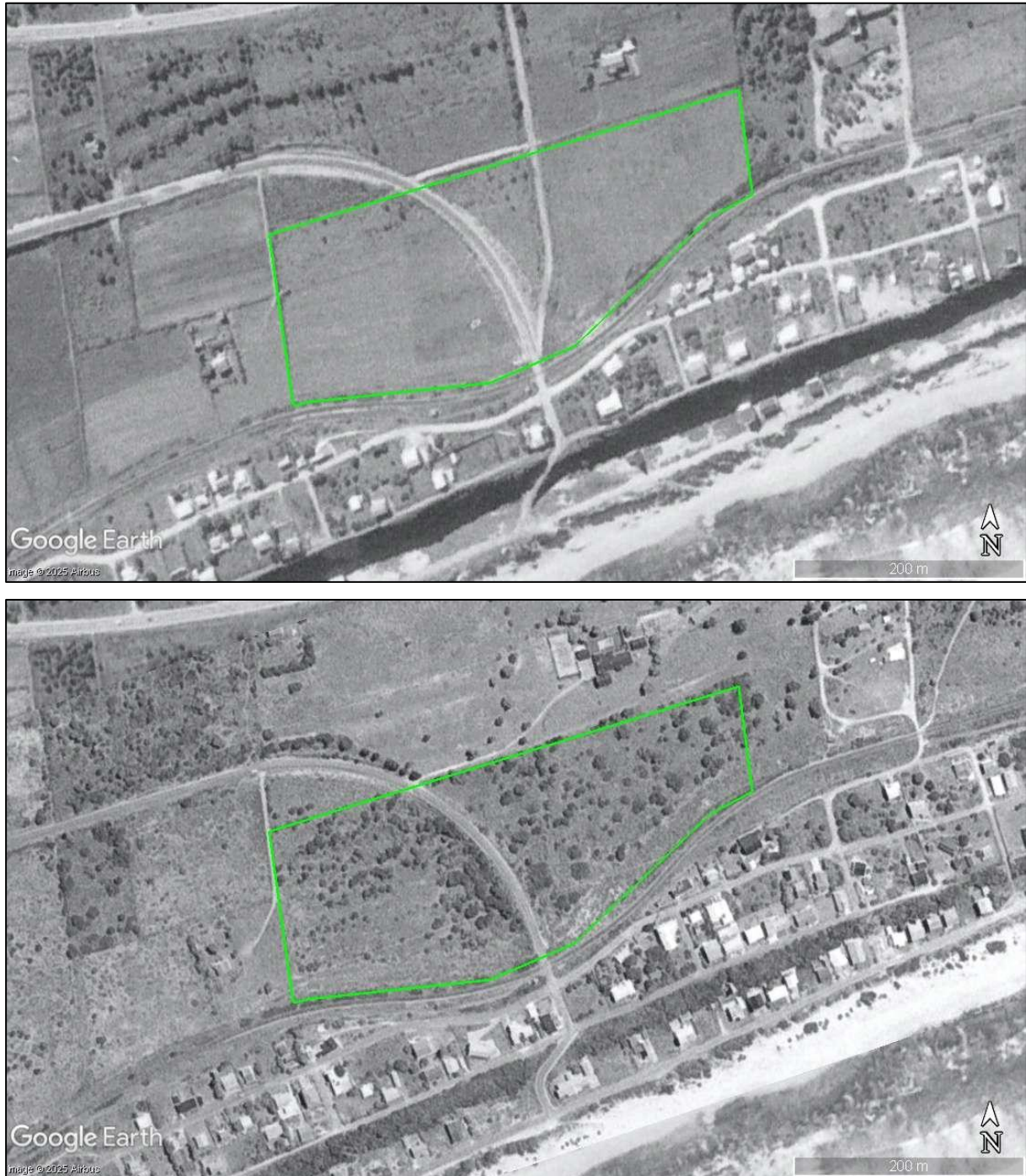


Figure 30. Historical aerial photographs of 1974 (top) and 1991 (bottom) superimposed with Google Earth showing 38/136 (green polygon). Note Robertson Avenue is built after 1968 and before 1974 and there is an increase in residential development by 1991. Agricultural activities on 38/136 have stopped and the early road is disused by 1991. According to SG 4652/47, the water pipeline servitude was installed in 1991.



Figure 31. Historical aerial photographs of 1998 (top) and 2003 (bottom) superimposed with Google Earth showing 38/136 (green polygon). Note increased infrastructural and residential developments in the surroundings of 38/136, but apart from the cleared strip along the water pipeline servitude in the south, the site is overgrown and vacant.



Figure 32. Google Earth 2025 with 38/136 (green polygon). Note intensified infrastructural and residential developments in the surroundings of 38/136 over the past 20 years, but apart from the cleared strip along the water pipeline servitude in the south, and a new sewer line running along the northern boundary, the site is overgrown and vacant.

SG Diagrams and historic aerial photographs show that no colonial heritage resources occur on 38/136 and that the historic railway line to the south and old house on 30/136 to the west, both protected by the NHRA, will not be impacted by the proposed activity on 38/136. Furthermore, the proposed development is in keeping with existing and pending developments in the surrounding environment.

With permission, an independent site inspection of the affected property was conducted on 6 June 2025 by means of a foot survey (archaeological walk-through) that covered representative areas of the property. Notwithstanding dense vegetation cover, sufficient areas were accessed and thanks to extensive and intense mole burrowing activities, archaeological visibility of surface and near-surface sediments was good (Figures 5 through 15).

Survey tracks and observations were fixed with a handheld Garmin Etrex 30x GPS to record the investigated area (Figure 33). A high quality, comprehensive digital photographic record was made with a DooGee S86 mobile phone, including location data for photographs and observations. All GPS and photographic data are available on request.

The property was examined with a focus on the potential impact of the proposed development on heritage related resources of both colonial and pre-colonial origin. Heritage resources listed in Section E of the HWC NID application form were considered but are not listed here unless they are present on or in the immediate vicinity of the development footprint, or if they are anticipated to occur on or in the immediate vicinity of the property.

Due to previous heritage-related studies in the immediate surroundings, geotechnical work and test results discussed with Mr Hannes Lourens of Element Consulting Engineers, and results

of this investigation and site inspection, adequate observations and information are available for input to the HWC NID application process.

The approach to field work was:

- to evaluate the visual / aesthetic sensitivity of the study area from Robertson Avenue, the site is not visible from the “scenic routes” of the N2 and R102 further north,
- to inspect the sediments along the sewer pipeline servitude that was backfilled in around 1991, and
- to inspect the site to gain an understanding of its archaeological content and context by accessing a representative portion of the affected area.



Figure 33: 38/136 (green polygon) with GPS-fixed survey tracks (red lines). (A4 version below)

Apart from the railway line to the south and the old house on 30/136 (Figure 34), both protected by the NHRA, but which will not be impacted by the proposed development, a single flaked piece of quartzite was recorded at waypoint 360, less than 15 m from the railway line (Figures 33, 34 & 35).

Being isolated and not associated with any other organic or cultural materials, the piece seems out of place and also appears fairly fresh in terms of patination. The latter, however, would not be unusual for Later Stone Age stone artefacts. Nevertheless, a walk along the railway line quickly revealed several “flaked” pieces that were generated in the process of crushing stone (quartzite) during the manufacture of gravels for construction of the railway line (Figure 35).

It follows that the piece recorded at waypoint 360 is of questionable archaeological origin and may well originate from the nearby railway line. Nevertheless, if archaeological, then due to its compromised context (heavily burrowed surface sediments), its isolated nature, and the absence of associated organic or other cultural remains, the find is considered to be of low local value, Grade IIIC, and Not Conservation Worthy.

No further archaeological or heritage resources of colonial or pre-colonial origin were identified on the property or in its immediate vicinity.



Figure 34: Top: The old house / cottage on 30/136 will not be impacted by the proposed development on 38/136. Bottom: Context of “flaked” piece of quartzite (next to GPS unit in black ellipse) recorded at waypoint 360 amid mole heaps and adjacent to the railway line.



Figure 35: Top: quartzite flake and flaked piece recorded at waypoint 360. Bottom: “flaked” piece of quartzite among several seen on the railway line immediately south of 38/136.

The property is not visible from the scenic routes of the R102 and N2 further to the north and is only visible from Robertson Avenue and the immediate surroundings. Nevertheless, on

heritage grounds, due to the transformed nature of the surroundings and the absence of significant heritage resources or themes, the proposed residential development will have a negligible impact on the visual or aesthetic value of the area. Furthermore, the formerly pre-colonial / rural landscape is already transformed by existing and approved residential and infrastructural developments in the surroundings. Consequently, the proposed development is in keeping with existing and pending developments and will have negligible to zero visual impact on the aesthetic value of the area.

Given the absence of heritage and archaeological resources on 38/136, the impact of the proposed activity will have negligible to no impact on the heritage value of the area.

Furthermore, since there are no significant heritage resources or features associated with 38/136, the proposed activity will have no impact on the existing and already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

7. Conclusions and Recommendations

The following conclusions and recommendations are arrived at after reviewing information obtained through:

- previous heritage studies and HWC applications in the vicinity of 38/136,
- Consultation with Mr Hannes Lourens of Element Consulting Engineers regarding geology and geotechnical studies in the vicinity of 38/136,
- Prof John Pether's palaeontological inputs,
- SG Diagrams,
- historic and Google Earth aerial photographs, and
- a site inspection (archaeological walk-through).

"Palaeontological Sensitivity of the widespread Qg coversands generally is rated as LOW by SAHRIS. The Waenhuiskrans Formation is rated VERY HIGH due to previous fossil bone finds in calcreted aeolianites in coastal developments" (Pether 2025, pg. 3). "Due to the thickness of the Qg coversands the volume of disturbance of the Waenhuiskrans Fm. is unlikely to be substantial, reducing the possibility of fossil bone finds and reducing the potential palaeontological impact of the proposed development on the Waenhuiskrans Fm. to a LOW level" (Pether 2025, pg. 3).

"The intensity of impact of the proposed development on fossil resources is rated as LOW and further palaeontological interventions are not necessary at this stage. Although sparse, an occurrence of fossil material, or buried archaeological material, cannot be entirely dismissed. It is advisable that a protocol for finds of bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the project, basically "If fossil shells or bones are uncovered during the Construction Phase, temporarily stop work at the spot and report to Heritage Western Cape"" (Pether 2025, pg. 3).

Links to the HWC FFP are as follows:

https://www.hwc.org.za/sites/default/files/3_11%20Protocol%20Fossil%20Finds%20Final%20June%202016.pdf

https://www.hwc.org.za/sites/default/files/3_12%20Fossil%20Finds%20Poster.pdf

The study area has been impacted by agricultural activities and cultivation since at least 1939 and likely considerably earlier. The entire site is heavily impacted by mole activity affecting surface sediments to a depth of about 1 to 1.5 meters and thus compromising the context of surface sediments. Two roads have run through the property in colonial and modern times as have bulk services infrastructure and a railway line lies immediately south of 38/136. It follows that the site is transformed and is situated amidst existing and pending residential developments.

This basic investigation has determined that no colonial or pre-colonial heritage resources of value occur on 38/136. The historic railway to the south and old house on 30/136 to the west are protected by the NHRA but will not be impacted by the proposed development.

Heritage studies conducted by this author a few hundred meters to the east of 38/136 and in the same spatial, environmental and geological setting yielded no heritage resources (Nilssen 2007 / in prep. 2021). Similarly, an archaeological investigation conducted by this author some 2 km to the ENE yielded no tangible heritage resources (Nilssen 2022c). In the unlikely event that Stone Age implements are present on or in surface sediments, then they are expected to be of low local significance (Grade IIIC) and Not Conservation Worthy.

Because no significant heritage resources are associated with 38/136, the site does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason there will be negligible to no cumulative impact on the heritage value of the area.

The site is not visible from the R102 or N2 (nearest scenic routes) and is only visible from Robertson Avenue and the immediate surroundings, which consists of residential developments. Nevertheless, the pre-colonial / agricultural / rural landscape and aesthetic value of Tergniet is already transformed and compromised by a variety of developments in the area over the last 80 years or so. Consequently, the proposed residential development of 38/136 is in keeping with surrounding developments and will have a negligible to zero impact on the visual / aesthetic value of the area.

The positive socio-economic impact, including short-, medium- and long-term jobs as well as the growing need for residential and commercial (mixed use) space in the Mossel Bay area outweigh the negligible to zero negative impacts this project may have on heritage resources.

Because of the above, and because there is no reason to believe that heritage resources of value will be impacted by the proposed activity on 38/136, it is recommended that the proposed activity be approved in full, and that a Heritage Impact Assessment is not warranted for the project.

Nevertheless, it is recommended that Heritage Western Cape consider and/or require that the following be included in the Environmental Authorisation / Environmental Management Program, if the project is approved:

- although not requiring further Palaeontological investigation, in accordance with inputs from Prof Pether, the chance finds or Fossil Finds Procedure (FFP – see links above) should be included in the Environmental Authorisation / Environmental Management Program (EMPr) for the Construction Phase of the project,
- due to the findings of this and previous archaeological studies and geotechnical test excavations, archaeological monitoring is NOT recommended, but,
- if any human remains or significant archaeological materials are exposed during mining 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.

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Figure 1. Enlarged from Locality Map showing the location of 38/136 (green polygon) in Tergniet and relative to the N2 and R102 roads, Western Cape Province. Courtesy of Cape Farm Mapper.



Figure 2. Enlarged portion of 1:50 000 topographic map 3422 AA 1998 Mossel Bay showing 38/136 (yellow marker and red polygon). Courtesy of the Chief Directorate Surveys and Mapping, Mowbray and Google Earth 2025.



Figure 3. Area enlarged from Figure 1 showing 38/136 (green polygon) and surrounding properties and developments. Courtesy of Cape Farm Mapper.



Figure 4. Proposed residential development on 38/136. Courtesy of the applicant.

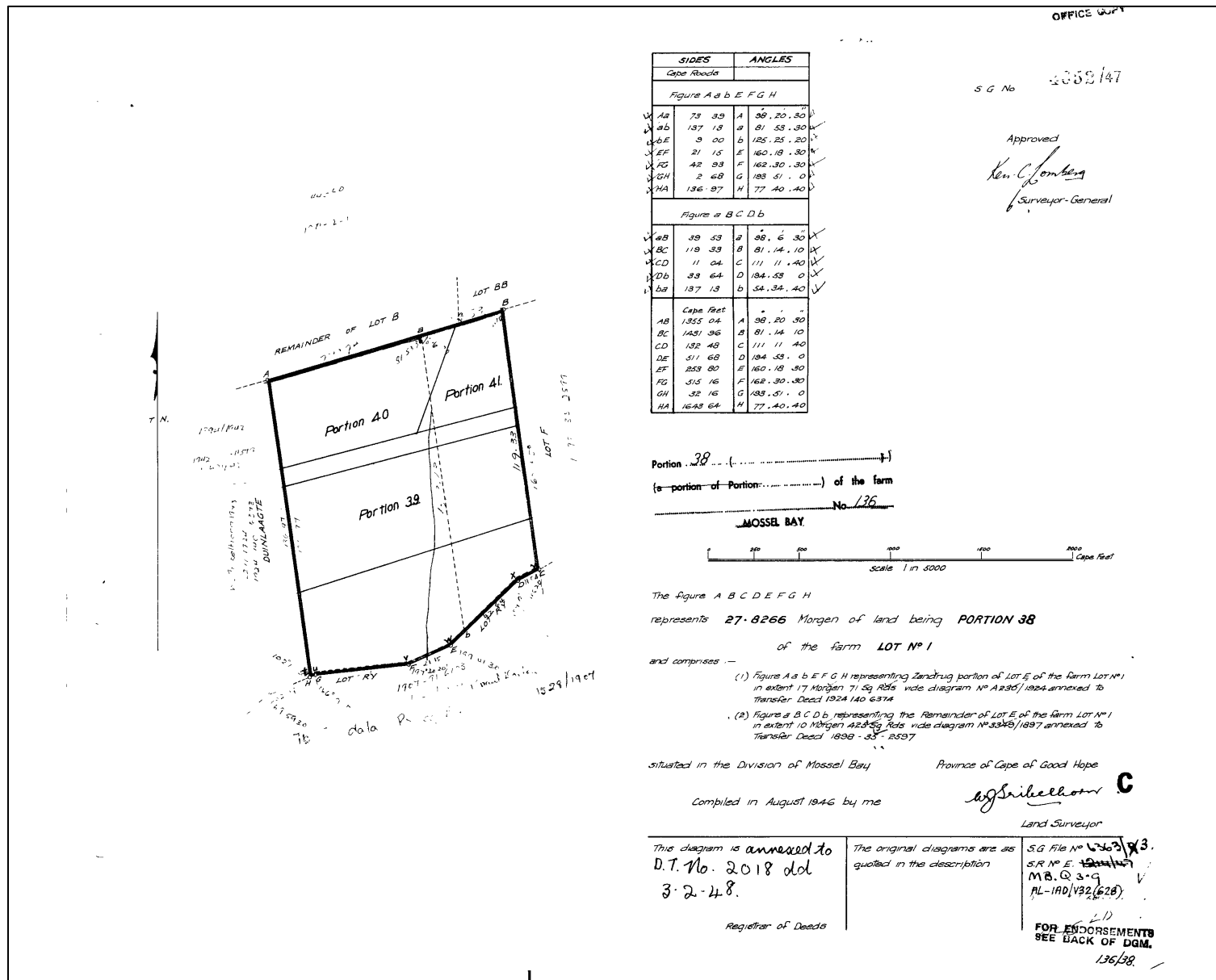


Figure 26. SG Diagram SG 4652/47 (1947) of 38/136.



Figure 33: 38/136 (green polygon) with GPS-fixed survey tracks (red lines).