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

(HWC Case No.: HWC23053001 and DEA&DP Ref. No.: 16/3/3/6/7/1/D1/13/0268/22)

Proposed Residential Development on Portion 91 (a portion of portion 14) of Farm Matjes Fontein 304, Keurboomstrand, Bitou Municipality and Administrative District of Knysna, Western Cape Province

for

Eco Route Environmental Consultancy, Ms. Janet Ebersohn (EAPASA 2019/1286, PO Box 1252 Sedgefield 6573, Cell: 082 557 7122, E-mail: janet@ecoroute.co.za and **The Applicant**, Mr Cornel Delport, Cell: 084 909 7711, E-mail: cornel@gomuster.com on behalf of **The Owner**, Familie Roux Eiendomme (Pty) Ltd, Stephan Roux, 215 Soutpansbergweg, Rietondale, Pretoria, Tel: 012 111 9575, E-mail: sroux@worldonline.co.za

by

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11 April 2023

Summary - Conclusions & Recommendations

The palaeontological sensitivity of the development footprint is low and even though Mr Pether recommends the inclusion of the Fossil Finds Procedure in the EMPr for the development, geotechnical test pits to a depth of 2 to 3 m have revealed no palaeontological resources. Excavations for bulk services and foundations are not expected to exceed 1, 5 m in depth.

The proposed development footprint on 91/304 has been impacted by farming activities (ploughing, cultivation and grazing) since at least 1818 and more likely since the mid- to late-1700s. As a result, the context of pre-colonial heritage resources in surface sediments was damaged, disturbed or destroyed. Colonial period heritage resources – structures and old road – were demolished or destroyed by the late 1900s or early 2000s.

Furthermore, as described by Mr Steele and as revealed in the geotechnical test pits, sediments containing fragmented marine shell, some bone and a few stone artefacts were imported, dumped and dispersed on the property in the last 4 to 5 years. The geotechnical test pits lack any evidence of archaeological horizons or shell midden deposits and are archaeologically and palaeontologically sterile to depth.

The archaeological walk-through identified the imported and dispersed sediments with fragmented marine shell, some bone and a few stone artefacts as described by Mr Steele and as detected through geotechnical test excavations. These sediments have no sub-surface origin and were clearly imported and dispersed on 91/304. Identified modern building rubble and rubbish, as well as isolated Stone Age pieces are considered to be of low heritage value and are not conservation worthy.

Due to the absence of significant heritage resources, the proposed activity will have no cumulative impacts on the archaeological or heritage value of the area.

This baseline investigation has shown that heritage resources on the affected part of the property are of low significance and are given a field rating of Not Conservation Worthy. Since there are no significant heritage resources associated with the proposed development footprint, it does not meaningfully contribute to the cultural landscape of the area.

For reasons given above, and due to the planned screening from the PO394 road, the proposed activity will have a negligible to no negative impact on the aesthetic value of the area.

The positive socio-economic impact, including several short, medium and long term jobs as well as the provision of middle income housing 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 significant heritage resources will be impacted by the proposed development on 91/304, it is recommended that no further heritage-related specialist studies (as listed in the NID) are required 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:

- even though 91/304 is of LOW palaeontological sensitivity, in case of a chance fossil discovery Mr Pether recommends that the Fossil Finds Procedure (FFP) is included in the Environmental Management Plan (EMP) for the Construction Phase of the development, basically “If fossil bones are uncovered during excavations, stop work and report to Heritage Western Cape (HWC)” – however, given the absence of palaeontological and archaeological remains in the geotechnical test pit excavations, this requirement is in question and may not be applicable (unfortunately Mr Pether was not available to comment at the time of this observation and writing),
- due to the disturbed nature of this part of 91/304, as well as the findings of the geotechnical 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.

1. Name, Biosketch 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 260 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;
- am aware that a false declaration is an offence in terms of regulation 48 of GN No. R. 982.

Signature of the specialist:

Date: **11 April 2023**

2. Introduction & Background

The applicant, Mr Cornel Delport ?company details?, is proposing a sustainable, off-grid, middle income residential development on Portion 91 of Farm Matjes Fontein 304 (hereafter 91/304). The level, lower-lying part of the property has been transformed since farming activities began prior to 1818. The study area is currently used by an equestrian centre (K-Rides).

The environmental authorisation application process, presently a Draft Basic Assessment Report, is being facilitated by Ms Janet Ebersohn of Eco Route Environmental Consultancy (hereafter Eco Route) who compiled a Screening Tool Report (Eco Route 2022). The latter and proposed activity triggers the National Heritage Resources Act (Act 25 or 1999; NHRA), and therefore, a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC) is required. This author was appointed by Mr Delport to assist with the heritage process.

This document is not a Heritage Impact Assessment, but rather, is a heritage scoping report – Heritage Statement - 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 here.

The purpose of this Heritage Statement is to report the results of 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.

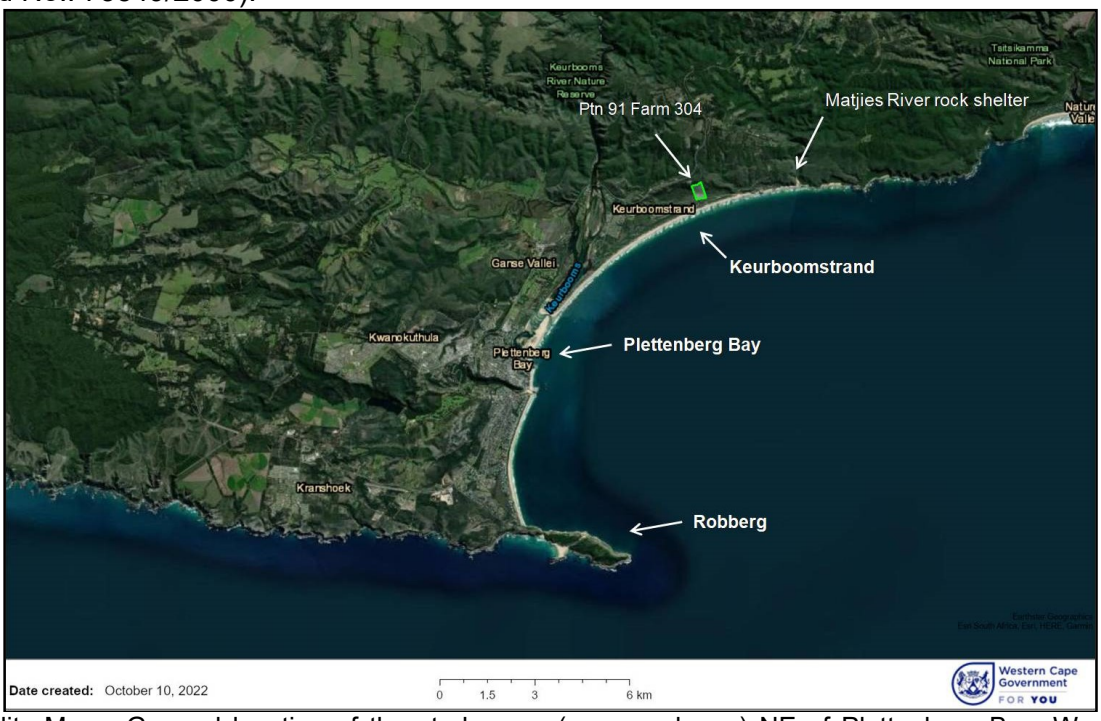
For the above reasons, HWC recommends that NID applications should be prepared with the assistance of suitably qualified and accredited heritage professionals.

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

3. Site Location and Development Proposal

Portion 91 of Farm Matjes Fontein 304 (hereafter 91/304), Keurboomstrand, Plettenberg Bay, is located some 8 km North East of Plettenberg Bay and about 3 km West of the Provincial Heritage Site of Matjies River rock shelter on the south Cape coast of the Western Cape Province with the centre of the property at approximately S 34°00’16, 26” E 23°26’ 09, 69” (WGS 84, see Locality Map and Figures 1, 2 and 3). 91/304 is 14.7251 ha in extent, while the proposed development footprint in the previously disturbed part of the property is

approximately 6 ha in extent and is registered to Familie Roux Eiendomme (Pty) Ltd (Title Deed No.: 73549/2000).



Locality Map. General location of the study area (green polygon) NE of Plettenberg Bay, Western Cape Province. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/). (A4 version below)

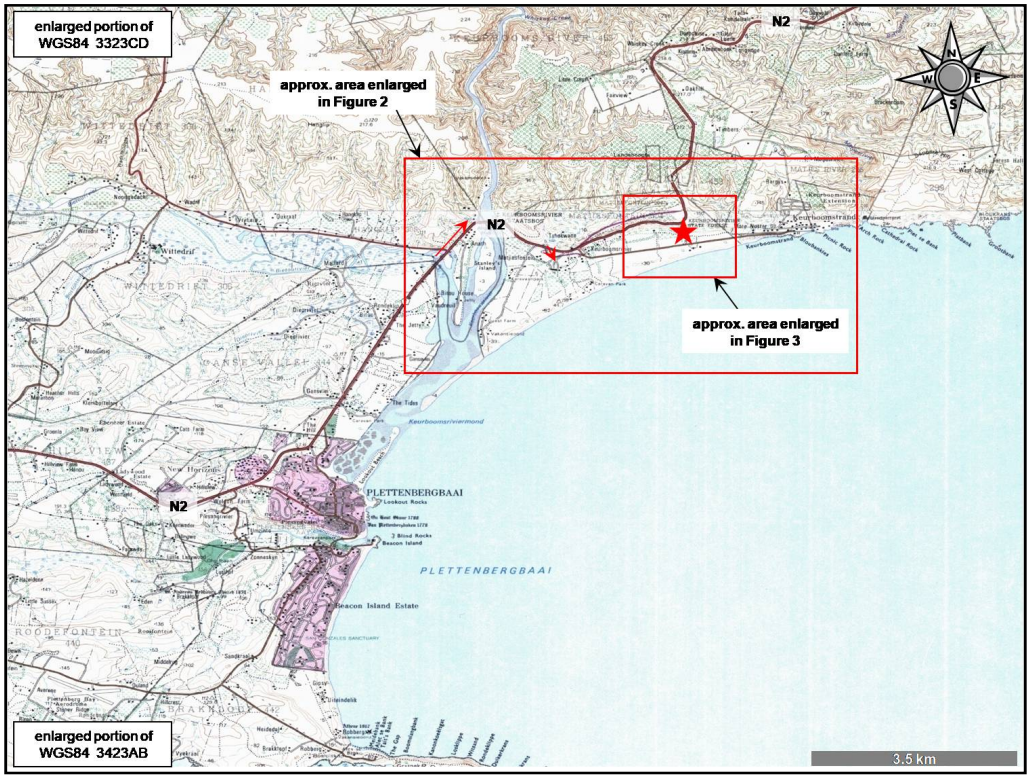


Figure 1. General location of the study area (red star) NE of Plettenberg Bay, Western Cape Province. Enlarged portions of 1:50 000 topographic maps 3323 CD and 3423 AB (1999) courtesy of The Chief Directorate Surveys and Mapping, Mowbray. (A4 version below)

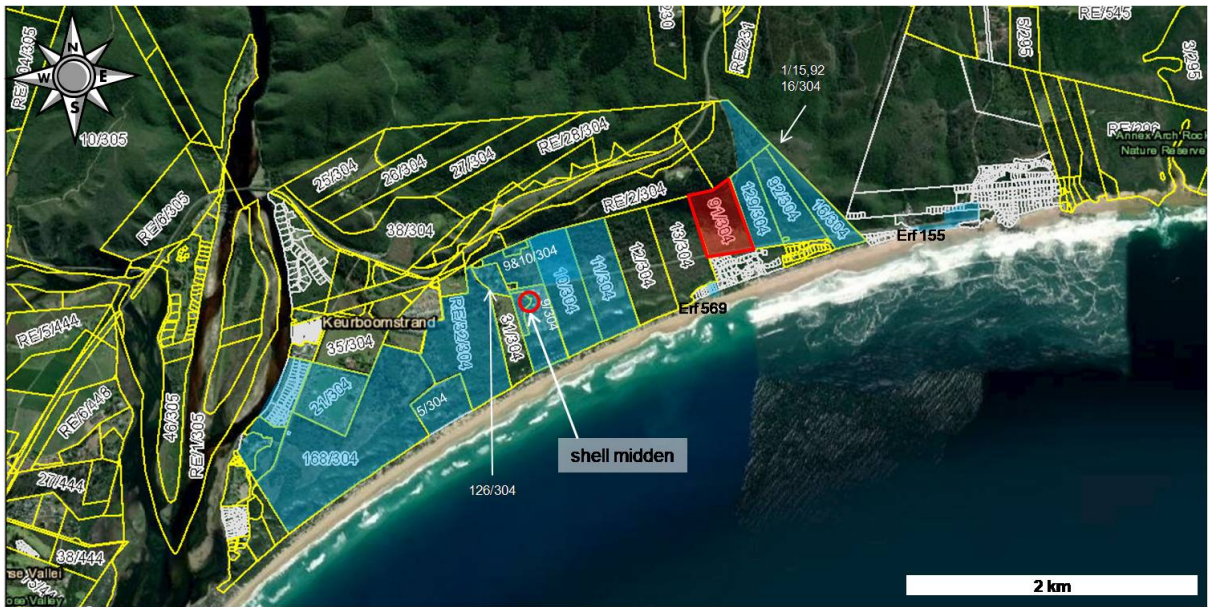


Figure 2. Enlarged from Figure 1 showing 91/304 (red polygon) relative to Keurboomsriver in the West and Arch Rock in the East. Properties shaded blue have undergone heritage-related studies. A stratified shell midden (red ellipse) is located in the "Dunes" development some 1,5 km WSW of 91/304. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/). (A4 version below)

Figure 3. Enlarged from Figure 1 showing 91/304 (green polygon), surrounding properties and existing developments and transport infrastructure. Properties shaded blue have undergone heritage-related studies. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/). (A4 version below)

91/304 is situated south of the N2 with roads DR1888 and PO394 running through the northern and southern portions of the property respectively, and thus creating infrastructural boundaries in the North and South (Figure 3). While properties to the SW, S and SE of

91/304 and South of road PO394 are under residential development, those immediately West (13/304) and East (129/304) are currently undeveloped. The sandy shoreline of the Indian Ocean is some 300 m to the South and the site is readily accessed by tar roads.

The applicant is proposing a sustainable, off-grid, middle income residential development on the low lying and previously farmed and disturbed portion of 91/304 (Figure 4). The activity will consist of 73 residential units, internal roads, bulk services, open areas and natural features such as Milkwood trees and a fresh water spring will be incorporated into the development. Further details of the vision and development proposal are given in the HWC NID form and are not repeated here (also see Planning Space 2022). Excavations for structures will be to a maximum depth of 1 m while those for services will be to a maximum depth of about 1, 5 m.

A line of trees and vegetation south of the residential units will screen the development from the PO394 road as is the case with other developments in the immediate surroundings that are not visible from the same road.

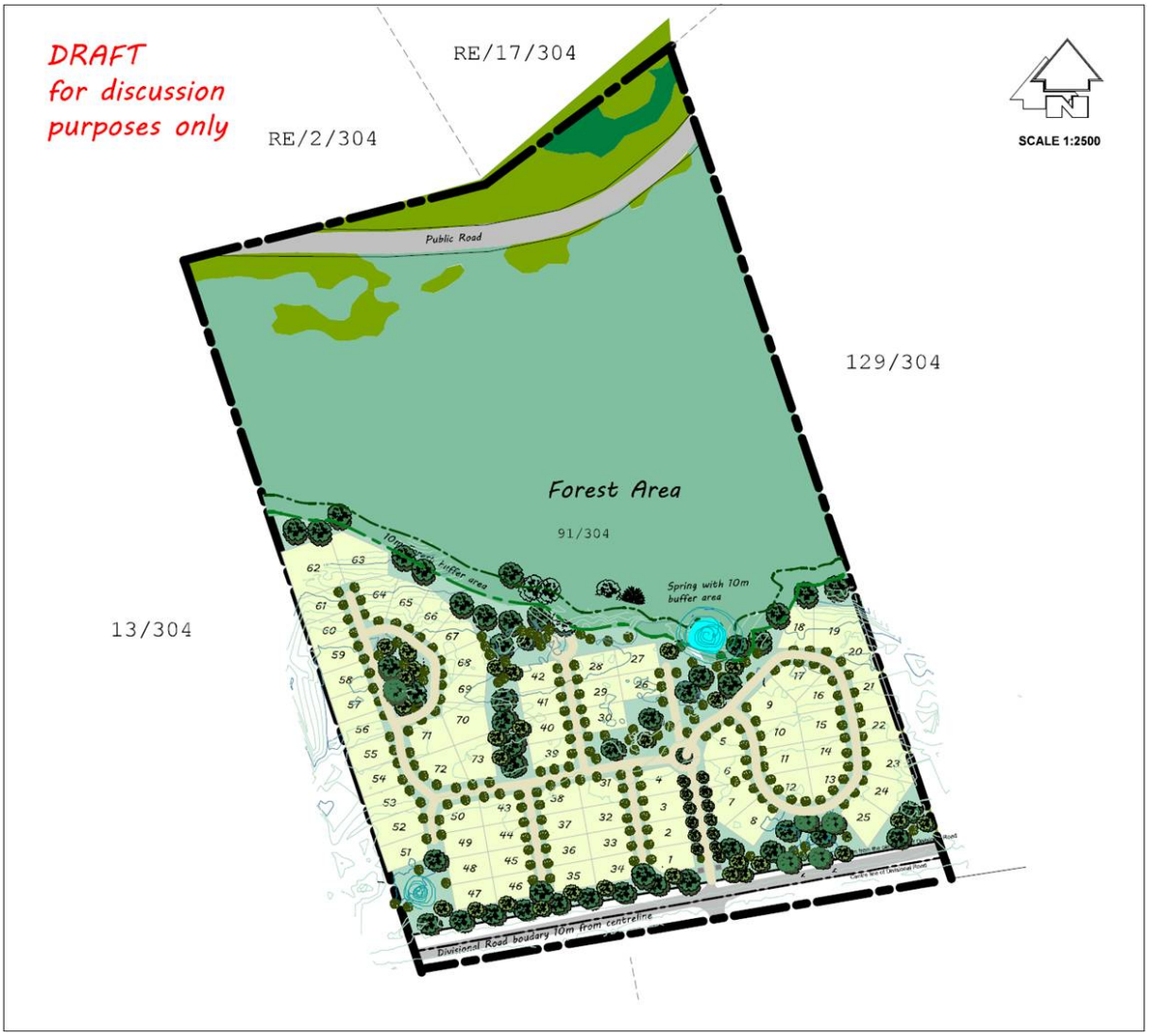


Figure 4. Draft conceptual layout of the proposed residential development. Courtesy of the applicant. (A4 version below)

4. Study Area

The proposed development footprint as shown above in Figure 4 is situated in a relatively flat basin at about 5 m above sea level, and between the coastal dune cordon in the south and a steep, densely vegetated slope to the north (Figures 5 and 6). Apart from a few trees, shrubs and bushes, the development footprint is mainly vegetated by short grass. The area was cleared of vegetation by at least 1818 and maybe by mid-1700s for farming (cultivation and grazing of domestic stock). As a result, surface sediments are significantly disturbed.

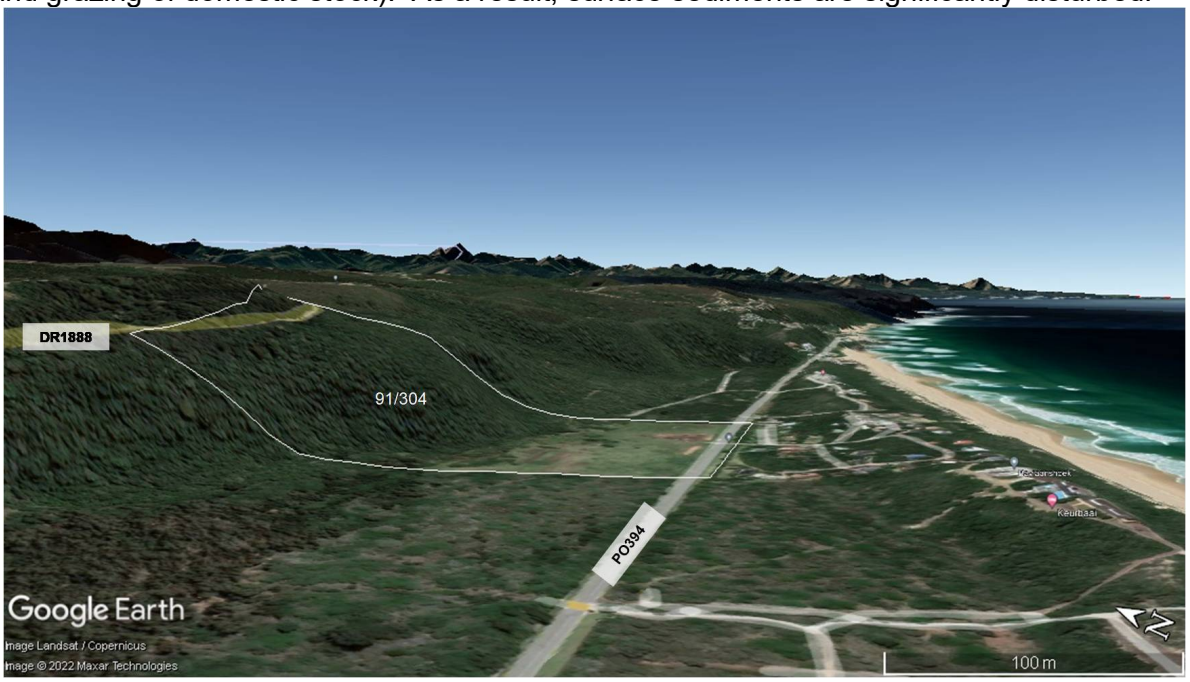


Figure 5. Oblique view showing the topographic and contextual setting of 91/304. Courtesy of Google Earth.

Figure 6. Oblique view showing the topographic and contextual setting of 91/304. Courtesy of Google Earth.

The area is currently used as an equestrian centre and apart from a small reservoir at the natural spring / water trough, there are no permanent structures. There are, however, several temporary wooden installations including sheds / stables, paddocks, and riding areas (Figure 7). Two spoil heaps with low densities of pre-colonial anthropogenic materials are present. The PO394 road runs though the southern part of 91/304 and fencing encloses the property and the approximate northern boundary of the proposed development footprint.

Figure 7. The southern part of, and proposed development footprint on 91/304, showing various existing features on the property. Courtesy of Google Earth 2022. (A4 version below)

Examples of the receiving environment are shown in Figures 8 through 13 where directions of views are indicated with abbreviated compass bearing names like WNW = west-north-west, ENE = east-north-east, and so on.

Figure 8. Views onto 91/304 from the PO394 road and from roughly the centre of the property. Note topography and existing developments.

Figure 9. 91/304 viewed from the SW corner.

Figure 10. 91/304 seen from the SE corner (top) and from the DR1888 road in the north-west (bottom). Note that the property is hardly visible from the DR1888 road due to screening by vegetation.

Figure 11. Views towards and onto 91/304 from the DR1888 road in the north-east. Note that the property is hardly visible due to screening by vegetation.

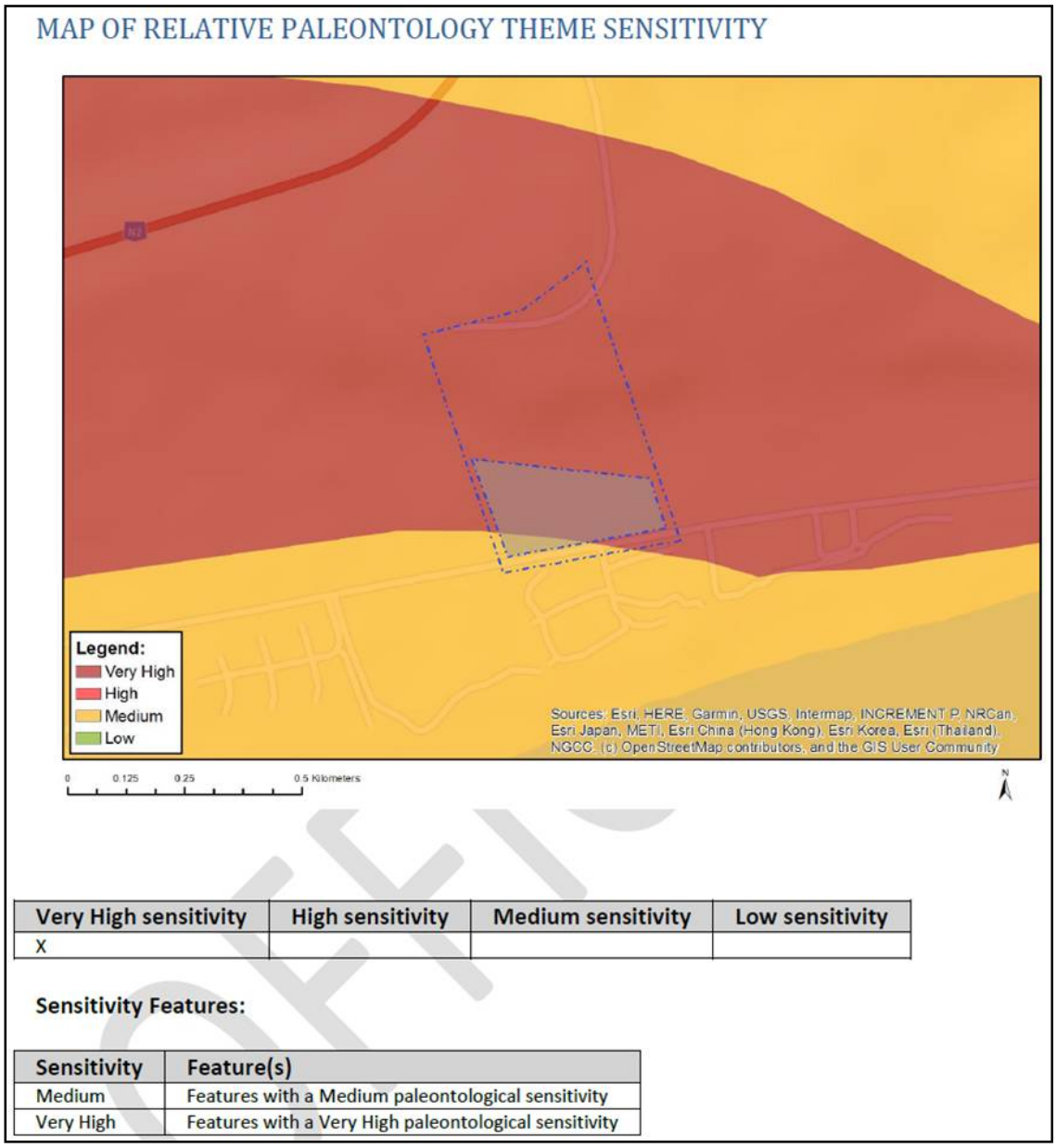
Figure 12. 91/304 seen from the eastern boundary near the NE corner of the development footprint.

Figure 13. Pedestrian and/or horse-riding trails along the northern boundary (top) and in the northern part of the development footprint (bottom).

5. Background Information & Previous Heritage Studies

Palaeontology: A DFFE screening tool report was obtained by Eco Route as part of the initial stages of the environmental application process (Eco Route 2022). Palaeontologist, Mr John Pether was consulted by this author (Pether 2022). The screening tool map (Figure 14)

and the SAHRIS PalaeoSensitivity Map (Figure 15) indicate that “the location of the development, the K-Rides field, is mainly on a unit polygon of VERY HIGH palaeontological sensitivity. Referring to the source geological map 3322 Oudtshoorn, the unit is the late Jurassic-early Cretaceous Uitenhage Group. In this rather out-of-date map the various formations making up the Uitenhage Group are not depicted and the VERY HIGH classification does not apply to all of them. The formation present here is the Enon Formation which is mainly composed of conglomerates and is of LOW sensitivity” (Pether 2022 pg. 1).



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Features with a Medium paleontological sensitivity
Very High	Features with a Very High paleontological sensitivity

Figure 14. Map of relative palaeontology theme sensitivity from the DFFE screening tool report (Eco Route 2022). The proposed development footprint is represented by the shaded area within the polygon (dashed blue line).

“However, the SAHRIS Palaeomap is misplaced to the south with the result that the flat K-Rides field only appears to be on the Enon Fm., but it is actually on unit Qg at the foot of the steep hill of the Enon Fm” (Pether 2022, pg. 1).

Figure 15. SAHRIS PalaeoSensitivity Map (after Fig. 1 in Pether 2022, pg. 1).

“On the 3322 Oudtshoorn geological map [Figure 16] unit Qg denotes “marine and estuarine terrace gravel and sand, partly calcareous”.

These deposits were laid down during the Quaternary Period at times when sea level was higher relative to the present level and constitute the Klein Brak Formation.

This is a composite unit, formed by the reworking of the Enon Fm. conglomerates during the ~14 m high sea level around 400 000 years ago and the LIG ~6 m high sea level ~125 000 years ago.

The Qg “marine and estuarine terrace gravel and sand, partly calcareous” is not rated on the SAHRIS palaeontological sensitivity map (CLEAR, UNCLASSIFIED).

Exposures of the older cobble beach deposits seen west of the Keurbooms estuary were lacking in shell fossils (pers. obs.).

Any fossil shells which may occur are expected to be extant species which are common today.

Excavations for conventional foundations and infrastructure are unlikely to have an impact on the fossil heritage of the Klein Brak Fm. Quaternary raised beaches.

In view of the above the Quaternary “raised beach” deposits are of LOW palaeontological sensitivity with respect to fossil shells.

In case of a find of fossil bones it is recommended that the Fossil Finds Procedure (FFP) is included in the Environmental Management Plan (EMP) for the Construction Phase of the development, basically “If fossil bones are uncovered during excavations, stop work and report to Heritage Western Cape (HWC)”.

The links to the HWC and the FFP are below:
https://www.hwc.org.za/node/89
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” (Pether 2022, pg. 1-2).

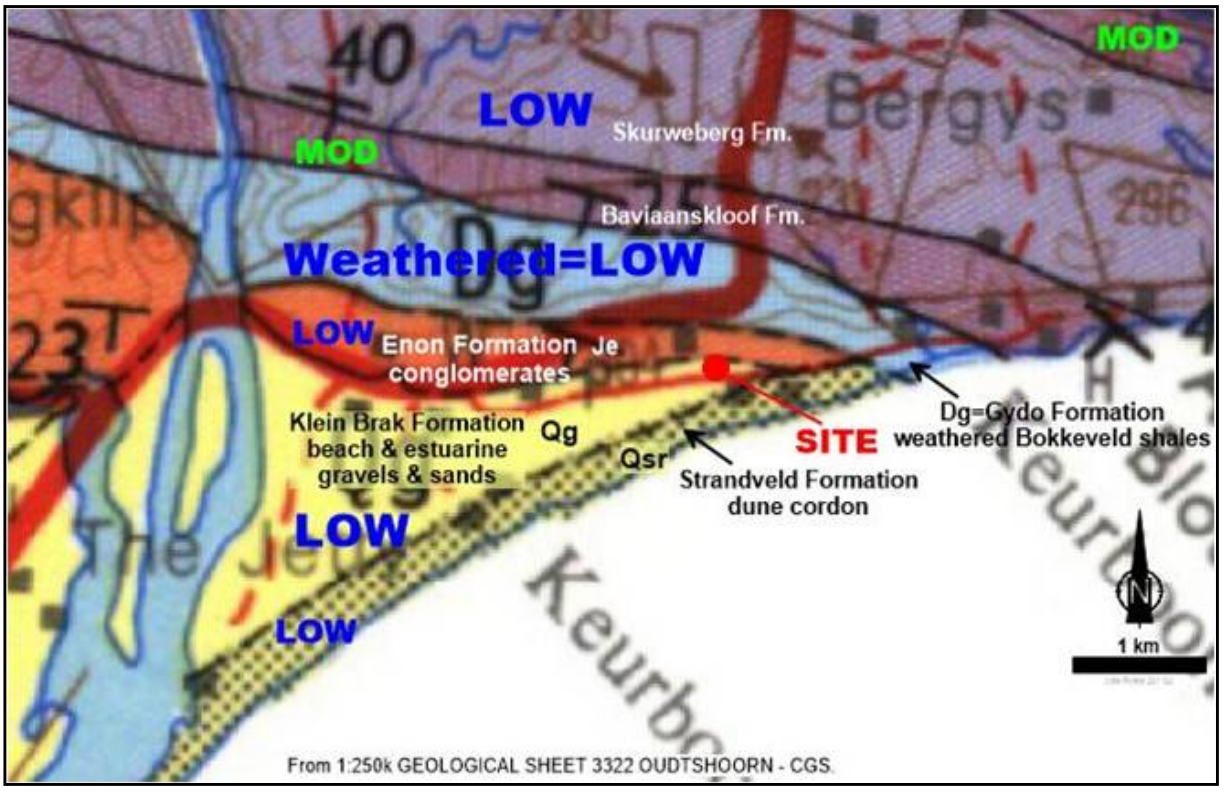


Figure 16 3322 Oudtshoorn geological map (after Fig. 2 in Pether 2022, pg. 2).

Archaeology: The DFFE screening tool map and table for the archaeological and cultural heritage theme sensitivity shown in Figure 17 indicates that the proposed development footprint within 91/304 falls within an area of low sensitivity (Eco Route 2022). In this regard, the results of the basic investigation conducted here concur with the DFFE screening tool report’s attribution of low sensitivity with respect to heritage resources. The high sensitivity red dot east of 91/304 in Figure 17, however, is misleading as it refers to Webley’s site 2, which consists of some quartzite artefacts of unknown age and likely disturbed context where no other cultural or faunal remains were seen (Webley 2001). This observation was considered to be of low significance (Webley 2001).

While not usually required or done for a scoping study, a detailed desktop study and literature review was previously conducted by this author for 126/304 (Figure 2). Findings from that study are repeated here to provide an overview of the types and significance of heritage resources identified by previous studies in the surrounding area and that may occur on 91/304 (Nilssen 2021).

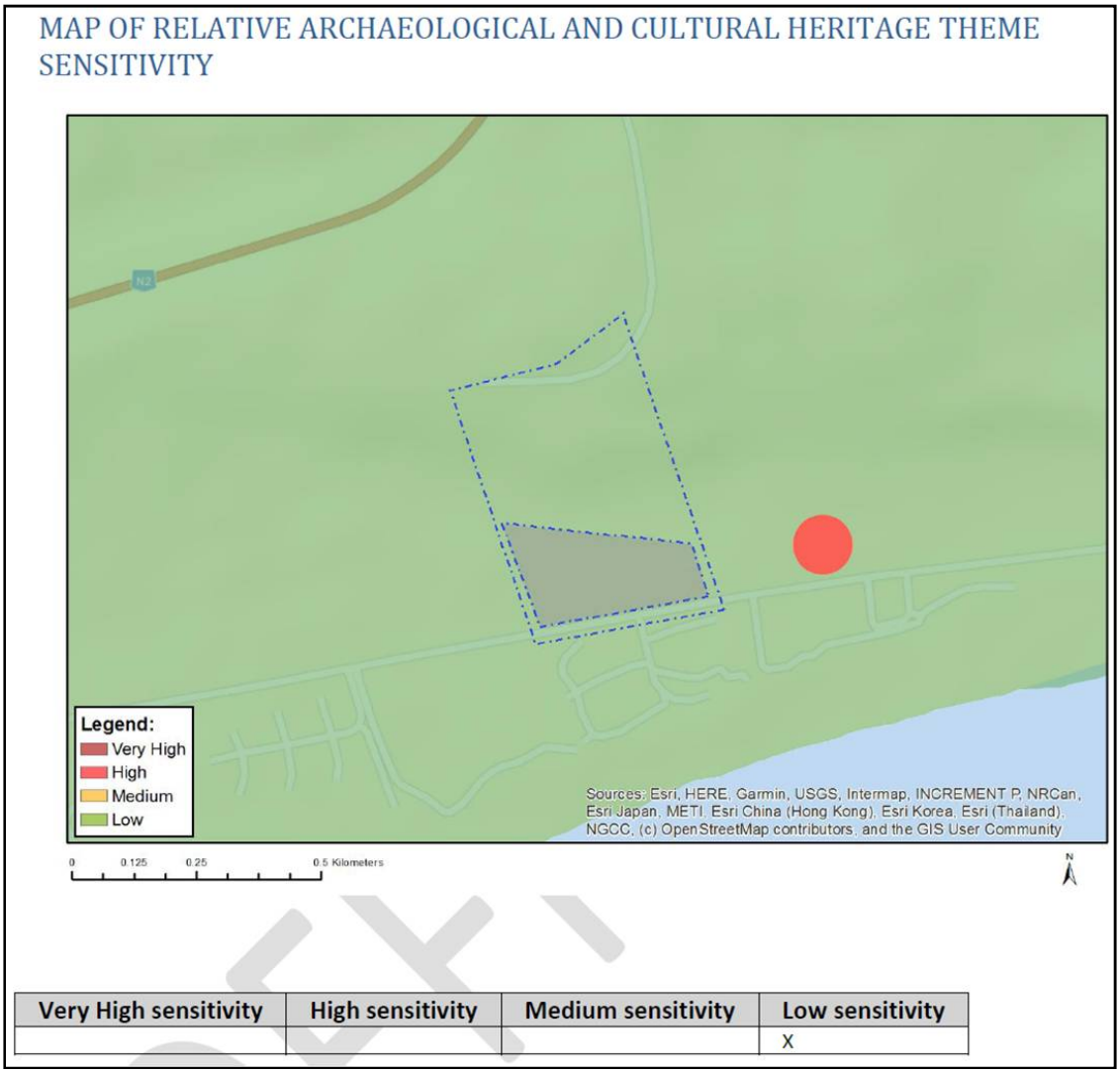


Figure 17. Map of relative archaeological and cultural heritage theme sensitivity from the DFFE screening tool report (Eco Route 2022). The proposed development footprint is represented by the shaded area within the polygon (dashed blue line). The red dot is actually of LOW sensitivity (Webley 2001).

Previous heritage and archaeological studies in the immediate surroundings have described the history, heritage and archaeological record of the area (see Figures 2 and 3; Deacon 2001, Kaplan 1993, 1999, 2001, Nilssen 2011, 2012a, 2012b, 2013, 2014a, 2014b, 2020, 2021 & 2023, Webley 2001 and Yates 2006).

According to information in the Archaeological Data Recording Centre at Iziko – South African Museum (Cape Town), the earliest descriptions of the archaeological record in the surroundings of the study area were made in the early to mid 1900s (Kaplan 1993). A shell midden was “mapped at the Keurbooms River Beach, while Mortelmans (1946) described

Later Stone Age (LSA) and Middle Stone Age (MSA) sites in association with raised beaches at Keurbooms River Beach. The Matjies River Cave (declared a National Monument in 1960 and now a Provincial Heritage Site) near Keurbooms River Beach was described by Peringuey (1911) and Goodwin and Van Riet Lowe (1929)" (Kaplan 1999, pg 3).

The Plettenberg Bay area has a rich Stone Age archaeological record, where cave and open sites as well as shell middens with Middle Stone Age (MSA) and Later Stone Age (LSA) deposits are particularly common on and around the Robberg Peninsula (Kaplan 1993). The archaeological site of Nelson Bay Cave falls within the Provincial Heritage Site of the Robberg Nature Reserve and is open to the public.

While archaeological remains of the Early Stone Age (ESA), MSA and LSA periods have been recorded in the surroundings of the current study area (e.g., Deacon 2001, Kaplan 1999 & 2001, Nilssen 2013, Webley 2001 and Yates 2006), the closest and most significant heritage site is the Provincial Heritage Site of Matjes River Cave, Keurboomstrand, Knysna District, which is situated some 3 km to the east. Matjes River Cave contains one of the deepest LSA shell middens of some 10 m thick that resulted from human occupation of the site over the last 12 000 years. The site contains abundant cultural remains that include a painted burial stone, bone tools, shell pendants and ostrich egg shell beads (Webley 2001). As Webley notes in the aforementioned report, there are numerous archaeological sites in the Tsitsikamma mountains, and it is common knowledge that numerous caves and rock shelters preserve evidence of prehistoric human occupation.

In a study of Portion 168 and Remainder 32 of Farm 304 (Figures 2 & 3), Kaplan describes one archaeological site that was identified on the eastern boundary of the study area (RE/32/304) on a high, partially vegetated dune (Kaplan 1999). The dunes occur near the shoreline and hence the observation was in the southern portion of the property. The site consists of a low density scatter of fragmented marine shells and includes a few weathered ostrich egg shell fragments as well as some stone flakes. The site was given a low conservation rating (Kaplan 1999). In addition, isolated stone artefacts were identified elsewhere on the property, but these were considered to be of low significance. Eight buildings and ruins occurring in the north eastern and eastern portion of the property are not considered to be historically significant (Kaplan 1999).

A previous study of Portion 10 of the farm Matjiesfontein No. 304 (10/304, Figures 2 & 3) identified ephemeral shell scatters, a few pieces of ostrich egg shell and two stone flakes in exposed surfaces on the north facing slope of a barrier dune to the south of the road that transects the property (Kaplan 2001). These finds were considered to be of low significance. No archaeological remains were identified to the north of the road that transects the property, though this area was noted to be densely vegetated and degraded. It was recommended that archaeological inspection should be conducted when development activities commence. To date, the proposed development on 10/304 has not materialised.

Kaplan and Webley pointed out that, archaeological sites of high significance are unlikely to occur in the area due to the sandy nature of the shoreline and point to the general absence of significant shell middens and archaeological sites adjacent to sandy beaches. Most shell middens are associated with rocky shorelines (Kaplan 1999 and Webley 2001). A large, stratified shell midden, however, was recorded at The Dunes Resort which lies south of the road that transects Portion 9 of the farm Matjiesfontein No. 304 (Yates 2006; Figure 2). Although shell midden deposits were evident in mole heaps, the stratified midden deposit was only exposed during vegetation clearing and earthmoving activities associated with construction. This LSA shell midden contains mammal and fish bone, ostrich egg shell,

hammer-stones and large quartzite flakes, and was considered to be of local and regional significance (Yates 2006). Several recommendations were made for further assessment and mitigation of this site, but to the best of this author's knowledge, there is no record that these recommendations were implemented (Yates 2006). It is unknown whether or not further illegal disturbance and damage to this heritage site occurred after Yates' 2006 report.

A study of the northern parts of Portions 9 & 10 of Matjiesfontein 304 (9/304 & 10/304; Figures 2 & 3) noted that a comprehensive archaeological study could not be done due to poor archaeological visibility caused by dense vegetation and ground cover (Nilssen 2013). Nevertheless, archaeological resources that were identified include; two isolated quartzite flakes of likely MSA origin, historic period retaining walls made from large, rounded rocks, a few old glass bottles, and a levelled linear strip that appears to be a portion of an old road (Nilssen 2013). Other structures and ruins on the property are not of historic significance or value. During the same study, this author was informed that unmarked graves were identified by the land surveyor, Mr John Bailey, and that the graves are situated immediately east of the eastern boundary of the property. That is to say, the alleged graves are situated on Portion 11 of the Farm Matjiesfontein 304. The graves could not be located during the field investigation.

Webley's archaeological survey of Portions 1/15, 92 and 16 of Farm 304 was hampered by dense vegetation, resulting in limited access and poor archaeological visibility (Webley 2001; Figures 2 & 3). Nevertheless, a diffuse scatter of brown mussel and estuarine shell was identified near the shoreline, but the material is not necessarily of archaeological origin and no other cultural or faunal remains were seen (Webley 2001). Some quartzite artefacts of unknown age and likely disturbed context were found further inland, but no other cultural or faunal remains were seen (Webley 2001). Both these observations were considered to be of low significance. As mentioned above, the red circle in Figure 17 refers to Webley's site 2, which is of low significance, contrary to the high sensitivity rating attributed to it in the screening tool report (Eco Route 2022). Concerned about limited visibility and the potential for buried or obscured heritage resources, Webley provides a list of what contractors should look out for during construction activities including dense accumulations of shell, stone tools, fossil bones and human remains (Webley 2001).

A few studies conducted by this author in the immediate surroundings of the affected area identified no archaeological resources, but due to poor and limited archaeological visibility, it was recommended that archaeological monitoring should be conducted during the vegetation clearing and construction phases of development (Nilssen 2012a, 2012b, 2014a & 2014b, 2023, also see Kaplan 1999 and Webley 2001).

While several old buildings and ruins have been recorded in the immediate surroundings (see above), only one of these, an old post office, was considered to be conservation worthy or of historic significance (Nilssen 2021). Nevertheless, the area has been settled, farmed and impacted by colonial period agricultural activities since at least the late 1700s. These most recent of the area's inhabitants are mostly of European origin and have had the most dramatic effect on the environment. This includes large tracts of indigenous vegetation being cleared for ploughing and planting of crops and pastures for cattle feed and grazing. Heritage resources related to this period - older than 60 years or of historic significance - include a variety of structures, dwellings and associated structures, transport infrastructure, material culture as well as cemeteries, marked and unmarked human burials.

SG Diagrams: A detailed archival and deeds study of the property's history and ownership is beyond the scope of this report. The focus here is on the presence and significance of the

built environment. According to Surveyor-General (SG) Diagrams, the original parent farm, Matjes Fontein No. 304, was granted to Martinus Jacobus Jarling in 1818 (Figure 18). A spring and structure are indicated on that diagram, but a rough overlay of the diagram using Google Earth showed that these features are located well west of 91/304, which is situated near the eastern extent of the parent farm (roughly within red circle). The southern part of Farm 304 is labelled as "grazing ground", indicating that this part of the farm was already cleared for grazing at the time the farm was first granted in 1818 (Figure 18).

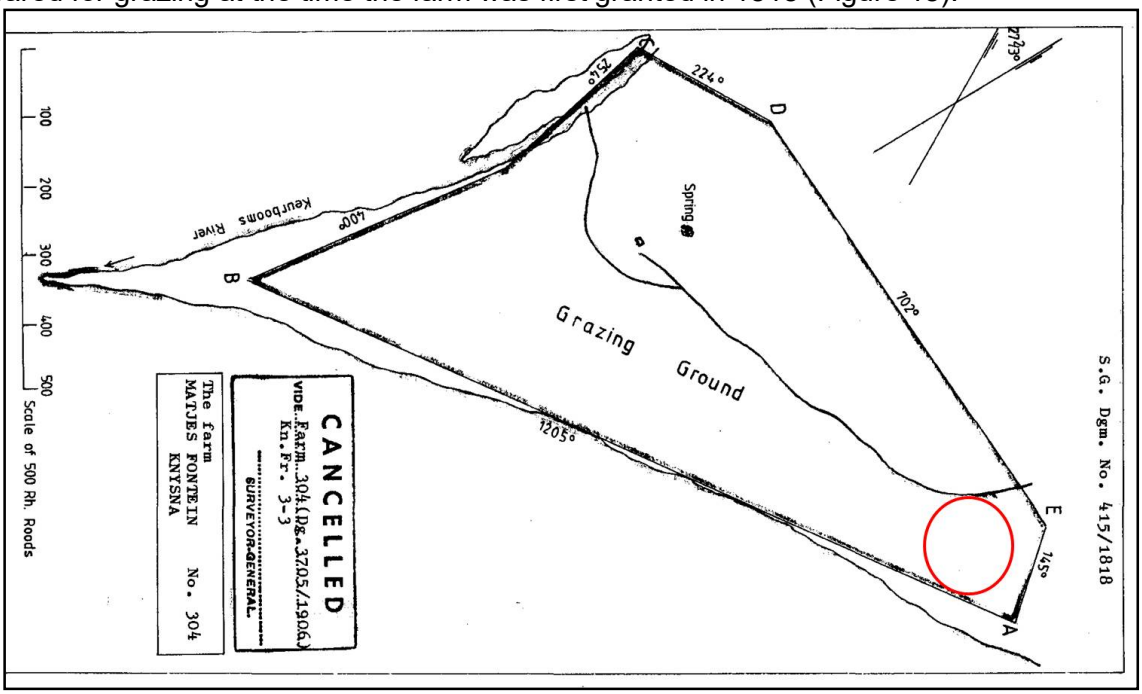


Figure 18. Cropped portion of SG Diagram 514/1818 showing the parent farm of Matjes Fontein 304 that was granted to Jarling in 1818. Note the spring and structure as well as grazing ground discussed further in the text.

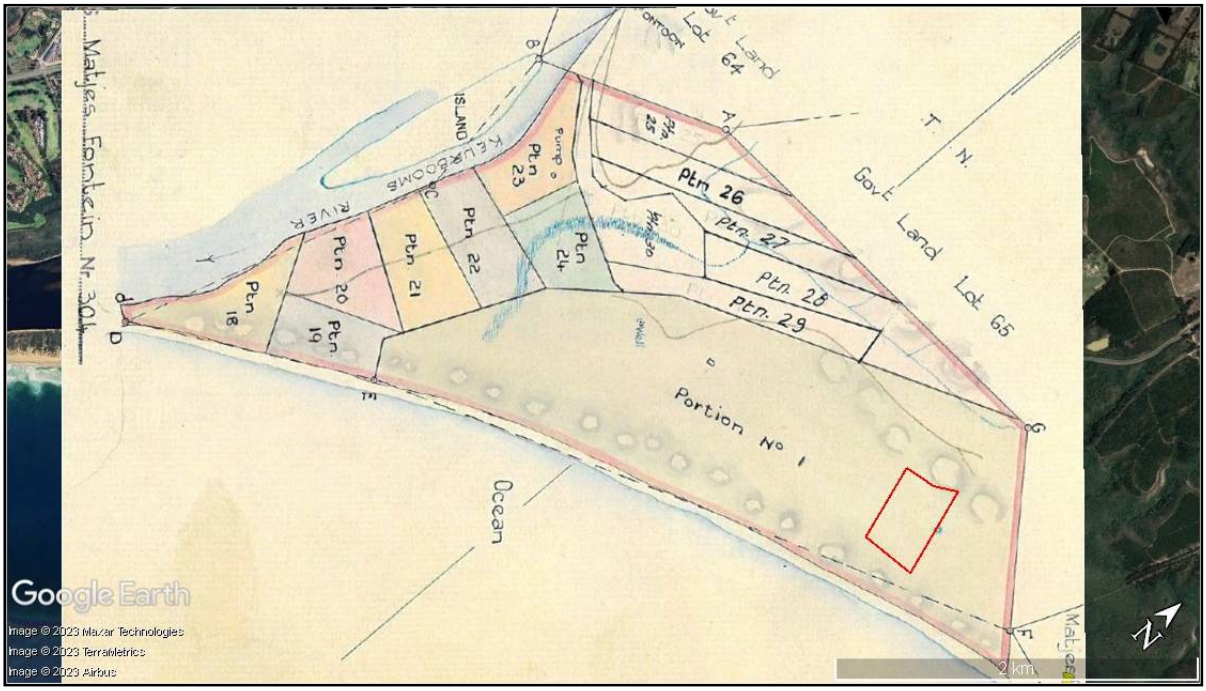


Figure 19. Cropped portion of SG Diagram 3705/1906 showing subdivisions from the parent farm of Matjes Fontein 304 in 1906. The approximate location of 91/304 is shown with the red polygon.

The first subdivision of the farm was in 1906/1907, when Portion 1 was granted to I.W.O and J.P.C Read (Figure 19). Portion 1 was subdivided further in 1907 as shown in Figure 20. This diagram shows that 91/304 was at that time part of Portion 14 of Portion 1 of Farm 304. Apart from the blue feature, possibly a spring / dam, next to the eastern boundary of 91/304 (Figure 19), no other structures or built features are indicated in the early SG Diagrams.

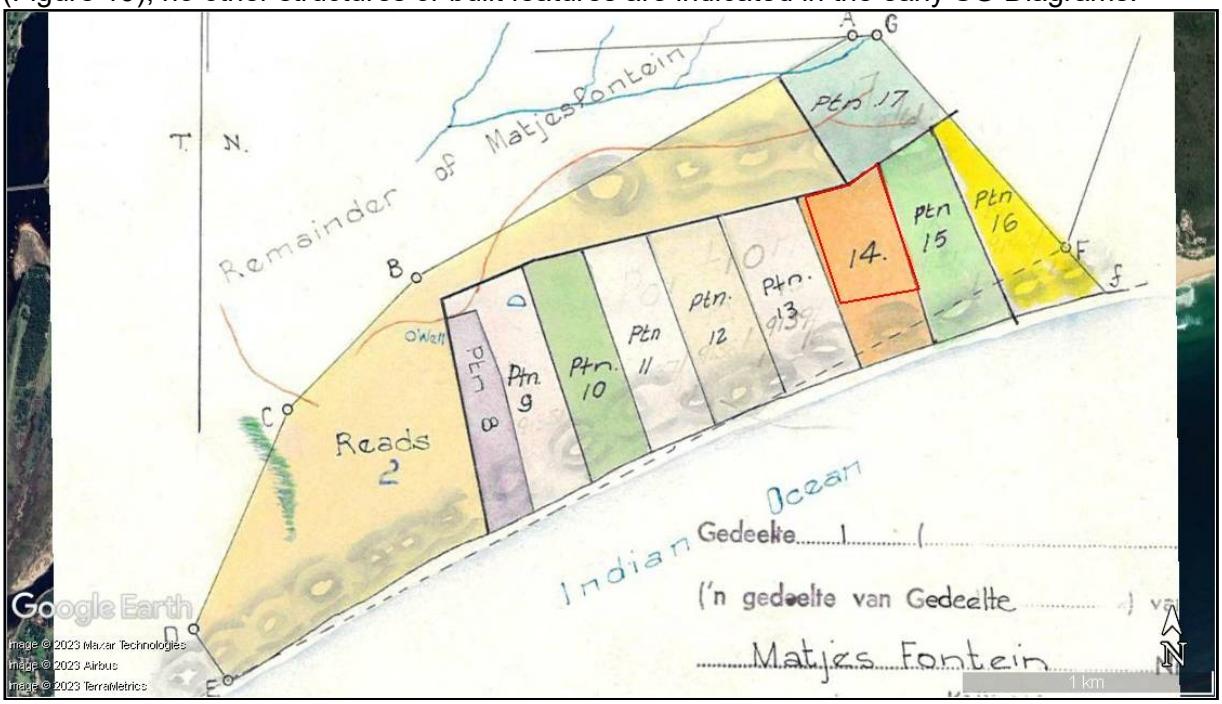


Figure 20. Cropped portion of SG Diagram 1596/1907 showing further subdivisions from Portion 1 of Matjes Fontein 304 in 1907. The approximate location of 91/304 (a portion of portion 14) is shown with the red polygon.

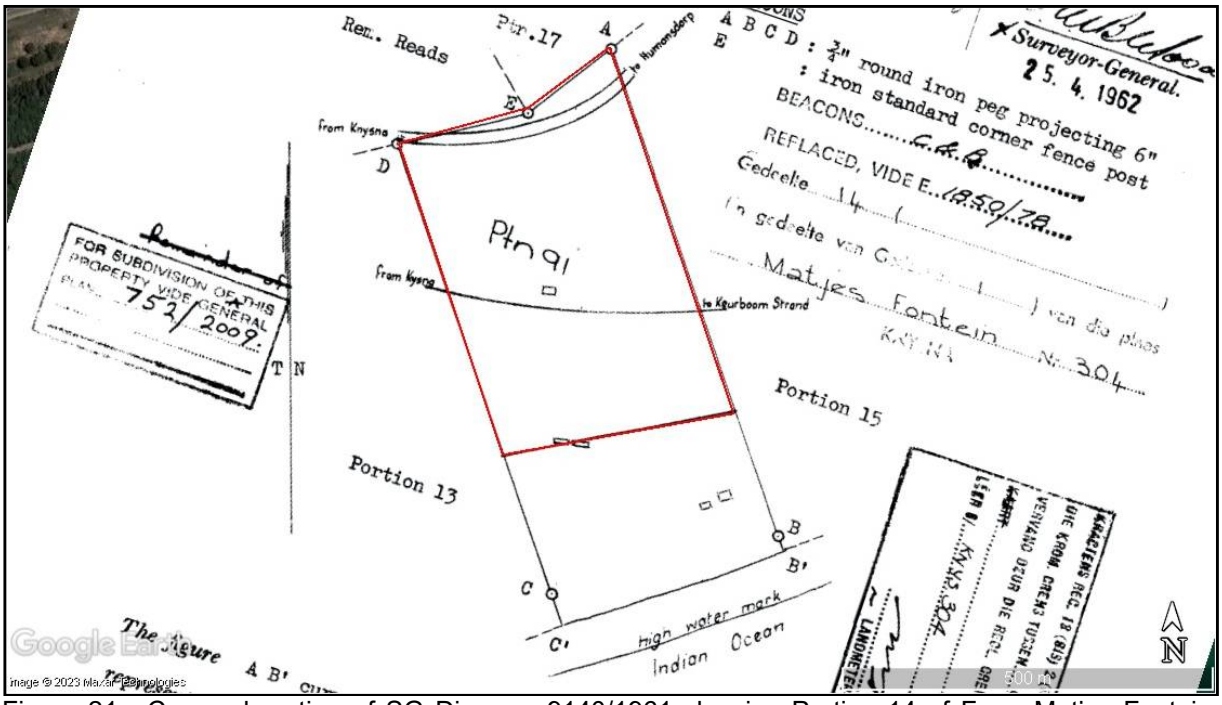


Figure 21. Cropped portion of SG Diagram 9140/1961 showing Portion 14 of Farm Matjes Fontein 304 in 1962. 91/304 (a portion of portion 14) is shown with the red polygon. Note road and structures.

The SG Diagram 9140/1961 of Portion 14 of Farm Matjes Fontein 304 indicates that by 1962 there are five structures on the property and an old road runs roughly through the middle of 91/304 (Figure 21). The two structures on the southern boundary were likely demolished before building the PO394 road as shown in the latest SG Diagram (Figure 22).

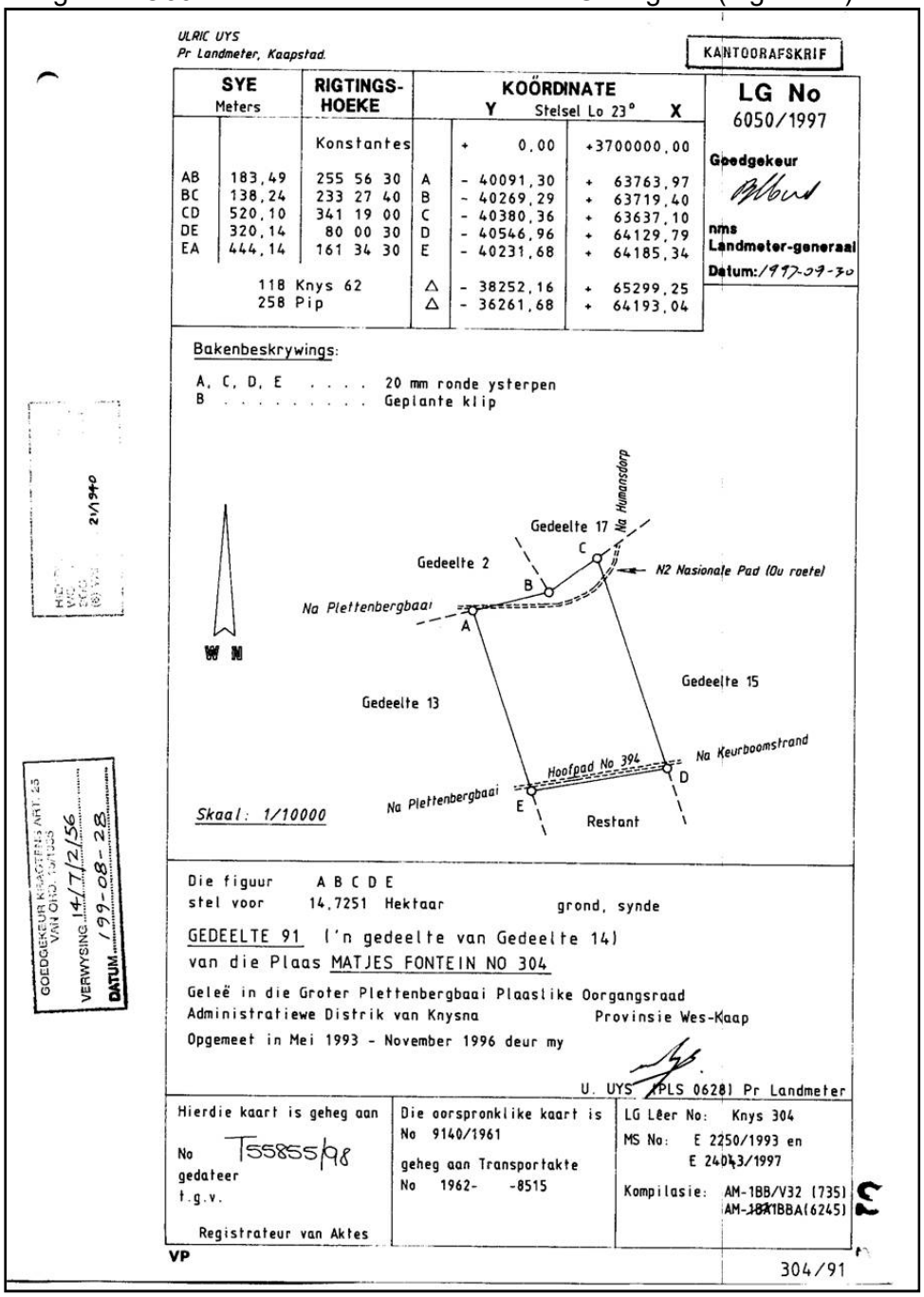


Figure 22. SG Diagram 6050/1997 showing the current extent of Portion 91 of Farm Matjes Fontein 304 in 1962. Note that road PO394 runs adjacent to the southern property boundary. No structures are shown.

Historic aerial photographs: Although the positioning is not perfect, the overlays of historic aerial photographs in Google Earth are adequate for identifying landscape and built environment features in the study area. The earliest image shows that vegetation is cleared

for farming and that a road and structure are in place by 1936 (Figure 23).

Figure 23. 1936 aerial photograph showing the approximate position of 91/304 (red polygon). What appears to be a structure (in white circle) and the old road are already in place. Note that vegetation was cleared for cultivation and grazing. Courtesy of NGSI, aerial survey 114, Flight strip 13, Image 19262.

Figure 24. 1962 aerial photograph showing the approximate position of 91/304 (red polygon). Structures on the property are circled in white. Road DR1888 runs through the northern part of the property. Courtesy of NGSI, aerial survey 445, Flight strip C03, Image 02319.

By 1962, the DR1888 road running through the northern portion of 91/304 is built, and two additional structures are present at the southern boundary (Figure 24, also see SG Diagram

in Figure 21). A few additional vehicle tracks are also visible on the property and in the immediate surroundings. The PO394 road was built between 1962 and 1972, which was the likely cause for the demolition of the two structures at the southern boundary of 91/304 (Figure 25).

Figure 25. 1972 aerial photograph showing the approximate position of 91/304 (red polygon). Structure is circled in white. Road PO394 runs adjacent to the southern boundary. Courtesy of NGSI, aerial survey 686, Flight strip 18, Image 08707.

Figure 26. 1980 aerial photograph showing the approximate position of 91/304 (red polygon). Structure is circled in white and approximate alignment of the old road is indicated by the dashed white line. Courtesy of NGSI, aerial survey 837, Flight strip 07, Image 08960.

By 1980 the old road that passed through the middle of the property appears disused (Figure 26). The 1990 image shows that a track leads to what appears to be structures within the circle at the eastern boundary of 91/304 (Figure 27). Note, however, that the overlay and placement relative to the property is not exact. More recent aerial photography shows that there are no structures on 91/304 by 2003.

Figure 27. 1990 aerial photograph showing the approximate position of 91/304 (red polygon). Structure is circled in white and approximate alignment of the old road is indicated by the dashed white line. Possible temporary or other structures or features circled with dashed white line. Courtesy of NGSI, aerial survey 943, Flight strip 06, Image 03074.

Mr David Steele's personal account: We are fortunate that Mr Delport was able to provide a personal account about the recent history of the property from Mr David Steele, whose grandfather was the landowner in the 1940s and whose knowledge about the property spans more than 60 years. Mr Steele's written account is in Afrikaans and the complete document is available from this author on request. Selected extracts from Mr Steele's writings that are pertinent to the heritage and archaeology of 91/304 are translated below by this author. The accuracy of the translation was checked and approved by Mr Delport and Mr Steele.

Agricultural lands stretched from the equestrian centre to the Dunes development to the west. These lands were used up to the 1960s for growing various crops including potatoes and sweet potatoes as well as for cattle grazing. On the mountain-side of the old gravel road was a labourer's cottage with a permanent spring.

Mr Steele's grandfather had a house built on the dunes some 150 m north of the high water mark. It is likely that this house was one of the structures indicated in the 1962 SG Diagram that are south of the PO394 and not on 91/304 (Figure 21).

Foundation excavations for a house were done about 4 to 5 years ago on a dune at "Milkwood Glen", south of the equestrian centre. The excavated sediments were dumped in the north-eastern part of the equestrian centre. Mr Steele believes that the fore-mentioned

excavations disturbed an old “Strandloper” midden and that the sediments including some artefacts were dumped at the equestrian centre.

The equestrian centre and the entire area between the dunes and the mountain were ploughed and cultivated over many years resulting in disturbance of sediments.
Geotechnical test excavations: Outeniqua Geotechnical Services excavated 6 test pits in the proposed development footprint and supplied this author with information and high resolution profile photographs (Figure 28).

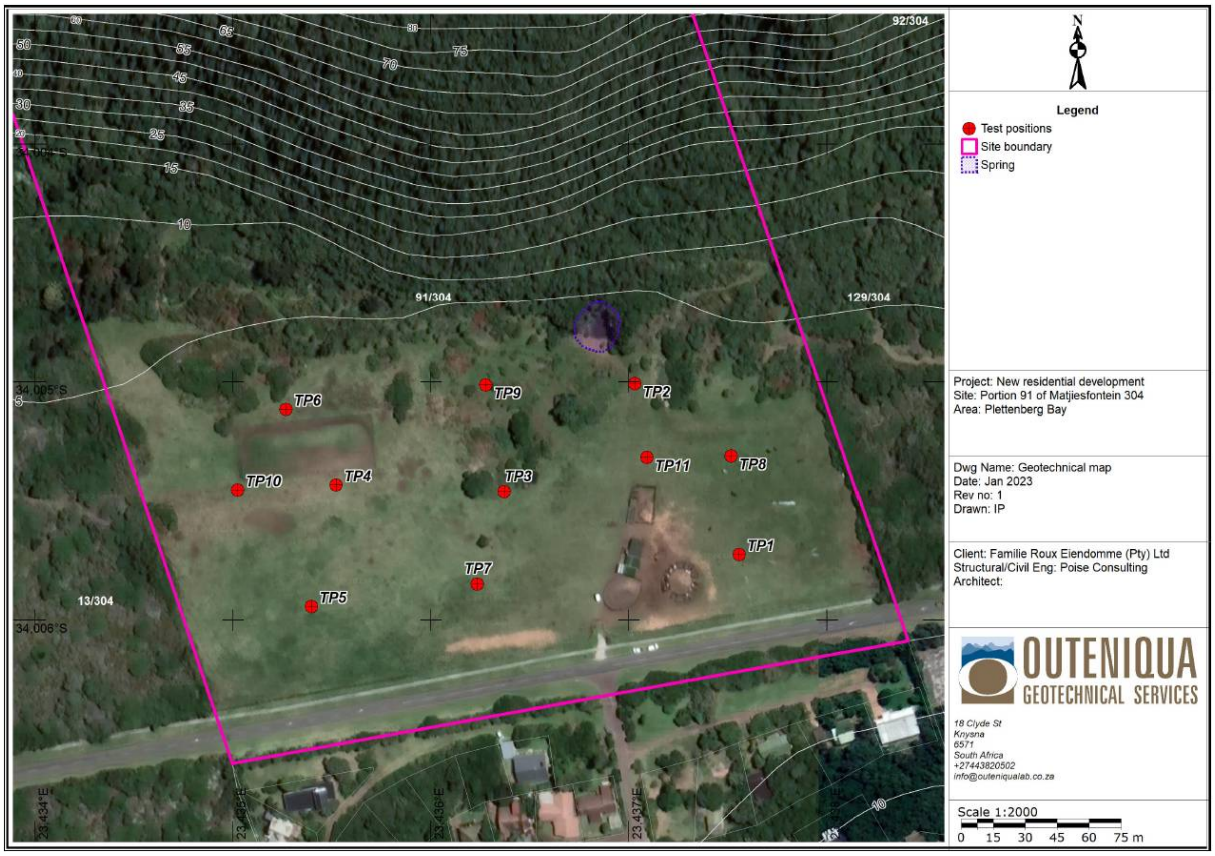


Figure 28. Geotechnical test locations on 91/304. Courtesy of the client and Outeniqua Geotechnical Services.

Test pits 1, 2, 3, 4, 5 and 11 provide a representative sample of sub-surface sediments across the study area and were excavated to a depth of between 2 m and 3 m below the surface (Figures 29 & 30). This is deeper than excavations for foundations and bulk services associated with the proposed development. Surface sediments to a depth of around 500 mm are described as “imported” in 3 cases and “transported” in 3 cases. In other words, there is an indication that sediments were brought onto 91/304 from elsewhere, which concurs with Mr Steele’s statement above. In any case, inspection of the exposed profiles show that there are no anthropogenic horizons or shell layers in these surface sediments and the aeolian dune sands are sterile to depth in all cases (Mr Iain Paton pers. comm., Figures 29 & 30). The inclusions of fragmented shell and a few bones and artefacts are very diffuse and not concentrated as is expected in an *in situ* and intact archaeological site or shell midden.

It is noted that Mr Paton, representing Outeniqua Geotechnical Services, is familiar with coastal shell midden archaeological sites and stated that there is no evidence of shell middens in any of the geotechnical test excavations (pers. comm.). Detailed inspections - at

high magnification - of the high resolution profile photographs of the 6 test pits were undertaken by this author. The results confirm that there is no evidence of *in situ* or intact archaeological materials or shell midden deposits in any of the geotechnical test pits (Figures 29 & 30). Furthermore, no palaeontological resources were identified in the sterile aeolian dune sands.

Figure 29. Profiles of geotechnical test pits 1, 2 and 3 on 91/304. The depths from surface to base of excavation are as follows; tp1 = 2 m, tp2 = 2, 5 m and tp3 = 2, 5 m. Courtesy of the client and Outeniqua Geotechnical Services.

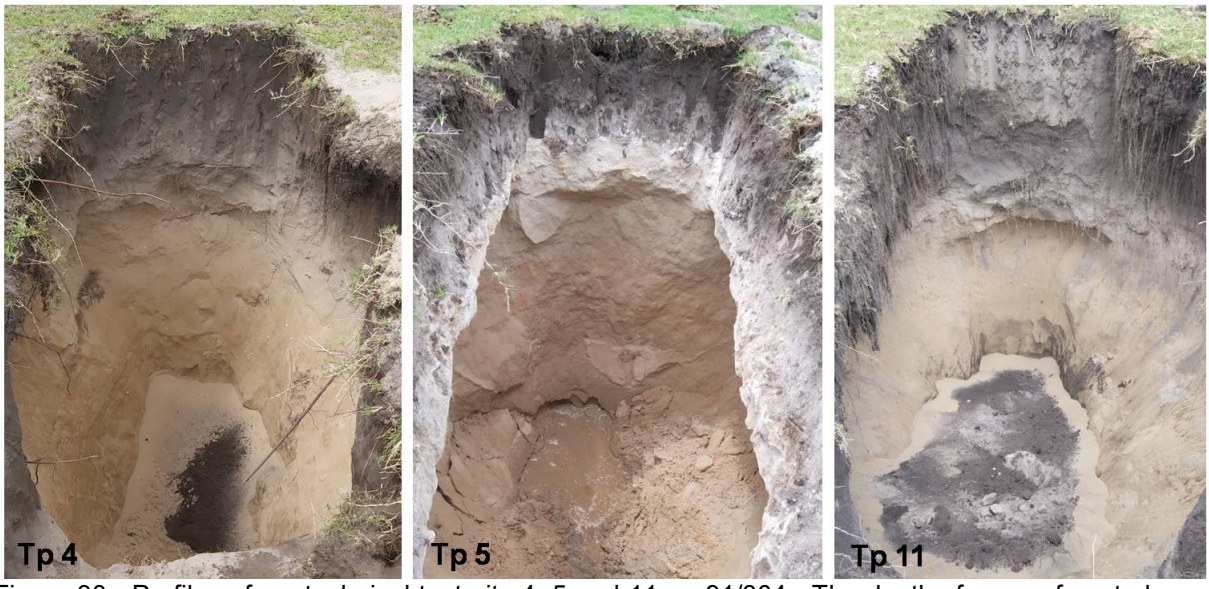


Figure 30. Profiles of geotechnical test pits 4, 5 and 11 on 91/304. The depths from surface to base of excavation are as follows; tp1 = 2, 5 m, tp2 = 2, 5 m and tp3 = 3 m. Courtesy of the client and Outeniqua Geotechnical Services.

From personal experience and from a desktop study conducted by this author in 2021, it is noted that when archaeological remains are found in exposed, open contexts, they are often temporally mixed and disturbed. This is particularly true for areas covered by dunes and

aeolian sands. The lack of *in situ* context, therefore, renders such archaeological sites compromised and of questionable or no scientific value.

With a few exceptions, like the stratified shell midden shown in Figure 2 (Yates 2006), shell middens are usually fairly close to the shoreline and mostly associated with rocky intertidal zones. In other words, shellfish are most commonly processed and consumed close to the point of collection. The current study area is about 300 m from a sandy shoreline and is not the type of location normally expected to contain shell midden deposits.

Given the above background information and apart from the natural spring and associated drinking trough, the structures and old road associated with the colonial period were demolished during the latter part of the 1900s or early 2000s. Due to ploughing, cultivation, and the grazing of domestic stock over a period of about 200 years, surface sediments in the proposed development footprint are significantly disturbed. Consequently, the context of any pre-colonial archaeological remains on or in those sediments is also disturbed and thus compromised and of questionable or low heritage value. Furthermore, as described by Mr Steele and as revealed in the geotechnical test pits, sediments containing fragmented marine shell, some bone and a few stone artefacts were imported, dumped and dispersed on the property in the last 4 to 5 years.

Overall, based on the above, it is not expected that any significant palaeontological, archaeological or cultural heritage resources occur on 91/304. It is anticipated that the following heritage resources, though in disturbed context, may be found on the property:

1. the natural spring and associated watering trough (will be incorporated into the proposed development (Figure 4),
2. remnants of the structure (possible labourers cottage) and associated rubbish and debris (Not Conservation Worthy [NCW]),
3. remnants of the old road (Grade IIIC or NCW),
4. isolated Stone Age pieces or very low density scatters of Stone Age implements (Grade IIIC or NCW),
5. diffuse scatters of shell, some bone and a few stone artefacts from imported, dumped and dispersed sediments (NCW), and
6. although rare, unmarked human burials are considered to be of high significance at the local level (Grade IIIA) and may occur anywhere in areas with soft sediments.

6. Site Inspection and Results

After arranging access and meeting Mr Delport on site, an independent site inspection of the affected property was conducted on 23 November 2022 by means of a foot survey (archaeological walk-through) that covered most of the proposed development footprint. Apart from a few stands of dense vegetation, the bulk of the development footprint was accessible on foot, and due to extensive exposed surfaces and substantial mole activity archaeological visibility was good.

Survey tracks and observations were fixed with a hand held Garmin Etrex 30x GPS to record the investigated area its heritage related contents (Figures 31 and 32). A high quality, comprehensive digital photographic record was also made with a Samsung Galaxy A70 cellular phone, including location data for photographs. All GPS and photographic data are available on request. Approximately 4 hours were spent on site.

Figure 31: 91/304 (white polygon) with GPS-fixed survey tracks (red lines).

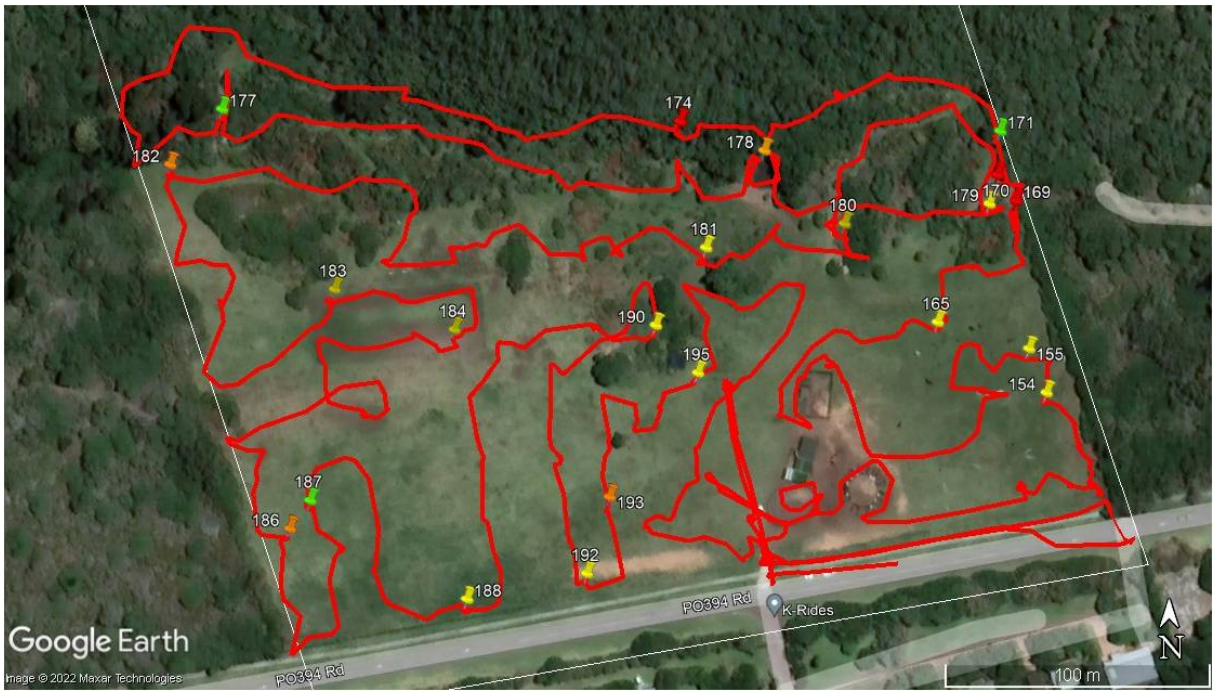


Figure 32: Development footprint on 91/304 with GPS-fixed survey tracks (red lines) and locations of observation and identified archaeological resources (labelled markers). (A4 version below).

The property was examined with a focus on the presence and significance of heritage related resources of both colonial and pre-colonial origin. Heritage resources listed in Section D of the NID application form were considered, but are not listed here unless they are present on or in the immediate vicinity of 91/304, or if they are anticipated to occur on or in the immediate vicinity of the property (also see Nilssen 2021). Due to open and low vegetation cover, exposed surfaces, disturbances associated with the equestrian centre, and mole

activity, archaeological visibility was very good, and adequate observations were made for the purpose of informing the NID application process.

The approach was to;

- walk and inspect as much of the property as possible to gain an understanding of its archaeological and heritage sensitivity by accessing as many exposed and disturbed areas as possible,
- and the site inspection was completed with an evaluation of the visibility of the site from the PO394 road in the south and the DR1888 road in the North.

Examples of existing temporary structures and features associated with the equestrian centre are shown in Figures 33, 34 & 35 (see layout in Figure 7 above).

Figure 33. Paddocks and sheds associated with the K-rides equestrian centre.

Figure 34. Feeding and watering area and temporary shed.

Figure 35. Riding or training area with spoil heap in foreground (top).

Examples of the diffuse scatter of imported and dispersed sediments that contain fragmented shell and a few pieces of bone and fewer stone artefacts are represented by waypoints 154, 155, 165, 179, 181, 188, 190, 192 and 195 (Figures 32 and 36 through 42). Although widely scattered across the development footprint, this sediment is denser in the east and north-east of the affected area (Figure 7). This supports Mr Steele's statement that the imported sediments were mostly dumped in the north-eastern corner of the "perdekamp". That the sediments were imported and dispersed is further supported by the fact that the shell is highly fragmented and present in very low densities, with no high concentrations of shell as is typical of intact archaeological shell middens. The GPS unit used for scale in photographs is 10 cm long.

Figure 36. Waypoint 154 – context and example of diffuse scatter of sediments containing fragmented marine shell (bottom right inset) and a quartzite stone artefact (bottom left inset) in mole heaps.

Figure 37. Waypoint 155 – context and example of diffuse scatter of sediments containing fragmented marine shell, a piece of bone and a quartzite stone artefact (bottom right inset).

Figure 38. Waypoint 165 – context and example of diffuse scatter of sediments containing fragmented marine shell and a few pieces of bone in mole heaps (see detail in insets).

Figure 39. Waypoint 181 – context and example of diffuse scatter of sediments containing fragmented marine shell and a quartzite stone artefact (see detail in insets).

Figure 40. Waypoint 188 – context and example of diffuse scatter of sediments containing very little fragmented marine shell, a dune molerat skull (top inset) and a quartzite stone artefact (bottom inset).

Figure 41. Waypoint 190 – context and example of diffuse scatter of sediments containing fragmented marine shell (detail in inset). GPS unit is 10cm long.

Figure 42. Waypoint 195 – context and example of diffuse scatter of sediments containing fragmented marine shell in mole heaps (detail in inset). GPS unit is 10cm long.

Figure 43. Waypoint 180 – spoil heap with fragmented marine shell, a few pieces of bone and fewer quartzite artefacts (Figure 32). The heap is about 10 m long, 4 m wide and 1,5 m high.

The spoil heap shown in Figure 43 - and visible in the A4 version of Figure 7 - may represent one of the original stockpiles imported to 91/304 as its nature and contents mimic those of the diffuse scatter of fragmented marine shell, bone and stone artefacts reported and shown

above. Note the difference in colour between the stockpile and aeolian sands in the foreground.

The permanent spring with watering trough shown in Figure 44 will be incorporated into the proposed development.

Figure 44. Waypoint 178 – Context and natural spring with retaining wall to create drinking trough (Figure 32). The wall is about 0,5 m high.

Although no significant rubbish dumps were identified, there are a few localities containing modern building rubble and rubbish in the form of glass, ceramics, metal, plastics and marine shell (Figures 32, 45 and 46). Due to the relatively recent origin and temporally mixed nature of materials, these are considered to be not conservation worthy.

Figure 45. Waypoint 169 – modern rubbish – glass, ceramic, plastic, metal, marine shell (Figure 32). GPS unit is 10 cm long.

Figure 46. Waypoint 170 – modern rubbish and rubble (top) and waypoint 174 – modern rubbish – plastic, oysters & marine shell (bottom) (Figure 32). GPS unit is 10 cm long.

Apart from the few quartzite stone artefacts associated with the imported sediments described above, 3 (three) Stone Age pieces were identified in the study area (Figures 32, 47, 48 and 49). In all cases these artefacts occurred in isolation (a single piece) and are not associated with any other cultural materials or organic remains. As such, and because

surface sediments on the property are disturbed, these pieces are considered to be of low significance (Grade IIIC) and Not Conservation Worthy.

Figure 47. Waypoint 171 – context (white ellipse) and isolated Middle Stone Age piece in quartzite with faceted / prepared striking platform (Figure 32). GPS unit is 10 cm long.

Figure 48. Waypoint 177 – context (white ellipse) and Stone Age flake in quartzite and of indeterminate age (Figure 32). GPS unit is 10 cm long.

Figure 49. Waypoint 187 – context (white ellipse) and isolated Stone Age flaked piece in quartzite and of indeterminate age (Figure 32). GPS unit is 10 cm long.

The site inspection identified no significant heritage resources and it is not expected that the proposed development will have an impact on heritage resources or the heritage value of the area.

The proposed development site is not readily visible from the DR1888 road in the north (Figures 10 & 11). While the development footprint is currently visible from the PO394 in the south, there are no heritage resources that will be visually impacted by the proposed development (Figures 8, 9 & 10). Furthermore, the proposal is for a 10 m wide strip along the PO394 road to be vegetated in such a way that the development will not be visible from the road. This screening effect has already been achieved by other developments along the PO394 in the surrounding area. Consequently, the scenic route will not be negatively impacted by the proposed development.

Furthermore, since there are no significant heritage resources or features associated with 91/304 or the proposed development footprint, the proposed activity will have a negligible to no impact on the existing cultural landscape of the area.

7. Conclusions and Recommendations

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

- Mr Pether's palaeontological inputs,

- previous archaeological and heritage related studies in the surrounding area,
- SG Diagrams,
- historic aerial photographs,
- Mr Steele's personal account,
- geotechnical test excavations, and
- a site inspection (archaeological walk-through).

The palaeontological sensitivity of the development footprint is low and even though Mr Pether recommends the inclusion of the Fossil Finds Procedure in the EMPr for the development, geotechnical test pits to a depth of 2 to 3 m have revealed no palaeontological resources. Excavations for bulk services and foundations are not expected to exceed 1, 5 m in depth.

The proposed development footprint on 91/304 has been impacted by farming activities (ploughing, cultivation and grazing) since at least 1818 and more likely since the mid- to late-1700s. As a result, the context of pre-colonial heritage resources in surface sediments was damaged, disturbed or destroyed. Colonial period heritage resources – structures and old road – were demolished or destroyed by the late 1900s or early 2000s.

Furthermore, as described by Mr Steele and as revealed in the geotechnical test pits, sediments containing fragmented marine shell, some bone and a few stone artefacts were imported, dumped and dispersed on the property in the last 4 to 5 years. The geotechnical test pits lack any evidence of archaeological horizons or shell midden deposits and are archaeologically and palaeontologically sterile to depth.

The archaeological walk-through identified the imported and dispersed sediments with fragmented marine shell, some bone and a few stone artefacts as described by Mr Steele and as detected through geotechnical test excavations. These sediments have no sub-surface origin and were clearly imported and dispersed on 91/304. Identified modern building rubble and rubbish, as well as isolated Stone Age pieces are considered to be of low heritage value and are not conservation worthy.

Due to the absence of significant heritage resources, the proposed activity will have no cumulative impacts on the archaeological or heritage value of the area.

This baseline investigation has shown that heritage resources on the affected part of the property are of low significance and are given a field rating of Not Conservation Worthy. Since there are no significant heritage resources associated with the proposed development footprint, it does not meaningfully contribute to the cultural landscape of the area.

For reasons given above, and due to the planned screening from the PO394 road, the proposed activity will have a negligible to no negative impact on the aesthetic value of the area.

The positive socio-economic impact, including several short, medium and long term jobs as well as the provision of middle income housing 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 significant heritage resources will be impacted by the proposed development on 91/304, it is recommended that no further heritage-related specialist studies (as listed in the NID) are required 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:

- even though 91/304 is of LOW palaeontological sensitivity, in case of a chance fossil discovery Mr Pether recommends that the Fossil Finds Procedure (FFP) is included in the Environmental Management Plan (EMP) for the Construction Phase of the development, basically "If fossil bones are uncovered during excavations, stop work and report to Heritage Western Cape (HWC)" – however, given the absence of palaeontological and archaeological remains in the geotechnical test pit excavations, this requirement is in question and may not be applicable (unfortunately Mr Pether was not available to comment at the time of this observation and writing),
- due to the disturbed nature of this part of 91/304, as well as the findings of the geotechnical 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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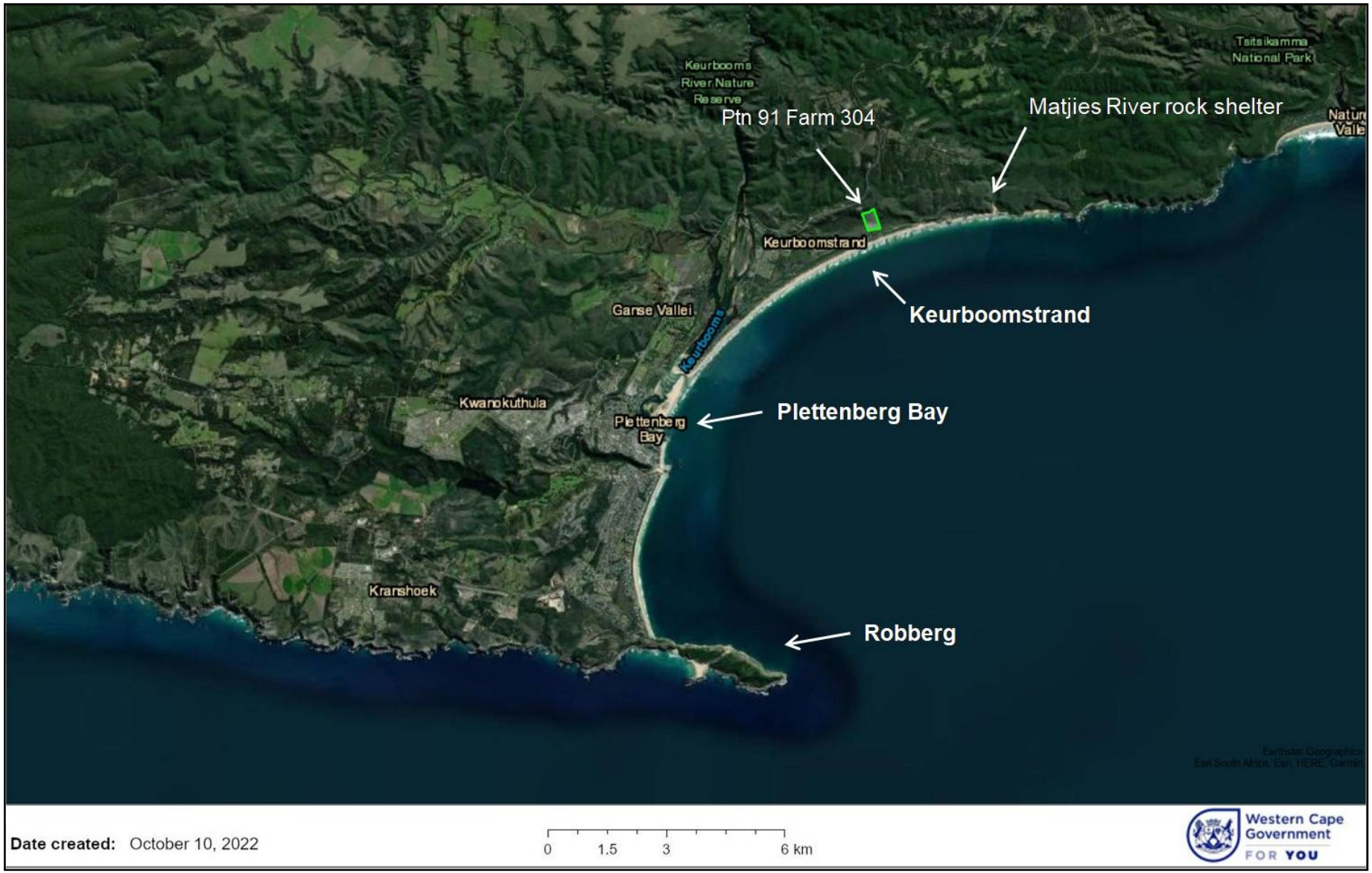

Locality Map. General location of the study area (green polygon) NE of Plettenberg Bay, Western Cape Province. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/).

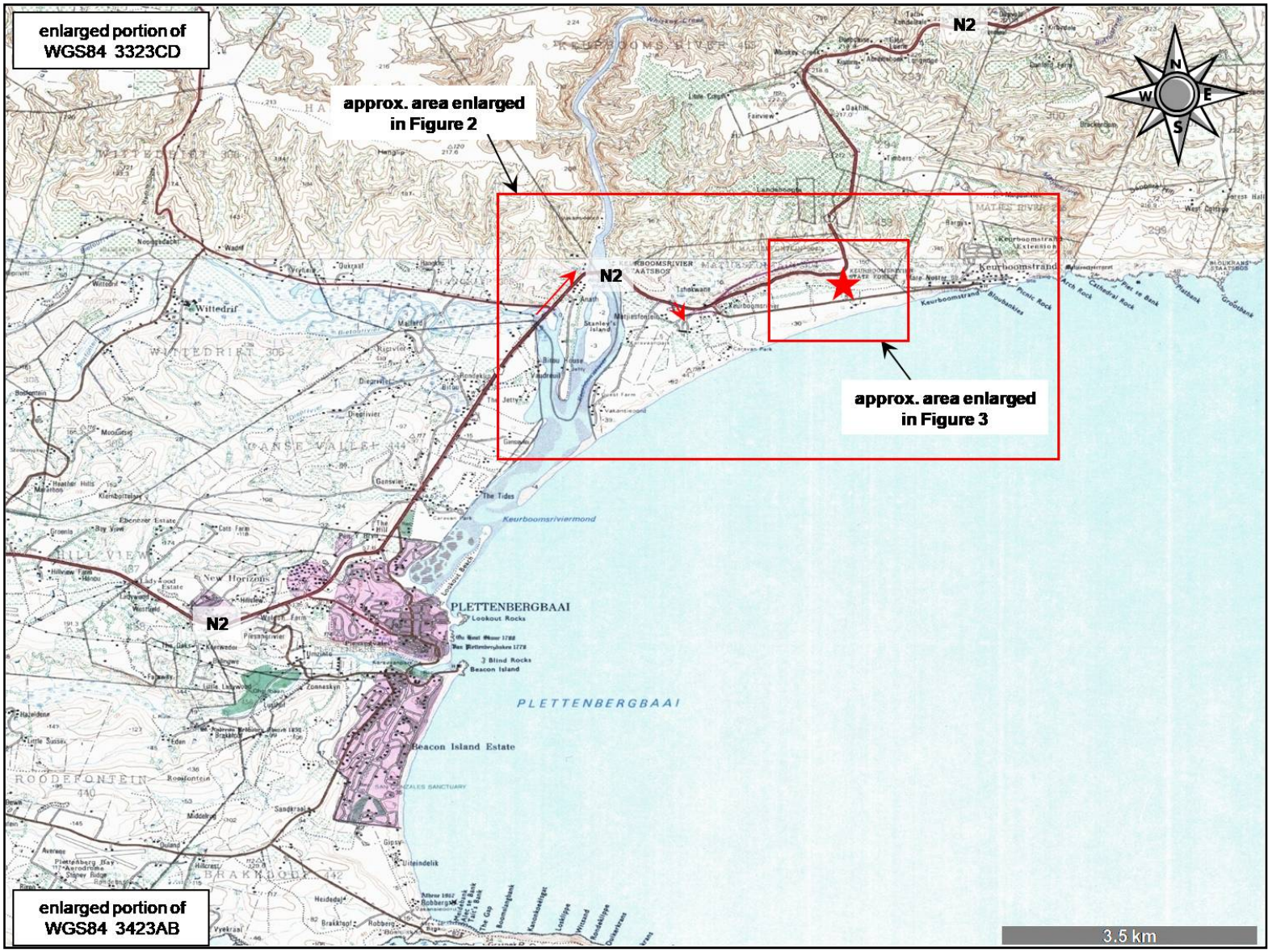

Figure 1. General location of the study area (red star) NE of Plettenberg Bay, Western Cape Province. Enlarged portions of 1:50 000 topographic maps 3323 CD and 3423 AB (1999) courtesy of The Chief Directorate Surveys and Mapping, Mowbray.

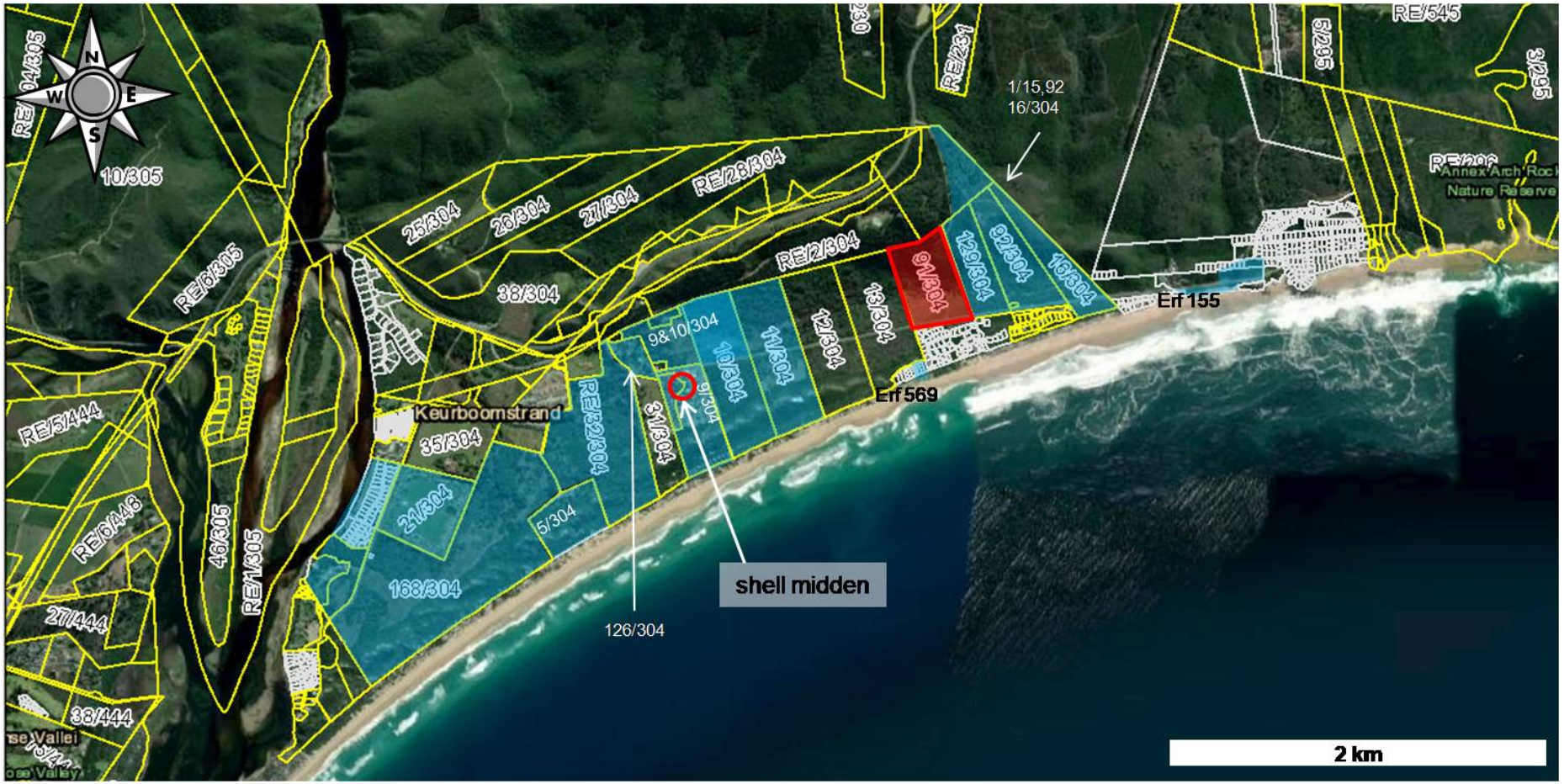

Figure 2. Enlarged from Figure 1 showing 91/304 (red polygon) relative to Keurboomsriver in the West and Arch Rock in the East. Properties shaded blue have undergone heritage-related studies. A stratified shell midden (red ellipse) is located in the "Dunes" development some 1,5 km WSW of 91/304. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/).

Figure 3. Enlarged from Figure 1 showing 91/304 (green polygon), surrounding properties and existing developments and transport infrastructure. Courtesy of Cape Farm Mapper (https://gis.elsenburg.com/apps/cfm/).

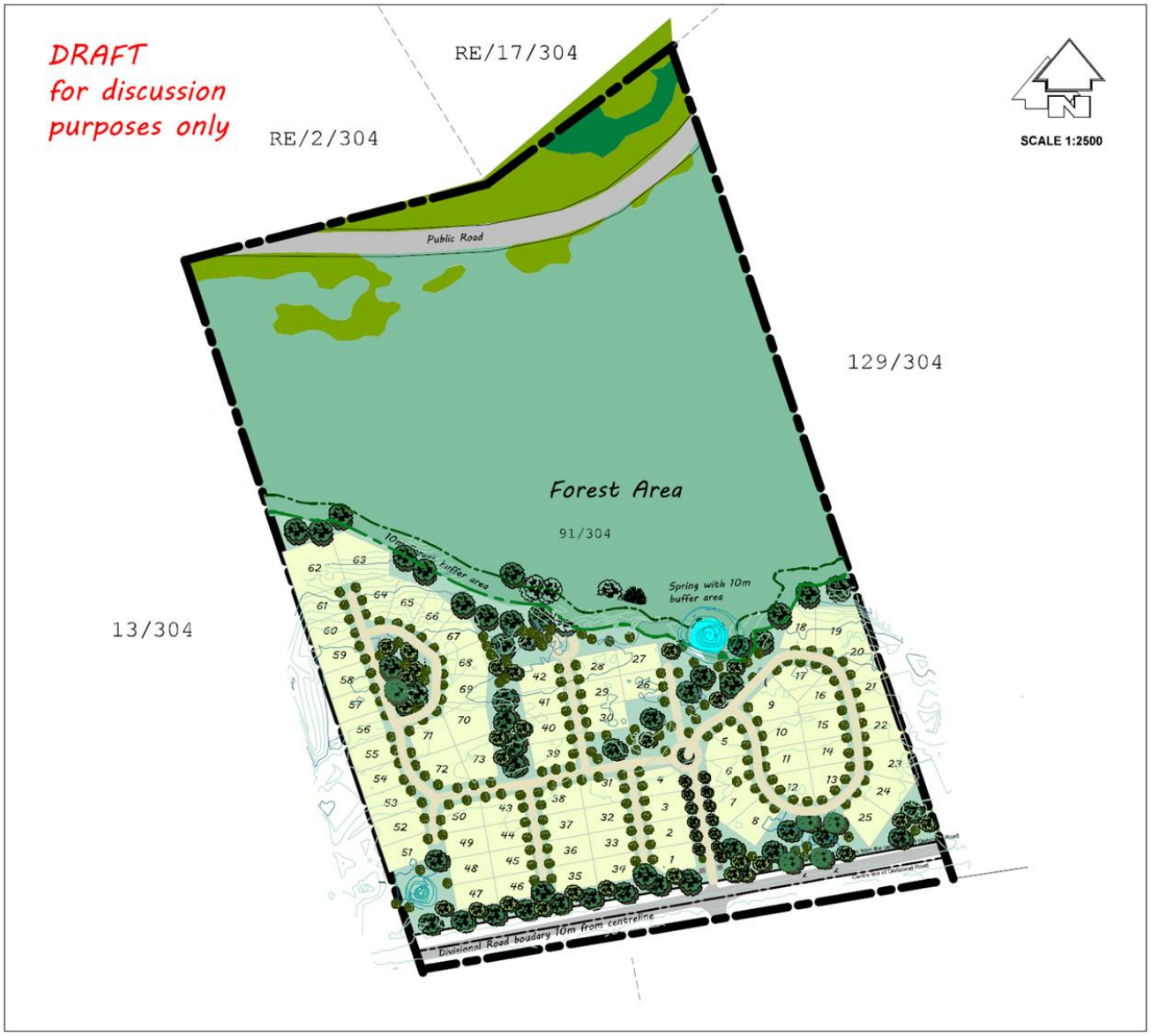

Figure 4. Draft conceptual layout of the proposed residential development on 91/304. Courtesy of the applicant.

Figure 7. The southern part of, and proposed development footprint on 91/304, showing various existing features on the property. Courtesy of Google Earth 2022.

Figure 32: Development footprint on 91/304 with GPS-fixed survey tracks (red lines) and locations of observation and identified archaeological resources (labelled markers).