

HERITAGE IMPACT ASSESSMENT

PROPOSED REZONING AND RESIDENTIAL DEVELOPMENT ON ERF 155 KEURBOOMSTRAND, PLETTENBERG BAY

Submitted to
Viridus Works (Pty) Ltd
77 Buitekring, Dalsig,
Stellenbosch
7600

Prepared by



HEARTH
HERITAGE
conversations about conservation

Emmylou Rabe Bailey
Disakloof Farm
Hout Bay, 7806

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HWC CASE REFERENCE: 21060110AM0615E

EXECUTIVE SUMMARY

A NID for the proposed development was submitted to Heritage Western Cape's Archaeology, Palaeontology and Meteorites Committee on 16 July 2021 and resulted in the Record of Decision request for an Heritage Impact Assessment that included specifically a desktop Archaeological Impact Assessment, Palaeontological Impact Assessment and Visual Impact Assessment. This HIA is prepared to fulfill the request from HWC APM Committee and consists of an integrated desktop HIA compiling the information from the AIA by Peter Nilssen (2021), PIA by John Almond (2021) and VIA prepared by Filia (Feb 2022).

1. Site description

An eastern portion of the Open Space zoned Erf 155, Keurboomstrand situated adjacent to the beach road approximately 10km north-east of Plettenberg Bay in the Bitou Municipality, Western Cape Province and neighbouring public place Erf 391.

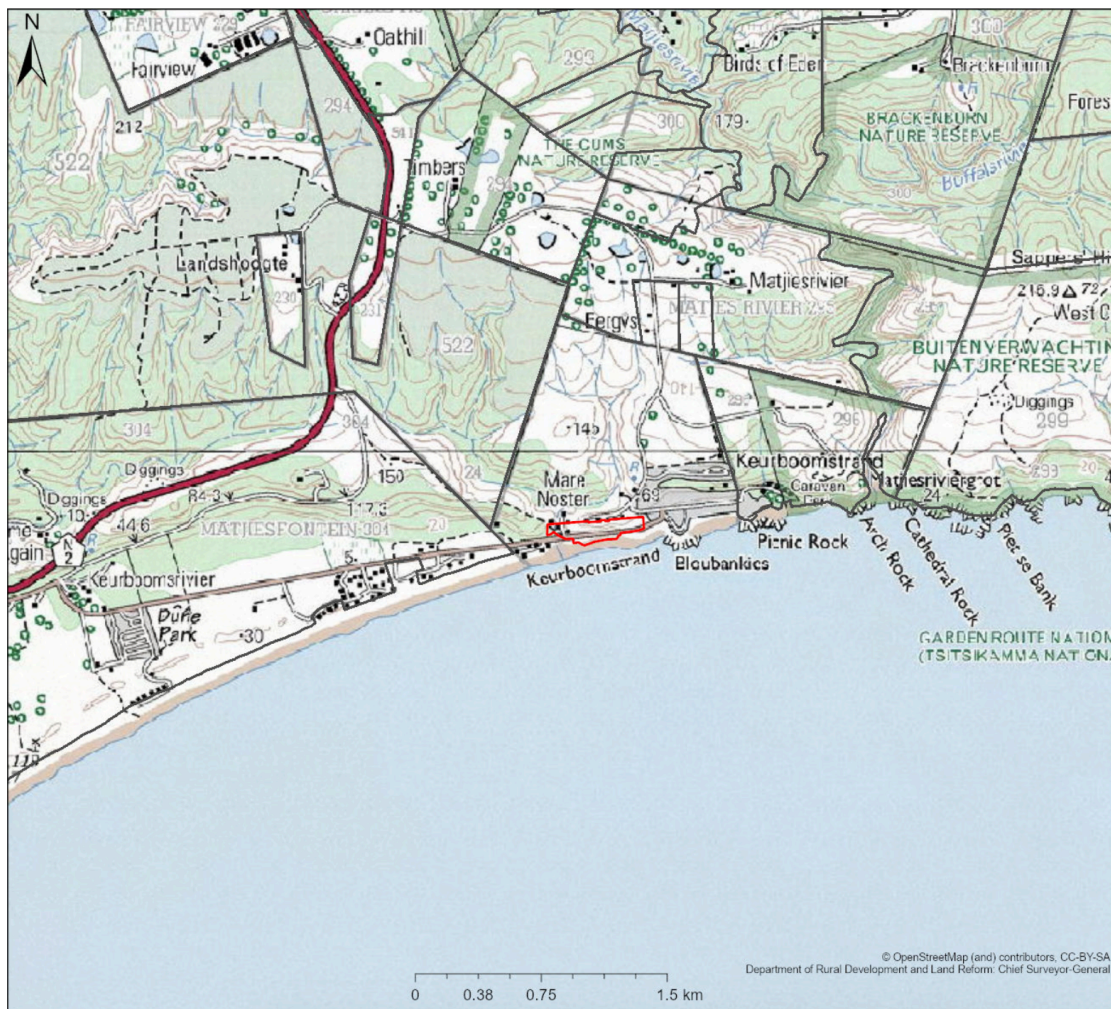


Figure 1: Locality Re/155 Keurboomstrand



Figure 2: Location of eastern portion (yellow) of Erf 155, Keurboomstrand (purple), identified for development.

2. Description of proposed development

The proposed development (Keurboomstrand Residential Housing Development on Erf 155 in Keurboomstrand) involves the subdivision of Erf 155 and rezoning of a portion thereof for the construction of three separate dwelling houses in a sectional title development. The subject site to be rezoned and developed measures 56 615,4m² in extent.

The proposed subject site's property boundary is flanked by residential erven (Erven 15, 20 and 565) and shares property boundaries with public place (Erf 391), undeveloped publicly accessible land (Erf 152) and the Main Road 394 road reserve. The current zoning of Erf 155 is Residential Zone II, while the portion of the property relevant to this NID is zoned as Open Space Zone II (private open space). The planning application is made in terms of the Bitou Municipal Land Use Planning Bylaw (Western Cape Government, 2015) Section 15 (2)(a) for a rezoning to Residential Zone II; and Section 15 (2)(d) for subdivision, and to register a servitude right of way access over public place Erf 391 alongside (to connect the proposed development via a driveway to Main Street north of the site).

Initially three development options were proposed by the developer and informed by site sensitivities. Development Option C was selected as the preferred alternative. Since the NID, two more design alternatives have been drafted to respond to the specialist studies that have been completed (PIA, AIA, VIA).

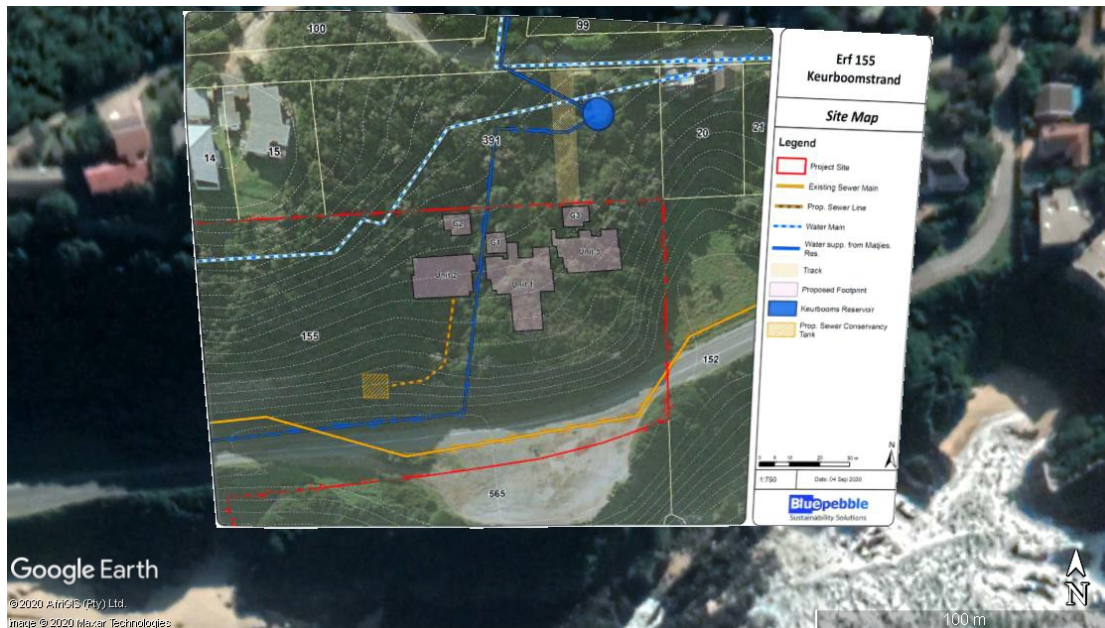


Figure 3: Map of preferred layout, Development Option C (Alternative 1 as per VIA), of Keurboomstrand residential development (Nilssen, 2021)

3. Heritage Resources Identified

Archaeology

From an archaeological heritage perspective, there is no evidence of historic or prehistoric occupation of the site. The Provincial Heritage Site of Matjies River Rock Shelter occurs in the wider area (<https://sahris.sahra.org.za/>) but will not be affected in any way by the proposed development.

Palaeontology

Published geological maps indicate that the project area is underlain by Early Devonian marine to coastal sediments of the Baviaanskloof Formation (uppermost Table Mountain Group). Elsewhere along the Southern Cape coast dark, organic-rich mudrocks within this formation contain important, largely unstudied fossils of primitive land plants while a small range of shelly invertebrate and trace fossils occur within sandstone facies in parts of the Western Cape. A recent site visit shows that the bedrocks beneath the development footprint in fact belong to the slightly younger Early Devonian Gydo Formation (lowermost Bokkeveld Group) which has yielded a range of marine shelly invertebrate fossils from the Keurboomstrand area in the past (Oosthuizen 1984). However, the Gydo Formation bedrocks in and around the project area are tectonically deformed (pervasive cleavage, folded). Sparse shelly fossils recorded near-surface here (brachiopods, bivalves, corals, crinoids etc) are poorly preserved due to deformation and secondary mineralisation; their conservation value is accordingly low. The overlying Late Cenozoic superficial sediments (colluvium, coversands, soils etc) are largely or entirely unfossiliferous.

Visual impact on Cultural Landscape

The overall landscape character of the receiving environment is predominantly coastal, with a diverse mix of landscape types both natural (river, estuary, forest, dunes, rocky headlands and vegetated foot slopes) and transformed (urban areas, agricultural land, rural settlements and resorts).

The landscape character of Keurboomstrand is dual, encompassing both (a) the sparsely developed dune slack/floodplain area with an open, rural character between the vegetated foothill and the crenulate bay

dune system; and (b) the compact, densely vegetated Keurboomstrand town proper situated on the steep foothill slopes with a distinctive resort-town character.

The sense of place is derived (especially at a local scale) from the scenic resources of the coastline, which are based on natural features. These include the sandy (blue flag) beaches, rocky promontories, vegetated primary dunes and dune slack areas, and the steep forested foothills that meet the rocky coastline.

The study area and receiving environment can be described as having a strong landscape character and a distinctive sense of place (albeit dual and localised). The greater receiving environment contains recognizable landmarks, landscape features and vistas as part of the Garden Route. The local receiving environment is unique and distinctive within the coastal belt, based on both the local townscape character and the value of the natural and scenic resources.

The landscape contains some intrusions or discordant structures and activities, and the Keurboomstrand town itself contributes to the erosion of landscape integrity. The intactness of the landscape in the study area increases as its integrity and quality increase toward the east, where the landscape has formal protection under conservation areas. The townscape character is generally eroded by buildings exceeding two storeys, with large footprints, excessive glazing, fencing, impermeable boundary walls and large unarticulated facades, as well as buildings that do not “nestle” into the landscape. The townscape character can accommodate buildings visible above the line of vegetation, but generally not exceeding one storey.

Landscape Quality in the receiving environment is high; and the Landscape integrity is moderate to high.

The Aesthetic value of the Visual Resource is Moderate to High, as the receiving environment exhibits:

- A positive character with valued features that combine to give the experience of unity, richness and harmony (high aesthetic value);
- As well as evidence of alteration to /degradation/erosion of features resulting in areas of more mixed character (moderate aesthetic value).

4. Anticipated impacts on heritage resources

Archaeology

The site is regarded to be of low to negligible sensitivity from an archaeological perspective. Even though the well known archaeological and Provincial Heritage Site of Matjies River Rock Shelter occurs in the wider area (<https://sahris.sahra.org.za/>), it will not be impacted in any way by development on Erven 155 and 391.

Palaeontology

It is concluded that the palaeosensitivity of the bedrocks and cover sediments is low overall, while the impact significance of the proposed small housing development is also LOW.

Visual Impact on Landscape Character

The findings of the Visual Impact assessment indicate that Alternative 1 will have the lowest visual impact overall. Alternative 2 will have higher visual impact on the scenic route, while Alternative 3 will most likely have higher visual impact on sensitive receptors (locals and neighbours). Alternative 1 (sans the swimming pool) remains the most responsive to the visual sensitivities of the site; is the least visible from the surrounding receiving environment; and will impact minimally on key aspects of Landscape Character and Sense of Place.

The Cumulative visual impact of all three Alternatives on sensitive features, hills and ridgelines will be comparable; but Alternative 2 is the most visually intrusive, especially at the threshold of the town, along the scenic route.

While a measure of urbanity that develops over time may be acceptable within the town proper, an entrance to what has been described as a resort town with a distinctive local character has a much lower tolerance for large, intrusive and visually dominant structures that are not embedded in the local forest and scrub forest vegetation.

However, the VIA does not support any one of the Alternatives outright, as none of the proposals comply substantially with both the recommendations of the Draft VIA and the visual sensitivity setbacks provided

5. Recommendations

Archaeology and palaeontology

According to the specialist reports, there is no evidence of historic or prehistoric occupation of the site. Consequently, the site is regarded to be of low to negligible sensitivity from an archaeological and palaeontological heritage perspective and there are no objections to the proposed residential development on Erf 155 on condition that:

1. Although unlikely, there may be buried or currently hidden archaeological material, including human remains, present on site and should these be uncovered or exposed during excavations or vegetation clearing, HWC should be notified immediately and all development work on site (preconstruction included) should be halted until these finds are investigated by HWC (Att: Ms Waseefa Dhansay 021 483 9685).
2. No negative impact to significant palaeontological heritage is anticipated as the palaeontological sensitivity of the geology of the development area is considered to be very low and there are no objections on palaeontological heritage grounds. In the event of important fossil material being identified during excavations, the HWC Fossil Finds Procedure must be implemented.

Visual and landscape character

According to the Local Area Spatial Plan future development in Keurboomstrand must have low visual impact (Keurbooms and Environs Local Area Spatial Plan, 2013, p. 154). The Department makes specific reference to development proposals on slopes of 1:4 or steeper, where development would be highly visible and recommends development be limited to flatter ground.

Recommendations:

To augment the botanical and geotechnical sensitivity mapping, the following visual sensitivity parameters have been established and should be adhered to in the final proposal for all alternatives:

- a) A 35m Scenic route setback (offset) that delineates a no-go area for development on the site from the part of the receiving environment with the highest exposure and sensitivity;
- b) Additional 5m offset from the eastern ecological and slope sensitivity exclusion area, to ensure that the dense forest vegetation screening views of the proposed development from the east remains unaffected by development.
- c) Adherence to the key parameters of the Architectural Guidelines (Pg 118, Smit VIA, 2022)

Due to the high value and sensitivity of the receiving environment, landscape character and the visual receptors, it is extremely important that a responsible and enforceable design approach be taken for the planning, construction and operational phases of each dwelling unit and the development as a whole, taking care to minimize the visual impact wherever possible. The Site Development Plan (SDP) and building plans must demonstrate adherence to the recommendations of this report in order for visual impact to be managed successfully.

Given that none of the Alternatives are compliant with the visual sensitivity parameters, the proposal should be revised to avoid biodiversity and visual impacts, by proposing buildings within the developable area only (indicated by the Botanical, Geotechnical and Visual sensitivity offsets and no-go areas).

Author Declaration of Independence

I, Emmylou Bailey, hereby declare that I act as an independent, objective specialist in this assessment and that I do not and will not have any financial interest in the undertaking of the proposed activity, other than remuneration for my work performed according to the National Heritage Resources Act (25 of 1999).

Signature E Rabe Bailey



June 2022

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1. INTRODUCTION

1.1 BACKGROUND TO DEVELOPMENT PROPOSAL

The proposed development (Keurboomstrand Residential Housing Development on Erf 155 in Keurboomstrand) involves the subdivision of Erf 155 and rezoning of a portion thereof for the construction of three separate dwelling houses in a sectional title development. The subject site to be rezoned and developed measures 56 615,4m² in extent.



Figure 4: Location of eastern portion (yellow) of Erf 155, Keurboomstrand (purple), identified for development

The proposed subject site's property boundary is flanked by residential erven (Erven 15, 20 and 565) and shares property boundaries with public place (Erf 391), undeveloped publicly accessible land (Erf 152) and the Main Road 394 road reserve. The current zoning of Erf 155 is Residential Zone II, while the portion of the property relevant to this NID is zoned as Open Space Zone II (private open space). The planning application is made in terms of the Bitou Municipal Land Use Planning Bylaw (Western Cape Government, 2015) Section 15 (2)(a) for a rezoning to Residential Zone II; and Section 15 (2)(d) for subdivision, and to register a servitude right of way access over public place Erf 391 alongside (to connect the proposed development via a driveway to Main Street north of the site).

Initially three development options were proposed by the developer and informed by site sensitivities. Development Option C was selected as the preferred alternative. Since the NID, two more design alternatives have been drafted to respond to the specialist studies that have been completed (PIA, AIA, VIA).



Figure 5: Site layout preferred option (Option C/ Alternative 1)(Slee architects, 2020)

The buildings are double storey with flat roofs throughout, with a total height of 7,1m measured from top of finished floor level. All the buildings are proposed on the same height, which will require cut and fill to create what is essentially one platform for all three structures. This total height is exceeded in six places by the chimney stacks, which measure 8,1m in height.

The three buildings are separate from one another, and arranged in a straight line across the widest part of the site facing the sea (an east/west axis), parallel to the contours in the central, more gently sloping portion of the site. The building sizes, features and footprints vary (two having separate garages, and one including a swimming pool), but the architectural treatment, construction methods and material finishes will be identical for all three. The driveway proposal indicates hard landscaping that will be continuous with patio and other accessible outdoor areas around the buildings.

1.2 DESCRIPTION OF PROPERTY

The project is located within Plettenberg Bay, which is part of the Bitou Local Municipal area in the Eden District of the Western Cape. Plettenberg bay is typical of the crenulate bays along the Eden District Municipality coast, with exposed western rock headlands, long, sheltered sandy beaches extending eastward from the headlands and an estuary at the western side of the bay. The Cape Fold Mountains (the Outeniqua range) are a ubiquitous presence in the region, their marches delineating the extent of the famous Garden Route between the mountains and the coast. Major and minor river valleys extend across the inland plateau where the mountainous topography (generally covered by natural and commercial forest) gives way to a coastal corridor of undulating coastal plains, rocky headlands, flood plains, estuaries and sandy beaches at the coast.



Figure 6: Surrounding landscape of RE/ 155 Keurboomstrand, proposed for subdivision, shown in red with Portion A, proposed for rezoning and development, shown in yellow. (Scale 1:18 056)

The subject site is undeveloped, containing no existing buildings, services or infrastructure (with one exception being some decommissioned water pipelines and associated infrastructure). It is offset from the nearest road (Main Street) by the 27m width of the adjoining public place (Erf 391), which shares its northern boundary. Its southern boundary is delineated by the 25m wide road servitude set out for Main Road 394, which is the main access and entrance road for the whole of the Keurboomstrand town. The eastern and western boundaries are shared with Erf 152 and Erf 155, respectively.

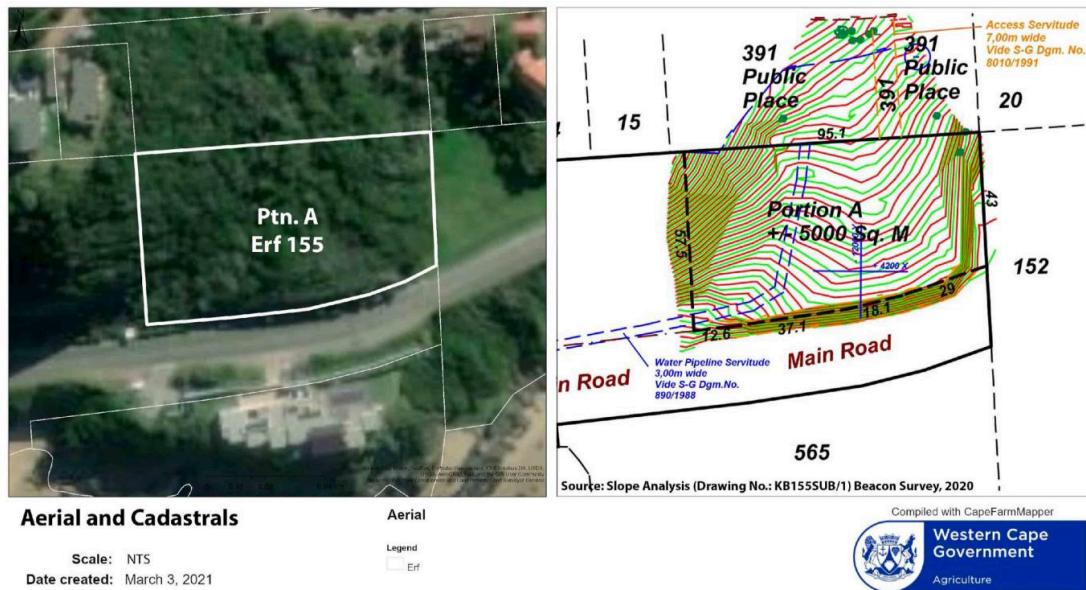


Figure 7: Aerial image of site alongside site survey (Smit, 2021)

Existing residential buildings are located up-slope to the north east (Erven 15, 14, 13 etc.) and north west (Erven 20, 21, 22 etc.) of the site, with the majority of the town being located to the east. The recently developed Erf 565 is located 25m downslope of the site. The adjoining public place (Erf 391) is not utilised as a public space despite its zoning, houses a water reservoir and associated infrastructure, and does not appear to be part of an integrated corridor or network of public places. Erf 152 contains an open grassed area that appears to have some local amenity, and is one of a string of open areas at the foot of the coastal dune ridge that are accessible by the wide pedestrian pathway that runs along the entire length of the Main Road 394. A bus stop is located at the south-western corner of the site, along the pedestrian route, and across from a small viewing area across the road, and west of Erf 565.

2. METHODOLOGY

2.1 PURPOSE of HIA

A Notification of Intent to Develop (NID) for the proposed development was submitted to HWC's APM Committee on 16 July 2021 and resulted in the ROD request for an Heritage Impact Assessment that included specifically a desktop Archaeological Impact Assessment (AIA), Palaeontological Impact Assessment (PIA) and Visual Impact Assessment (VIA). This HIA is prepared to fulfill the request from HWC APM Committee and consists of an integrated desktop HIA compiling the information from the AIA by Peter Nilssen (2021), PIA by John Almond (2021) and VIA prepared by Filia (Feb 2022) to satisfy the requirements of section 38(8), and therefore section 38(3) of the National Heritage Resources Act (25 of 1999).

2.2 SUMMARY OF STEPS FOLLOWED

AIA, PIA and VIA specialist impact assessment reports for the development were reviewed. The specialists had independently conducted site surveys and the information was used to inform this HIA. The identified heritage resources were assessed for significance taking into account the information received from the specialists in terms of the grading as set out in Section 3 of the NHRA. An integrated desktop HIA was compiled using the information from the specialist reports with the addition of historical background information and a review of other relevant impact assessments in the broader area as available on SAHRIS.

2.3 CONSTRAINTS AND LIMITATIONS

The author of this desktop HIA did not conduct an independent field survey and, other than the historical background and desktop review of other impact assessment reports, the information contained in this HIA largely relies on the information from the specialist reports as requested by the client, Viridus Works.

From the Keurboomstrand AIA (Nilssen, 2021) and other AIA's in the area, it seems that dense vegetation in the area severely limited foot accessibility to much of the site as well as archaeological visibility.

3. HISTORY AND EVOLUTION OF SITE AND CONTEXT

3.1 HISTORAL BACKGROUND OF THE AREA

Historical information on the study area is scant, focusing largely on the origins and development of Plettenberg Bay.

Nelson Bay Cave on the Robberg Peninsula and Matjes River Cave on Keurbooms, both near Plettenberg Bay, attest to the Middle and Late Stone Age occupation of the Bitou area that dates from a few hundred to 125 000 years ago¹. As with other coastal sites along the southern Cape, the cultural material at Matjes River rock shelter, some 1km east of the Keurbooms River includes bone tools, shell ornaments, OES and a painted burial stone. The shelter contains shell deposits over 10 metres deep and appear to have been accumulated as a result of human occupation over the last 12 000 years². There are many other archaeological sites in the Tsitsikamma mountains and it is common knowledge that there are numerous rock shelters and caves with evidence of human occupation.

Occupation of the area by hunter-gatherer and, later, herder groups would have continued well into the recent past when European explorers such as Bartholomew Dias arrived, often unplanned, on the south-eastern Cape shores during the 15th and 16th centuries while chartering the shorelines and bays. Portuguese explorers from the *Sao Gonçalo* were ship-wrecked nearby in 1630 for eight months which was the first European settlement in South Africa.

Baron Joachim Ammena van Plettenberg was the governor of the Cape of Good Hope from 11 August 1771 to 14 February 1785. On 18 May 1774 he was permanently appointed as governor. He himself made several tours to determine the borders of the Cape-Colony and visited 47 outposts. Among others he let erect a column for the Dutch East India Company (VOC) on 6 November 1778, the so-called Van Plettenberg Beacon. Since then the place where it was erected is called Plettenberg Bay. The town of Plettenberg Bay was named after him in 1779. In 1763 the first white settlers in the Bay were stock farmers, hunters and frontiersmen from the Western Cape.

“Infamous historical figures [associated with the area] include the leader of the Griquas, Andrew Abraham Stockenström le Fleur, who by his people, was looked upon as a new Messiah. The name of Le Fleur is intimately associated with the history of the Griqua people in this area and his grave can be seen in the village of Kranshoek on the Robberg/Airport Road. “The griquas, a proud and deeply religious people, are spread all over South Africa. Their largest settlement is at Kranshoek, 13 kms west of Plett town. Kranshoek’s central board is registered as the Griqua National Council and, together with other groups at Kurland (to the north of Plett) and Blouelies (to the east of Storms River), its people supply a substantial part of the town’s craft skills and wider labour force. The Griqua population is unique. Descended from the Khoisan people, the griquas were, after the arrival of the Europeans, driven again and again from any part of the country in which they sought to settle, including the widely-separated regions still popularly known as East Griqualand and Griqualand West. The desire for some piece of land they could call their own has been

¹ [Peeling Away the Past: The Display of Excavations at Nelson Bay Cave, by Janette Deacon and Michael Brett © 1993 South African Archaeological Society](#)

² [Webley, 2004.](#)

unwavering and was what led a large number of them, after centuries of wandering, towards a land where there would be springs and green grass... It also gave rise to angry confrontations with authority and even litigation at the beginning of the 20th century³.

A woodcutter's post was established in 1787 and Johann Jacob Jerling, an early inhabitant, was commissioned by the Dutch East India Co. to build a storehouse for house timber, which was to be exported. In the 1800's the growing timber trade led to Thomas Bain building Prince Alfred Pass (1868) and the 90km forest road through the Tsitsikamma to Humansdorp. Three major passes had to be constructed: Groot Rivier, Blauwkrantz and Storms River. The Great Fire of the 1868 claimed to have made Thomas Bain's task of building the coastal road considerably easier. Bain started construction of the Groot River Pass in 1880, completing the work in 1883 with present road differing little from Bain's original.

"William Henry Newdigate, [another prominent figure in the history of the area] moved from Piesang Valley to The Crags where he bought 1620 hectares of forest land and transferred his energies to dealing in timber. He built Forest Hall...which today is a Provincial Heritage Site (declared a National Monument in 1992)." The Newdigates also built the Church of St Michael and All Angels in Kirbywood, The Crags, on their own land and in 1850-51 built St Andrews Chapel, Redbourn, Plett, the oldest ecclesiastical building in the George-Knysna-Plett area which was declared a National Monument in 1963,⁴.

In 1910 a Captain Sinclair set up the whaling station on Beacon Island to harvest the placid Southern Right whales but this ceased operation in 1916. The first hotel was erected by Hugh Owen Grant in 1940 and replaced in 1972 by the current well-known landmark on Beacon Island.

The Keurboomstrand village dates back to 1927 when a township plan consisting of 127 allotments on the farm Matjiesriver was drawn up in favour of Hendrik Petrus Read. The sale of individual plots commenced in 1929. Keurboomstrand has since evolved as a holiday village/resort town as further subdivisions took place in and around the village.

The history of the Keurbooms River node, primarily relates to agricultural use and the establishment of limited amenities such as a shop, post office and hotel. The site originally formed part of the indigenous forest belt of the area with an adjacent wetland system that was linked to the Keurbooms River.

Since early 1800s deforestation took place for both usable timber and agricultural. Agriculture primarily related to grazing and subsistence farming until markets were established in the early 1900's. Of the original forests that once grew between George and Port Elizabeth only 1% or 50000 hectares are left due to the timber industry and urban development.

Between 1966 and 1977, rapid tourism development took place in the form of caravan parks and holiday dwellings on the coastline. The old road closed completely and was no longer utilised as a through road. Settlement patterns (such as labour dwelling infrastructure) was broken down as the agricultural functions changed. Further subdivisions brought about a change in character and land use from an agricultural node

³ Storrar, P. 2001. "Plettenberg Bay and the Paradise Coast", TMG Publishers: South Africa pg.153

⁴ Storrar, P. 2001. "Plettenberg Bay and the Paradise Coast", TMG Publishers: South Africa pg.159

to a tourism node with built infrastructure converted to farmstalls, restaurants, a pub etc.⁵



Figure 8: Excerpt from Burchell's 1822 map of the Cape Colony showing approximate location of Keurboomstrand development site in pink.



Figure 9: Excerpt from 1900-1911 Imperial Maps showing Keurboomstrand area.

⁵ PHS Consulting, 2014. HERITAGE IMPACT ASSESSMENT WITH INTEGRATED SET OF RECOMMENDATIONS Proposed Residential Development of Nature's Path Lifestyle Village Portions 9 and 10 of the Farm Matjiesfontein No. 304, Keurboomstrand, Plettenberg Bay

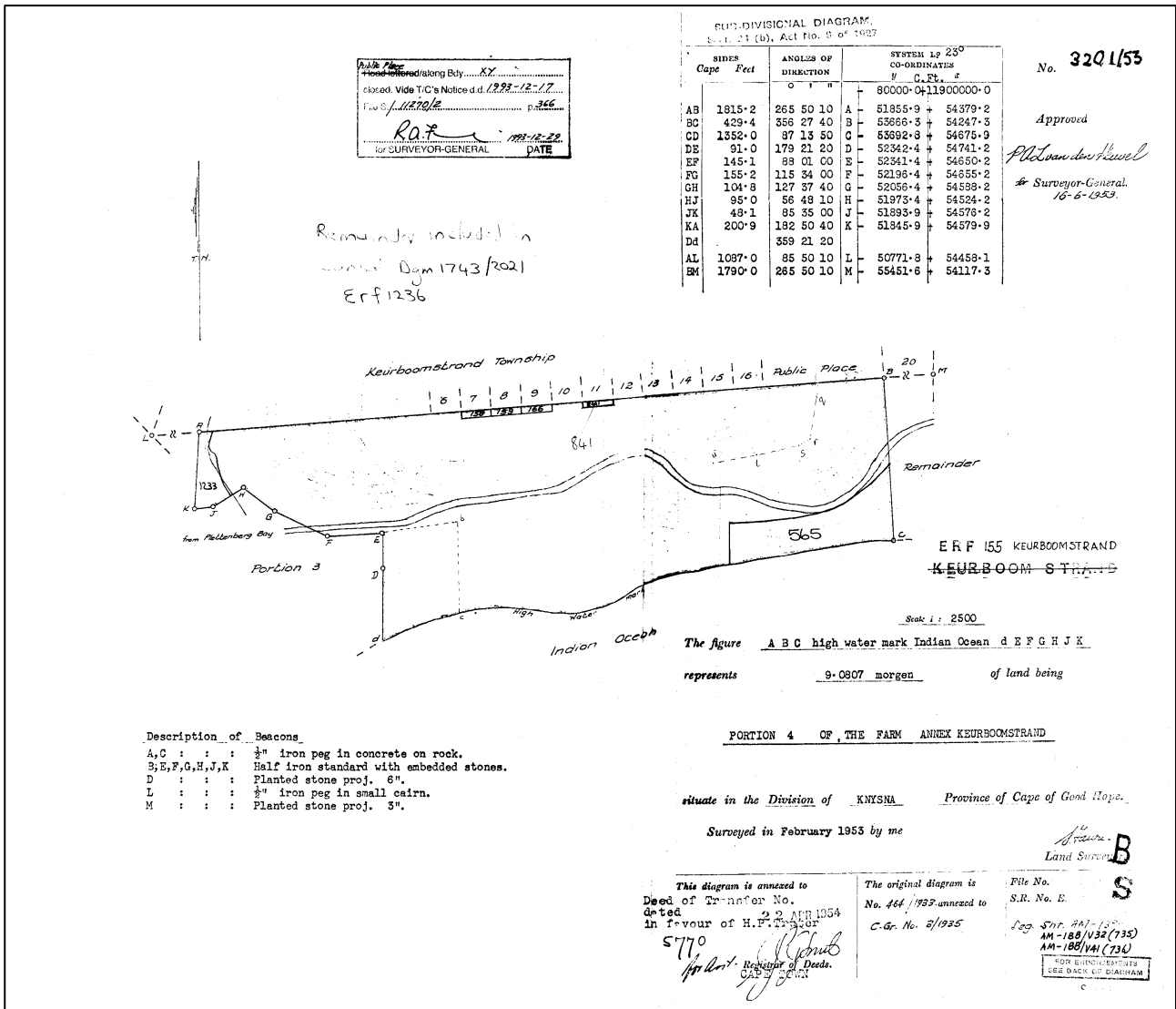


Figure 10: 1953 SG Diagram of Ptn 4 of Farm Annex Keurboomstrand, now Erf 155, showing the historic road running past the site to Plettenberg Bay (Cape Farm Mapper, June 2022).

3.2 PREVIOUS IMPACT ASSESSMENTS CONDUCTED

The coast round Plettenberg Bay is not only famous for its beautiful scenery and its interesting historical relics but this region is also remarkably rich in archaeological remains left by the prehistoric occupants of the country. The study of such material has enabled scientists to make a considerable contribution to the archaeology of South Africa.⁶

A number of archaeological and heritage impact assessments have been conducted in the area with few archaeological resources identified, possibly due to the very dense vegetation which limits accessibility and archaeological visibility. Nevertheless, some very significant sites also exist in the area, notably the Matjes River Rock Shelter within close proximity of the project site.

⁶ <https://sahris.sahra.org.za/node/43507/sitereport-archaeology-pdf>



Webley's 2001 Phase 1 AIA of Ptns 1/15, 92 and R16 of Farm Matjiesfontein, No 304 Keurboomstrand found two possible areas of archaeological settlement sites, neither substantial in size or remains. Site 1 represented a very diffuse scatter of shell in the disturbed soil around the recently constructed brick utilities building. Site 2 had some large undiagnostic quartzite stone tools scattered around the forest at the base of a footpath, which are imported from elsewhere and probably not in context. The recommendations were for care to be taken by developer to avoid destroying archaeological sites which may be buried beneath the soil surface with the following features to be aware of: 1 dense accumulations of marine shell, concentrations of shell associated with pieces of bone, pottery and stone artefacts, concentrations of fossilized bone and human remains.

Webley's 2004 Phase 1 AIA of of Ptns 1 and 2 of Arch Rock 296, Plettenberg Bay observed no archaeological sites during the foot survey of the area above the cliff face, however the extremely dense vegetation is mentioned as a limitation in the survey process. The report recommended that development may proceed but that the following archeological material/ sites may still be uncovere during levelling of the soil: 1) concentrations of stone tools, 2) shell middens, 3) human remains, including burials and 4) remains of earlier stone structures.

ACRM's 1999 AIA for the Sanderlings development located one archaeological site comprising of low density scatter of fragmented shellfish remains, weathered OES and stone flakes on a high, partially vegetated sand dune on the eastern boundary of the study area. The site was given a low conservation rating. A few quartzite chunks were located on the south facing barrier dunes and a number of stone tools alongside the gravel roads, none of which were considered significant. This site was also 'severely vegetated' resulting in low archaeological visibility. The report recommended that the site was suitable for development, however some archaeological monitoring may be required if development should take place in the vegetated frontal dunes and that human burial remains may be uncovered during development.

Deacon's 2001 Phase 1 AIA at Farm Arch Rock 296, Keurboomstrand identified a 'conservation-worthy' MSA site at the top of the cliff above the Matjes River Rock Shelter with associated quartzite and silcrete flakes dated to around 100 000yrs old. It's value is on a landscape scale as a record of where MSA occupations took place. No other archaeological materials were noted. It was recommended that the development avoid the MSA site with a 50m buffer around the site.

ACRM's 2001 HIA for Ptn 10 of the Farm Matjiesfontein No 304, Keurboomstrand identified "no significant archaeological or heritage remains". A few small, discreet patches of shellfish remains, OES and two stone flakes were located in open patches on the steep north facing slopes of the large barrier dunes which probably represent small food parcels consumed by prehistoric people during visits to the beach. No cultural material was found associated with the shell and no archaeological remains were located in the frontal dunes. Kaplan mentions the very limited archaeological visibility in the area between the barrier dunes and the escarpment. The report recommended that 1) an archaeologist assess the site after vegetation clearing and 2) sampling if any identified significant sites. The possible uncovering of human remains was also mentioned.



Figure 11: Map showing portions of the area surveyed for previous AIA reports (SAHRIS database) as discussed (green), Keurbooms 155 (pink) and proposed development site (yellow). The orange polygons represent identified archaeological sites as per the reviewed reports. The green polygon furthest east includes the site of Matjies River Rock Shelter.

3.3 ENVIRONMENTAL CONTEXT

Plettenberg bay is typical of the crenulate bays in the Eden District, with exposed rock headlands, long sandy beaches and estuaries. The Cape Fold Mountains are a ubiquitous presence, delineating the northern extents of the famous Garden Route, where river valleys incise the inland plateau and give way to a coastal corridor of undulating coastal plains, flood plains, estuaries and sandy beaches at the coast. The series of estuaries, lakes and forests of the Garden Route are considered to have high scenic value.

The N2 freeway, which is a major structuring element and mobility route through the area has given rise over time to numerous settlements along the coastline. Plettenberg Bay's southern bay coastal area is heavily developed containing the town of Plettenberg Bay, whereas the northern part of the bay is largely undeveloped apart from several hotel complexes and the village of Keurboomstrand at its northern end. The coastline within the receiving environment has a number of important archaeological sites, two such heritage and scenic resources with formal protection being the Robberg Peninsula and Matjies River Cave (both Provincial Heritage sites (PHS)). Large parts of the Bitou Municipality are also under conservation, and the UNESCO Garden Route Biosphere reserve contains some of the most pristine parks in South Africa.



Figure 12: Site photograph of the N2 freeway just before the Keurboomstrand access road turnoff (left), demonstrating the typical inland topography and vegetation cover (Smit, 2021)

Land use and economic activity in the study area is diverse, with its roots in agriculture and forestry. All policy documents consulted during the Desktop study identified the bio-physical environment and diverse natural resource base of the region as either a key element of, or the very basis of the economy. The Bitou Municipality can be described as being rich in culture and an often-visited tourism destination in the Western Cape for local and international visitors. The coastline, in particular, draws tourists by the millions, and attracts development and economic activities. Coastal areas are particularly valued for whale-watching, wide open ocean views, hiking and other outdoor lifestyle, leisure and recreation activities.

Distinct landscape types in the study area include:

- Long sandy beaches of the crenulate bay and small coves;
- The Keurbooms river valley and estuary;
- The vegetated coastal dune systems and the dune slack area directly inland;
- Urban development areas (medium to high density settlement);
- The inland coastal plateau containing minor and major river valleys (forested – _commercial and indigenous);
- Rural settlements within the inland coastal plateau;
- Vegetated foothills at the coast, which give way to hard rock cliffed coasts with rock shore platforms (interrupted by small sandy river mouths).



Figure 13: Site photograph illustrating topographical and landform features: mountain backdrop, deeply incised forested river valleys on the inland plateau; estuaries, lagoons and either dune systems or rocky headlands at the coast (Smit, 2021)

It is necessary to describe the subject site's localized receiving environment due to the heterogeneity of the greater receiving environment, and the uniqueness of its local context. The local receiving environment is found within a relatively narrow strip of land referred to as a 'Coastal Corridor', between the sea and the rural hinterland, and at the intersection of three landscape types. Keurboomstrand as a township is divided into two distinct areas: the western portion situated in the floodplain of the estuary, on the dunes and within the dune slack area, and the eastern portion situated on the steep slopes of the vegetated foothills (Keurboomstrand town/east) where the subject site is located.

The town of Keurboomstrand (Keurboomstrand east) is described as a popular destination for tourists, a retirement town and a beach resort town., which has been developed over time in response to environmental conditions, historic patterns of subdivision, and built forms. The town proper is nestled in a sheltered cove, the topography and settlement of the town creating an amphitheater around its picturesque blue flag beaches. The MR 394, a scenic route, gives access to the town and is flanked by a paved pedestrian route that appears to be valued by locals and tourists for walking, cycling and other recreation and leisure pursuits. The town is compact, established and contains mostly single residential buildings on erven with the notable exceptions of two gated communities, both with distinctive architectural styles.

The local vegetation is generally forest and coastal scrub forest, (intensified by the garden trees of the town itself), and the local settlement patterns tend to retain as much of the existing vegetation as possible, resulting in an urban environment that is generally verdant and lush. This results in a notable feature of the townscape character of the local receiving environment: buildings are generally hidden by surrounding vegetation up to at least the ground floor where site vegetation is not disturbed. In these cases, only the roof of the building or the first floor and roof are visible. The town is also situated next to a wilderness area which extends to Nature's Valley and further east as part of the Garden Route and Tsitsikamma National Parks.

4. IDENTIFICATION OF HERITAGE RESOURCES

4.1 SUMMARY OF SPECIALIST FINDINGS

Archaeology

The inspection was conducted independently and on foot on 21 October 2020 by Peter Nilssen for the AIA (2020). The affected area is vegetated with coastal thicket, scrub and bush and therefore some parts were difficult to access on foot and ground surfaces are commonly strewn with leaf and vegetation litter. Nevertheless, sufficient ground surfaces, disturbed areas and exposed sediments were open for archaeological inspection for the purpose of this basic assessment.

Apart from existing development activities, disturbances and modern rubbish on Erf 391, there is no evidence of historic or prehistoric occupation of Erf 391 or Erf 155. Existing developments include a water reservoir, pipelines, levelling and trenching for pipelines, small excavations or disturbances and a small electrical “sub-station”. The litter on site is mostly on Erf 391 and includes plastic, glass, piping, a vehicle tyre, and so on. No refuse of historic or prehistoric interest or significance was seen on site.

Although the DEFF Screening Tool rates the site of High sensitivity from an archaeological and cultural heritage perspective, there is no evidence of historic or prehistoric occupation of the site with the exception of the existing modern development activities mentioned above. Consequently, the site is regarded to be of low to negligible sensitivity from an archaeological and cultural heritage perspective. Even though the well known archaeological and Provincial Heritage Site of Matjes River Rock Shelter occurs in the wider area, it will not be impacted in any way by development on Erven 155 and 391.



Figure 14: Examples of the affected environment showing topography, vegetation cover and exposed surfaces

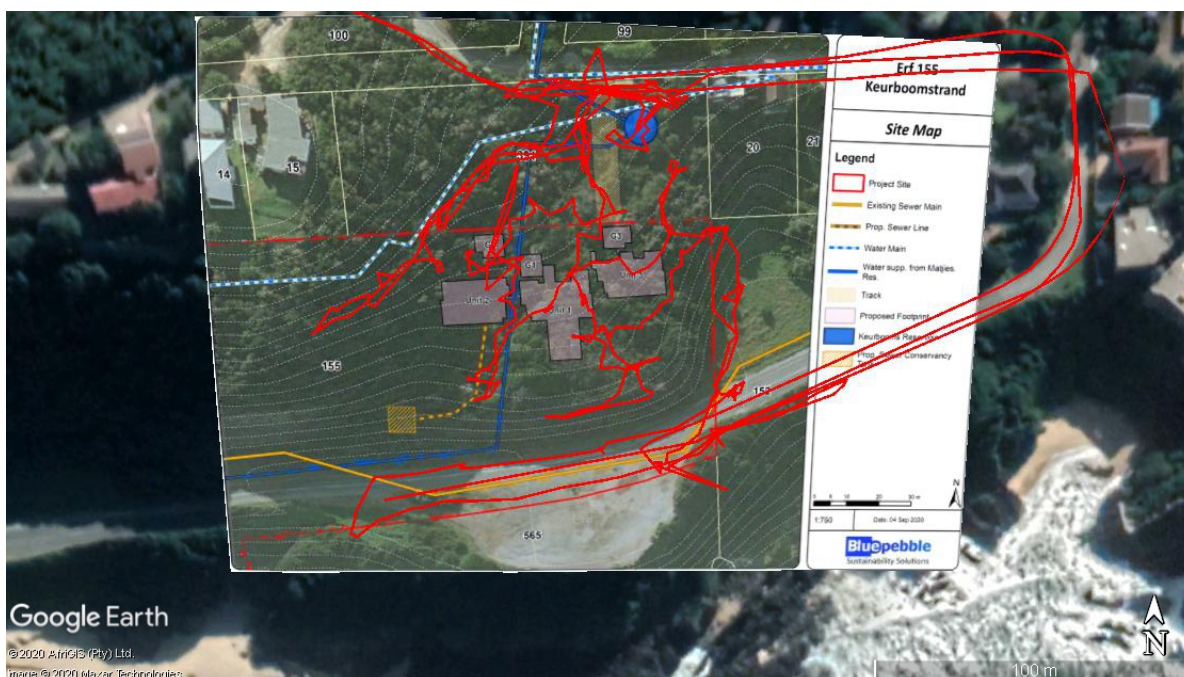


Figure 15: GPS fixed tracks (red lines) of the site inspection overlaid on the conceptual site development plan for the eastern extent of Erf 155 and Erf 391, Keurboomstrand. Courtesy of Bluepebble (Mr Jonathan Kingwill) and Google Earth 2020.

Paleontology

According to the specialist PIA by John Almond, 2021, published geological maps indicate that the project area for the proposed residential development on a Portion of Remainder of Erf 155, Keurboomstrand, is underlain by Early Devonian marine to coastal sediments of the Baviaanskloof Formation (uppermost Table Mountain Group). Elsewhere along the Southern Cape coast dark, organic-rich mudrocks within this formation contain important, largely unstudied fossils of primitive land plants while a small range of shelly invertebrate and tracefossils occur within sandstone facies in parts of the Western Cape. A recent site visit shows that the bedrocks beneath the development footprint in fact belong to the slightly younger Early Devonian Gydo Formation (lowermost Bokkeveld Group), which has yielded a range of marine shelly invertebrate fossils from the Keurboomstrand area in the past (Oosthuizen 1984). However, the Gydo Formation bedrocks in and around the project area are tectonically deformed (pervasive cleavage, folded). Sparse shelly fossils recorded near-surface here (brachiopods, bivalves, corals, crinoids etc) are poorly preserved due to deformation and secondary mineralisation; their conservation value is accordingly low. The overlying Late Cenozoic superficial sediments (colluvium, coversands, soils etc) are probably largely or entirely unfossiliferous. It is concluded that their palaeosensitivity of the bedrocks and cover sediments is low overall, while the impact significance of the proposed small housing development is also LOW.

There are therefore no objections on palaeontological heritage grounds to authorisation of the housing development, and no specialist palaeontological monitoring or mitigation measures are proposed here, pending the potential discovery of new fossil finds during the construction phase.

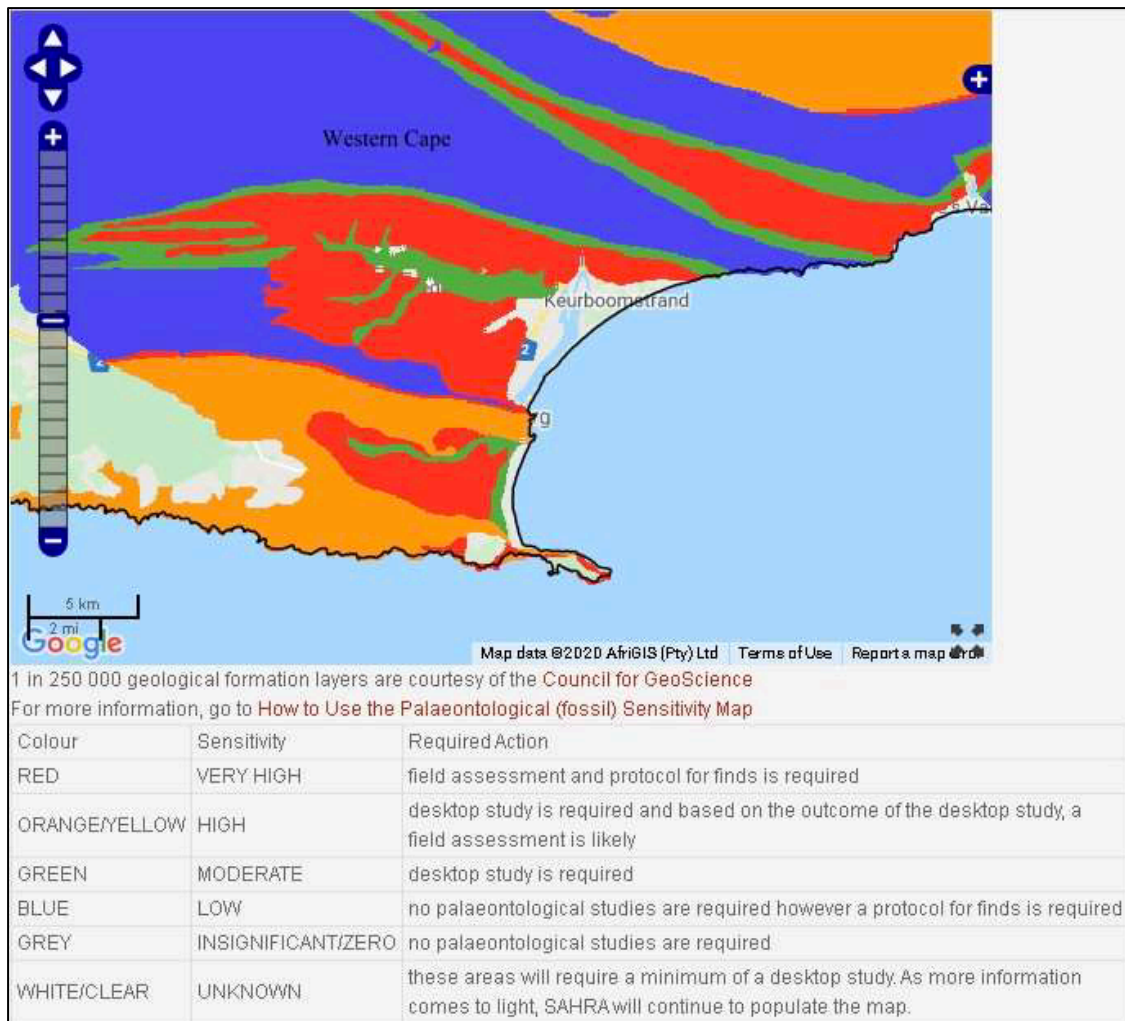


Figure 16: Extract from the SAHRIS Palaeosensitivity Map on the SAHRIS Website showing the Medium Sensitivity assigned to bedrocks in the Keurboomstrand residential development project area on the south coast near Plettenberg Bay (yellow circle). The Gydo Formation (Bokkeveld Group) bedrocks here are normally assigned a High palaeosensitivity. The site visit indicates that their palaeosensitivity is LOW, however. (Almond, 2021)

Visual Impact Assessment (Smit, 2022)

According to the Visual Impact Assessment conducted by Smit (2022), the overall landscape character of the receiving environment of the project site, Keurboomstrand Erf 155, is predominantly coastal, with a diverse mix of landscape types both natural (river, estuary, forest, dunes, rocky headlands and vegetated foot slopes) and transformed (urban areas, agricultural land, rural settlements and resorts).

The landscape character of Keurboomstrand is dual, encompassing both (a) the sparsely developed dune slack/floodplain area with an open, rural character between the vegetated foothill and the crenulate bay dune system; and (b) the compact, densely vegetated Keurboomstrand town proper situated on the steep foothill slopes with a distinctive resort-town character.

The sense of place is derived (especially at a local scale) from the scenic resources of the coastline, which are based on natural features. These include the sandy (blue flag) beaches, rocky promontories, vegetated primary dunes and dune slack areas, and the steep forested foothills that meet the rocky coastline.

The study area and receiving environment can be described as having a strong landscape character and a distinctive sense of place (albeit dual and localised). The greater receiving environment contains recognizable landmarks, landscape features and vistas as part of the Garden Route. The local receiving environment is unique and distinctive within the coastal belt, based on both the local townscape character and the value of the natural and scenic resources.

The landscape contains some intrusions or discordant structures and activities, and the Keurboomstrand town itself contributes to the erosion of landscape integrity. The intactness of the landscape in the study area increases as its integrity and quality increase toward the east, where the landscape has formal protection under conservation areas. The townscape character is generally eroded by buildings exceeding two storeys, with large footprints, excessive glazing, fencing, impermeable boundary walls and large unarticulated facades, as well as buildings that do not “nestle” into the landscape. The townscape character can accommodate buildings visible above the line of vegetation, but generally not exceeding one storey.

Landscape Quality in the receiving environment is high; and the Landscape integrity is moderate to high. (Refer to Section 3.4.2 of the VIA for further detail).

The Aesthetic value of the Visual Resource is Moderate to High, as the receiving environment exhibits:

- A positive character with valued features that combine to give the experience of unity, richness and harmony (high aesthetic value);
- As well as evidence of alteration to /degradation/erosion of features resulting in areas of more mixed character (moderate aesthetic value).

Zone of Potential Visual Influence

The Zone of Potential Visual Influence of the proposed development is approximately 800m.

Landscape Character Sensitivity

The sensitivity of the Landscape Character (i.e.: the degree to which the RE can respond to accommodate change arising from the proposed development without detrimental effects on its character) is Moderate to High.

Local sensitive receptors and View corridors

Potential Sensitivity of Visual Receptors

The Sensitivity of Visual Receptors is High.

Visibility

The proposed project has one instance of moderate visibility only within the Immediate Foreground. The overall visibility is however Moderate to Low, considering that:

- The proposed development is visible from less than half the ZoVI (moderate visibility);
- Views are partially obstructed (Moderate visibility);
- And few viewers are affected (Low visibility).

Visual Exposure

For this project, Visual Exposure is Low overall.

- High for Immediate Foreground views specifically, the +-150m stretch of the MR394 scenic route;
- Moderate for a minority of Foreground views;
- Low for majority of Foreground views;

- Insignificant for views from 800m away or more (the entire Middle ground and Background distance zones).

Visual Absorption Capacity

The VAC assessment for this proposed development is High to Moderate (please note that a higher VAC is desirable).

Relative Compatibility

The proposed development can be described as having Medium compatibility relative to the RE, with aspects of Low compatibility relative to the qualities of the existing landscape, sense of place and land use context.

The VIA has determined that visual impacts will result from the development of the proposed Erf 155 Keurboomstrand project.

At the outset of this study, the DEA&DP Guidelines were used to predict Moderate visual impact based on the classification of a Category 2 development within an area (or route) of high scenic, cultural, historical significance.

The subsequent findings of this study have determined that the visual impact predicted will be:

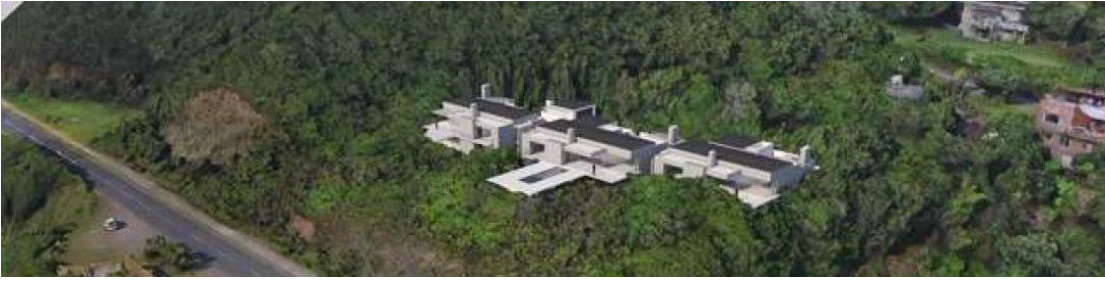
- i Low for the Alternative 1;
- ii Medium for Alternative 2;
- iii and Low to Medium for Alternative 3.

The findings of the Visual Impact assessment indicate that Alternative 1 will have the lowest visual impact overall. Alternative 2 will have higher visual impact on the scenic route, while Alternative 3 will most likely have higher visual impact on sensitive receptors (locals and neighbours). Alternative 1 (sans the swimming pool) remains the most responsive to the visual sensitivities of the site; is the least visible from the surrounding receiving environment; and will impact minimally on key aspects of Landscape Character and Sense of Place.

The Cumulative visual impact of all three Alternatives on sensitive features, hills and ridgelines will be comparable; but Alternative 2 is the most visually intrusive, especially at the threshold of the town, along the scenic route.

While a measure of urbanity that develops over time may be acceptable within the town proper, an entrance to what has been described as a resort town with a distinctive local character has a much lower tolerance for large, intrusive and visually dominant structures that are not embedded in the local forest and scrub forest vegetation.

However, the VIA does not support any one of the Alternatives outright, as none of the proposals comply substantially with both the recommendations of the Draft VIA and the visual sensitivity setbacks provided.



Alternative 1 – Preferred alternative/ Development Option C (2021)



Alternative 2



Alternative 3

4.2 HERITAGE RESOURCES IDENTIFIED

According to the specialist reports, no significant archaeological or palaeontological heritage resources were identified within the development area. The archaeological resources identified in the wider region can be graded from NCW/ IIIC for low density stone age material scatters to II for the Matjes River Rock Shelter.

The predominant heritage resources identified were through the Visual Impact Assessment (Smit, 2022), which identified view sheds, scenic routes and natural elements of the landscape which create a sense of place and landscape character which relies on scenic qualities. The grading of the site in terms of heritage significance in relation to the wider cultural landscape is largely in terms of the significant endemic and screening vegetation as well as its proximity to scenic routes and public spaces and can be classified as IIIC.

4.3 MAPPING OF HERITAGE RESOURCES

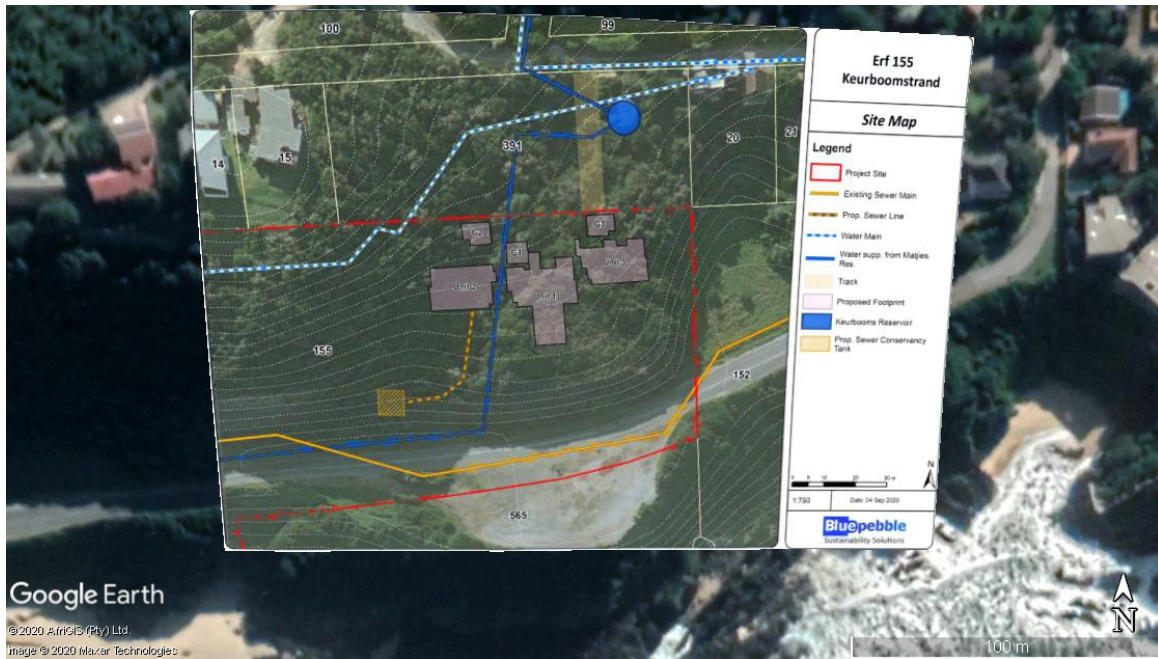


Figure 17: Conceptual site development plan overlaid on the eastern extent of Erf 155 and Erf 391, Keurboomstrand. Courtesy of Bluepebble (Mr Jonathan Kingwill) and Google Earth 2020 (Nilssen, 2020).



Figure 18: Map showing portions of the area surveyed for previous AIA reports (SAHRIS database) as discussed (green), Keurbooms 155 (pink) and proposed development site (yellow). The orange polygons represent identified archaeological sites as per the reviewed reports. The green polygon furthest east includes the site of Matjes River Rock Shelter.

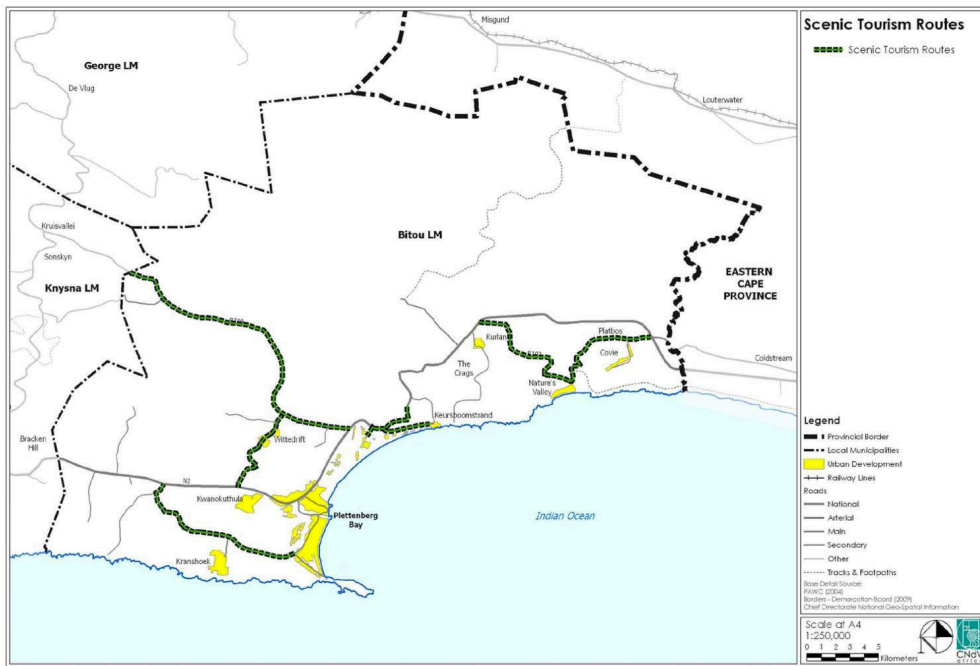


Figure 19: Map of scenic tourism routes in for Bitou area (Smit, 2021).

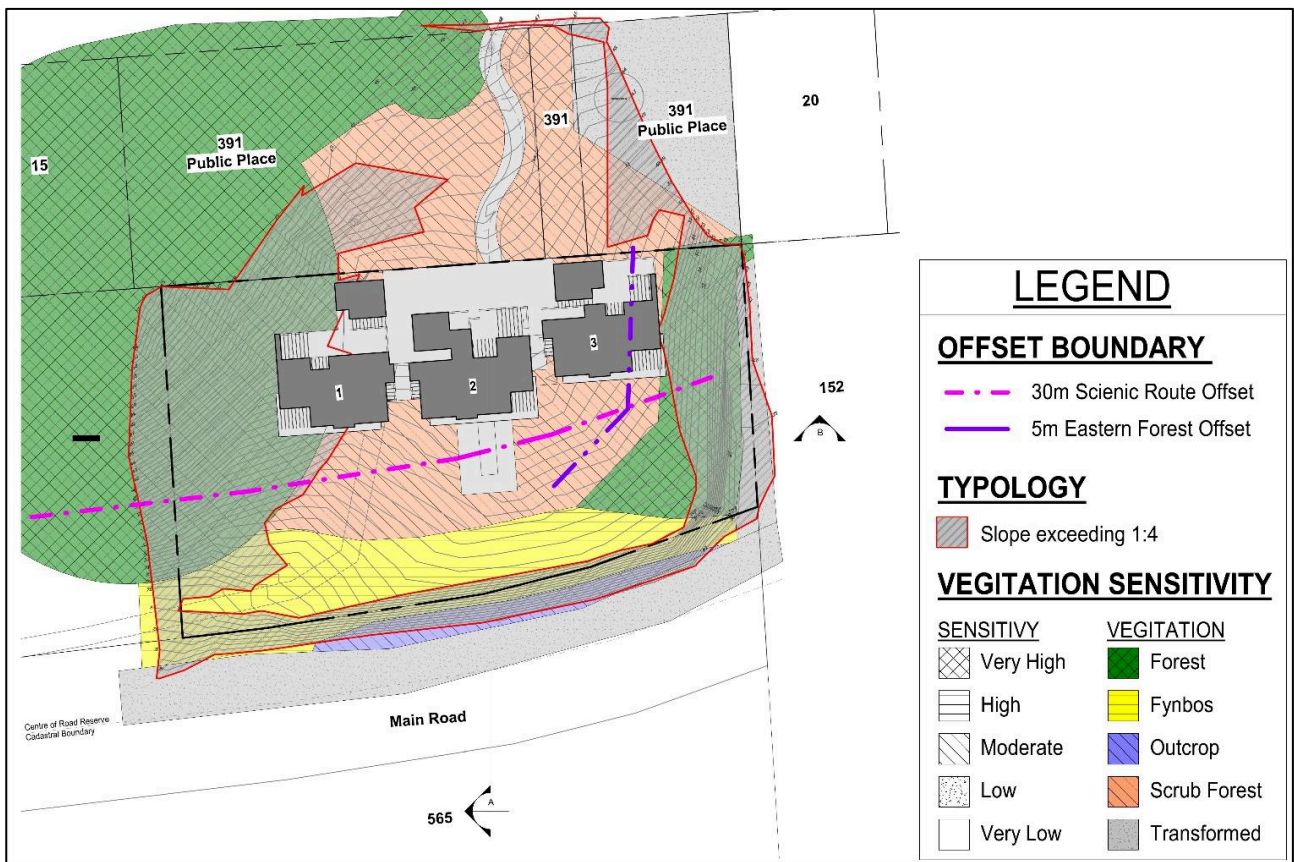


Figure 20: Site Plan of Alternative 1 showing botanical sensitivity, geotechnical and visual sensitivity no-go areas and setbacks/offsets over site contours. (van der Merwe, 2021)

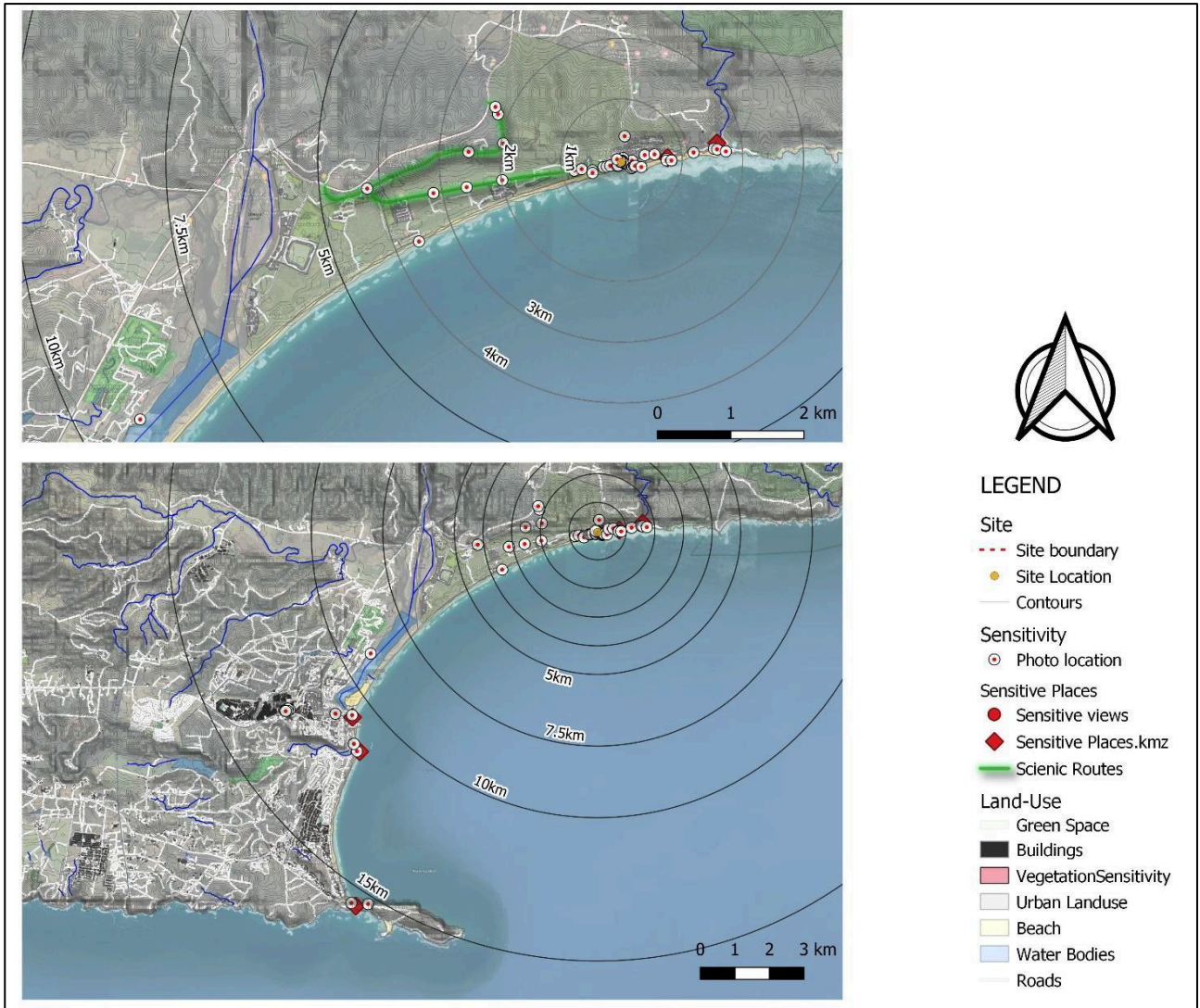


Figure 21: Graphic illustrating the location of photographs taken during fieldwork in the study area (up to 15km) to test visibility (van der Merwe, 2021)

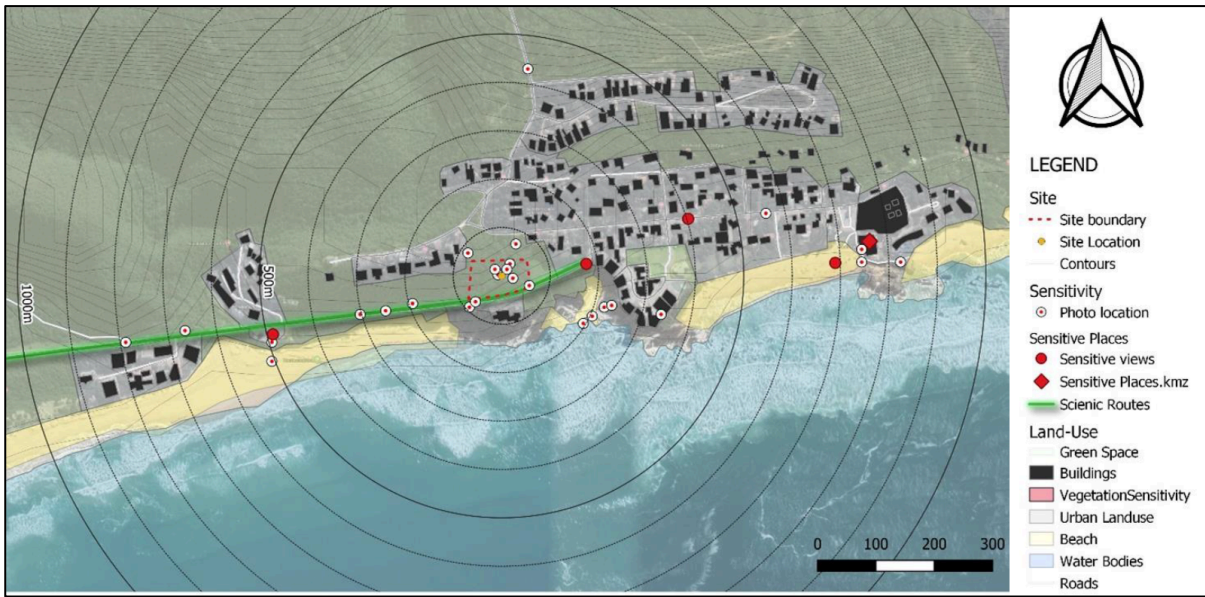


Figure 22: Graphic illustrating the location of photographs taken during fieldwork in the study area (up to 100m) to test visibility (van der Merwe, 2021)

4.4. SELECT PHOTOGRAPHIC RECORD



Figure 23: Photograph of the site taken from the parking area of the lookout point on the ocean side of the MR 394 scenic route. Note the steep cutting and density of vegetation covering the site (Smit, 2021)



Figure 24: Site photograph taken from the junction of Game and Main Streets, approximately 50m from the subject property boundary. The vegetation in the foreground is growing on Erf391 upslope to the north (Smit, 2021)



Figure 25: Site photograph (looking west) along the MR349, showing the roadway and the paved pedestrian route alongside. Note also the height of the vegetation alongside, typical of this stretch of road (Smit, 2021).



Figure 26: Site photograph overlooking the 5km long Keurboomstrand beach, looking toward Keurboomstrand west and Plettenberg Bay in the distance (van der Merwe, 2021)



Figure 27: Site photograph taken from the pedestrian walkway alongside the MR394 scenic route at 150m from the project site, looking east (Smit, 2021)



Figure 28: Site photograph taken from the publicly accessible private staircase across the small cove beach from the site, at 180m, looking west (Smit, 2021)



Figure 29: Site photograph from the Scrub-forest vegetation type looking west toward the Forest vegetation type area containing Milkwood trees (Smit, 2021)



Figure 30: Examples of the affected environment showing topography, vegetation cover and existing developments in the immediate surroundings. Except top left, all views are from Erf 155. (AIA, Nilssen, 2020)



Figure 31: Site photograph illustrating topographical and landform features: mountain backdrop, deeply incised forested river valleys on the inland plateau; estuaries, lagoons and either dune systems or rocky headlands at the coast (Smit, 2021)



Figure 32: Site photograph taken from the old N2 (a scenic route), showing a view of the study area as the road winds its way down the outside of the hill slope overlooking the floodplain and estuary. These dramatic views are not enjoyed by the “new” N2 route which passes through a cutting further inland (van der Merwe, 2021)

5. ASSESSMENT OF IMPACT OF DEVELOPMENT

Archaeology and Palaeontology

The proposed development will not have a negative impact on archaeological and palaeontological heritage resources within the Keurbooms 155 development site or on identified heritage resources in the surrounding area.

There is no evidence of historic or prehistoric occupation of the site; consequently the site is regarded to be of low to negligible sensitivity from an archaeological heritage perspective. There are no further concerns or objections to the proposed development on Erf 155. The archaeological observations noted all corroborate existing information about the archaeological sensitivity identified in reports from the wider area, noting that archaeological visibility is notoriously limited in the area due to the dense vegetation.

As indicated above, no negative impact to significant palaeontological heritage is anticipated as the palaeontological sensitivity of the geology of the development area is considered to be very low. In the event of important fossil material being identified during excavations, the HWC Fossil Finds Procedure must be implemented.

Visual Landscape Character (VIA, Smit, 2022)

The impact assessment was undertaken in terms of four key anticipated impacts, determined during the course of the literature review, the desktop study, fieldwork and the visual analysis process. The nature of these possible visual impacts is specified in the tables below.

- a) Effect on sensitive receptors;
- b) Effect on important views, view cones and view corridors;
- c) Effect on protected landscapes and scenic resources
- d) Effect on visual character and sense of place of Keurboomstrand (east).

The following four tables show the visual impact assessment of all three alternatives side by side. Each table is populated by a brief description of the nature of the anticipated impact, and followed by a list of noting exclusions and observations prior to impact assessment.

- a) Impact on sensitive receptors

Nature of Impact		Changes experienced by sensitive receptors: (i.e.: visitors to local heritage, scenic and cultural resources, sites, landscapes and monuments; the users of surrounding conservation and recreational areas; local residents etc.).	
Proposal:	Alternative 1	Alternative 2	Alternative 3
Status of the impact		Results in <i>change</i> , neither net positive nor net negative (the change includes aspects of positive and aspects of negative)	
Significance	14 Low	24 Low - Medium	32 Medium
Notes:	Please note that this assessment holds for the proposed buildings of Alternative 1 only. The swimming pool is disregarded as unfeasible, and if included in the final proposal it would increase the significance rating to Medium (negative).	This higher significance rating for Alternative 3 is because of the large footprints and the amount of clearing that unit 3 will require: increasing the amount of building exposed to the views from neighbouring properties and the scenic route.	

Discussion and impact-specific observations to support the findings of the assessment:

- i. Because the proposed development will not be visible from any local heritage and cultural resources (sites, landscapes and/or monuments) or conservation areas, viewers in these locations are not affected by the proposed development.
- ii. In terms of recreational areas, all Alternatives will be visible from the easternmost portion of the Keurboomstrand beach and will therefore have a visual impact on some beach areas within the ZoVI.
- iii. There is no evidence to suggest that views from the neighbouring properties will be affected negatively.
- iv. Local residents driving in and out of the town, and pedestrians using the paved walkway, the whale watching platform and the stairways giving access to the small cove beach will experience visual impacts.

b) Impact on important views and view corridors

Nature of Impact		Changes to important views, view cones and view corridors: (i.e.: continuity of views to and from the Indian Ocean and the coastal hills and ridgelines; views from within or towards protected areas or visually sensitive landscapes, the scenic route corridor generally).	
Proposal:	Alternative 1	Alternative 2	Alternative 3
Status of the impact	Negative	Negative	Negative
Significance	6 Low	40 Medium	27 Low - Medium
Notes:	As long as the swimming pool is not included in the proposal, the assessment above stands.		

Discussion and impact-specific observations to support the findings of the assessment:

- i. The site is not visible from the majority of the scenic route and the east/west view corridor it creates.
- ii. The proposed project does not break the silhouette of the ridgeline for all of the eastern views tested (including those from the conservation areas).
- iii. No public view corridors between the Indian Ocean and the coastal hills and ridgelines are interrupted or dominated visually by the proposed development. The proposed development does not have an effect on the ridgelines directly west of the site, nor the ridges of the foothills further inland.
- iv. Alternatives 2 and 3 interrupt the continuity of the ridgelines from a portion of the scenic route, and at the incoming and outgoing thresholds of the town.

c) Impact on protected landscapes and scenic resources

Nature of Impact	Change affecting protected landscapes and scenic resources: (i.e.: effect on the scenic route envelope; the effect on the total visual, heritage, conservation and tourism amenity of the area as well as heritage and conservation resources themselves).		
Proposal:	Alternative 1	Alternative 2	Alternative 3
Status of the impact	Negative	Negative	Negative
Significance	27 Low - Medium	44 Medium	30 Low - Medium

Notes: The above ratings describe visual impact on protected landscapes and scenic resources with specific reference to the scenic route.

Discussion and impact-specific observations to support the findings of the assessment:

- i. The proposed development will not impact on local heritage and cultural resources (sites, landscapes and/or monuments) from a visual point of view.
- ii. The conservation areas identified as potential sensitive receptors are outside of the ZoVI, and will thus not be affected.
- iii. The tourism amenity of the area is unlikely to be affected by the development in any significant way.
- iv. The site is situated on the inland side of the scenic route, and does not encroach on or interrupt sea views.
- v. Generally, the proposed development alternatives do not substantially deviate from the local settlement pattern. Alternatives 2 & 3 protrude above the vegetation notably from a limited number of views.
- vi. In terms of the scenic route, aspects of all three Alternatives are visible from a short portion of the road at the entrance of Keurboomstrand, an important threshold in terms of the visual character of the town.

d) Impact on visual character and sense of place of Keurboomstrand (east)

Nature of Impact	Change to the visual character of the area: (i.e.: effect on the sense of place, settlement pattern, landscape character and other sensate features of
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Keurboomstrand (east); with reference to the degree of change from existing development and land use in the area. The effect on the total visual, heritage, conservation and tourism amenity of the area, especially as these contribute to the sense of place and landscape character.

Proposal:	Alternative 1	Alternative 2	Alternative 3
Status of the impact	Negative	Negative	Negative
Significance	16 Low	18 Low	16 Low

Discussion and impact-specific observations to support the findings of the assessment:

- i. The proposed development does not introduce a change in land use from the land use in the area, but does introduce a scale of development that (while not unprecedented) deviates somewhat from the settlement pattern and townscape character of Keurboomstrand east in terms of footprint, overall size and number of dwellings per erf.
- ii. The proposed project is likely to result in some change to the Landscape character within the ZoVI (the difference between “noticeable change” and “some change” will be determined by the extent to which the vegetation on site is disturbed (from eastern views especially).
- iii. The proposal will result in limited change for landmarks and natural features, and it will result in limited change to the townscape character, provided that all the ecological, geotechnical and visual sensitivities are adequately responded to.

Cumulative impacts:

Existing Erf 565 development. Cumulative impacts are anticipated on the scenic route, landscape character and townscape character at a significant threshold/entrance, when the anticipated visual impact of the proposed development is taken together with that of the existing Erf 565 development. The affected portion of the MR394 is a significant threshold for the Keurboomstrand town, being located at the main pedestrian and vehicular entrance, and where the densely vegetated (substantively undisturbed) foothill that comprises the rest of Erf155 terminates. On the seaward side of the road, the development on Erf 565 is visually exposed, and presents a walled, almost urban interface with the public realm. In areas with scenic drive management plans or overlay zones, buildings and structures are not generally permitted on a site abutting the lower or down-slope side of a scenic drive, or to project more than 1.2m above the footway in the public street (Scenic Drive Network Management Plan, 2003, p. 17). The addition of another building on the up-slope side of a scenic route that would interrupt the visual continuity between the ocean and the terrestrial landscape further would have the cumulative effect of changing the landscape and townscape character of this threshold space. In areas with scenic drive management plans or overlay zones, no portion of a building is permitted to project so as to impair the view to the top of a ridge, hill or mountain when viewed from a point 1,2m above the centerline of the scenic drive (City of Cape Town, 2003, p. 17). Inappropriate development along the scenic route will have a negative cumulative visual impact.

Townscape character. The development will also add more generally to the compounded visual effect of densification and development within Keurboomstrand town, with particular reference to views from the east in a westerly direction. The existing built form from these views absorbs the new one to an extent, but only within the acceptable parameters discussed in Section 5.2.3 a) and elsewhere in this document (i.e.: buildings do not generally protrude above the vegetation except for their roofs and/or the top floor and roof).

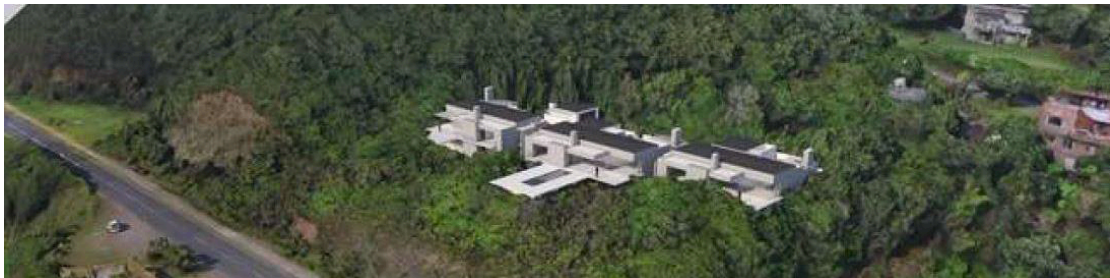
6. SUSTAINABLE AND SOCIAL ECONOMIC BENEFITS

According to the information provided, the potential benefit of the proposed development is likely to include some social and economic benefits through creation of business and employment opportunities for the local economy. The majority of the employment opportunities are likely to benefit local Historically Disadvantaged (HD) members of the community. This would represent a significant opportunity for the local building sector and members of the local community who are employed in the building sector. The potential creation of employment opportunities for local HD members of the community is therefore regarded as an important social benefit.

Based on the information provided, the anticipated socio-economic benefits do not outweigh the likely impacts to heritage resources unless the recommended mitigation measures provided below are implemented.

7. PROPOSED DEVELOPMENT ALTERNATIVES

The archaeological and palaeontological specialist reports did not assess development alternatives and conducted fieldwork and research on erf 155 as a site with the initial development proposal Alternative 1/ Option C. The Visual Impact Assessment (Smit, 2022) did assess 3 alternatives and came to the following conclusions and recommendations:



Alternative 1 – Preferred alternative/ Development Option C (2021)



Alternative 2



Alternative 3

Alternative 1

Alternative 1 is expected to have Low visual impact overall, with Low to Medium visual impact on the scenic route.

- Impact on sensitive receptors: Low neutral (14).
- Impact on important views and view corridors: Low negative (6)
- Effect on protected landscapes & scenic resources (scenic route): Low to Medium negative (27)
- Effect on the visual character and sense of place: Low negative (16)

Alternative 2

Alternative 2 is expected to have Medium visual impact overall, with Medium visual impact on the scenic route.

- Impact on sensitive receptors: Low to Medium neutral (24)
- Impact on important views and view corridors: Medium negative (40)
- Effect on protected landscapes & scenic resources (scenic route): Medium negative (44)
- Effect on the visual character and sense of place: Low negative (18)

Conclusions:

- i. Alternative 2 increased the visibility of the proposed development overall, but especially from the scenic route and recreational areas, increasing the number of sensitive receptors.
- ii. It is more visually intrusive to sensitive receptors than Alternative 1 because the bulk of the buildings are located on the most visually sensitive part of the site, where the VAC is the lowest (on the seaward side of the promontory, where the vegetation does not screen the proposed buildings).
- iii. Alternative 2 increases the Zone of Visual Influence because of its higher visibility. More of the development will be visible to users of the Keurboomstrand beaches, and a longer stretch of the scenic route to the west (at least 1km).
- iv. The visual impact on views from the east will be comparable to that of Alternative 1.
- v. Alternative 2 may be more noticeable from neighbouring properties than Alternative 1.
- vi. The effect on key elements of the Landscape Character will be increased, as the proposed building would be more clearly visible within the view frame & experience of receptors, with increased dominance especially from the scenic route.
- vii. Alternative 2 demonstrates higher exposure in the Foreground Distance zone.
- viii. The overall compatibility of Alternative 2 is lower than that of Alternative 1.

Alternative 3

Alternative 3 is expected to have Low to Medium visual impact overall, with Low to Medium visual impact on the scenic route.

- Impact on sensitive receptors: Medium neutral (32)
- Impact on important views and view corridors: Low to Medium negative (27)
- Effect on protected landscapes & scenic resources (scenic route): Low to Medium negative (30)
- Effect on the visual character and sense of place: Low negative (16)

Conclusions:

- The overall visibility of Alternative 3 is comparable to that of Alternative 1, except that the buildings are larger with longer and more continuous facades – demonstrated in Simulation B.
- Alternative 3 is less visually intrusive than Alternative 2 generally, but the increased exposure of Unit 3 on the eastern side results in higher visual impact on sensitive receptors (i.e.; local residents).
- Alternative 3 may be more noticeable from neighbouring properties than Alternative 2.
- The overall compatibility of Alternative 3 is lower but comparable to that of Alternative 1.

8. RESULTS OF PUBLIC CONSULTATION

HWC requires that any relevant registered conservation body, as well as the local authority, be included in the public participation process for this project. According to the HWC website (accessed June 2022), there is one registered conservation body for this area, Simon van der Stel Foundation Southern Cape. Both the Bitou Local Municipality and Simon van der Stel Foundation Southern Cape will be provided with 30 days to comment on this HIA. In addition, please note that this HIA will form part of the public consultation required in terms of NEMA. The public participation process will be managed by the environmental assessment practitioner.

9. CONCLUSIONS AND RECOMMENDATIONS

Archaeology and palaeontology

According to the specialist reports, there is no evidence of historic or prehistoric occupation of the site. Consequently, the site is regarded to be of low to negligible sensitivity from an archaeological and palaeontological heritage perspective and there are no objections to the proposed residential development on Erf 155 on condition that:

1. Due to the dense vegetation and limited archaeological visibility, a suitably qualified archaeologist should do a foot survey of the site intermittently during clearing of vegetation and once vegetation has been finally cleared before any earthworks are to commence.
2. Although unlikely, there may be buried or currently hidden archaeological material, including human remains, present on site and should these be uncovered or exposed during excavations or vegetation clearing, HWC should be notified immediately and all development work on site (preconstruction included) should be halted until these finds are investigated by HWC (Att: Ms Waseefa Dhansay 021 483 9685).
3. No negative impact to significant palaeontological heritage is anticipated as the palaeontological sensitivity of the geology of the development area is considered to be very low and there are no objections on palaeontological heritage grounds. In the event of important fossil material being identified during excavations, the HWC Fossil Finds Procedure must be implemented.

Visual and landscape character

According to the Local Area Spatial Plan future development in Keurboomstrand must have low visual impact (Keurbooms and Environs Local Area Spatial Plan, 2013, p. 154). The Department makes specific reference to development proposals on slopes of 1:4 or steeper, where development would be highly visible and recommends development be limited to flatter ground.

Recommendations:

To augment the botanical and geotechnical sensitivity mapping, the following visual sensitivity parameters have been established and should be adhered to in the final proposal for all alternatives:

- a) A 35m Scenic route setback (offset) that delineates a no-go area for development on the site from the part of the receiving environment with the highest exposure and sensitivity;
- b) Additional 5m offset from the eastern ecological and slope sensitivity exclusion area, to ensure that the dense forest vegetation screening views of the proposed development from the east remains unaffected by development.
- c) Adherence to the key parameters of the Architectural Guidelines (Pg 118, Smit VIA, 2022)

Due to the high value and sensitivity of the receiving environment, landscape character and the visual receptors, it is extremely important that a responsible and enforceable design approach be taken for the planning, construction and operational phases of each dwelling unit and the development as a whole, taking care to minimize the visual impact wherever possible. The Site Development Plan (SDP) and building plans must demonstrate adherence to the recommendations of this report in order for visual impact to be managed successfully.

Given that none of the Alternatives are compliant with the visual sensitivity parameters, the proposal should be revised to avoid biodiversity and visual impacts, by proposing buildings within the developable area only (indicated by the Botanical, Geotechnical and Visual sensitivity offsets and no-go areas).

10. REFERENCES

Impact Assessment Reports Consulted

1. ACRM, 2001. HIA Proposed Development Ptn 10 of the Farm Matjiesfontein No 304, Keurboomstrand.
2. ACRM, 1999. Archaeological Study, Sanderlings, Plettenberg Bay.
3. Deacon, H. 2001. Phase 1 Report AIA of the Proposed Subdivision of Farm Arch Rock No 296 (Keurboomstrand)
4. PHS Consulting, 2014. HERITAGE IMPACT ASSESSMENT WITH INTEGRATED SET OF RECOMMENDATIONS Proposed Residential Development of Nature's Path Lifestyle Village Portions 9 and 10 of the Farm Matjiesfontein No. 304, Keurboomstrand, Plettenberg Bay
5. Webley, 2004. Phase 1 AIA of Ptns 1 and 2 of Arch Rock 296, Plettenberg Bay.
6. Webley, 2001. Phase 1 AIA of Ptns 1/15, 92 and R16 of the Farm Matjiesfontein No 304 Keurboomstrand, Plettenberg Bay.

Further references

7. Peeling Away the Past: The Display of Excavations at Nelson Bay Cave, by Janette Deacon and Michael Brett © 1993 South African Archaeological Society
8. Rabe, 2010. Historical Background Report for Kurland, Bitou Knysna (draft)
9. Storrar, P. 2001. "Plettenberg Bay and the Paradise Coast", TMG Publishers: South Africa

APPENDIX A: ARCHAEOLOGICAL IMPACT ASSESSMENT



APPENDIX B: PALAEOLOGICAL IMPACT ASSESSMENT



APPENDIX C: VISUAL IMPACT ASSESSMENT

