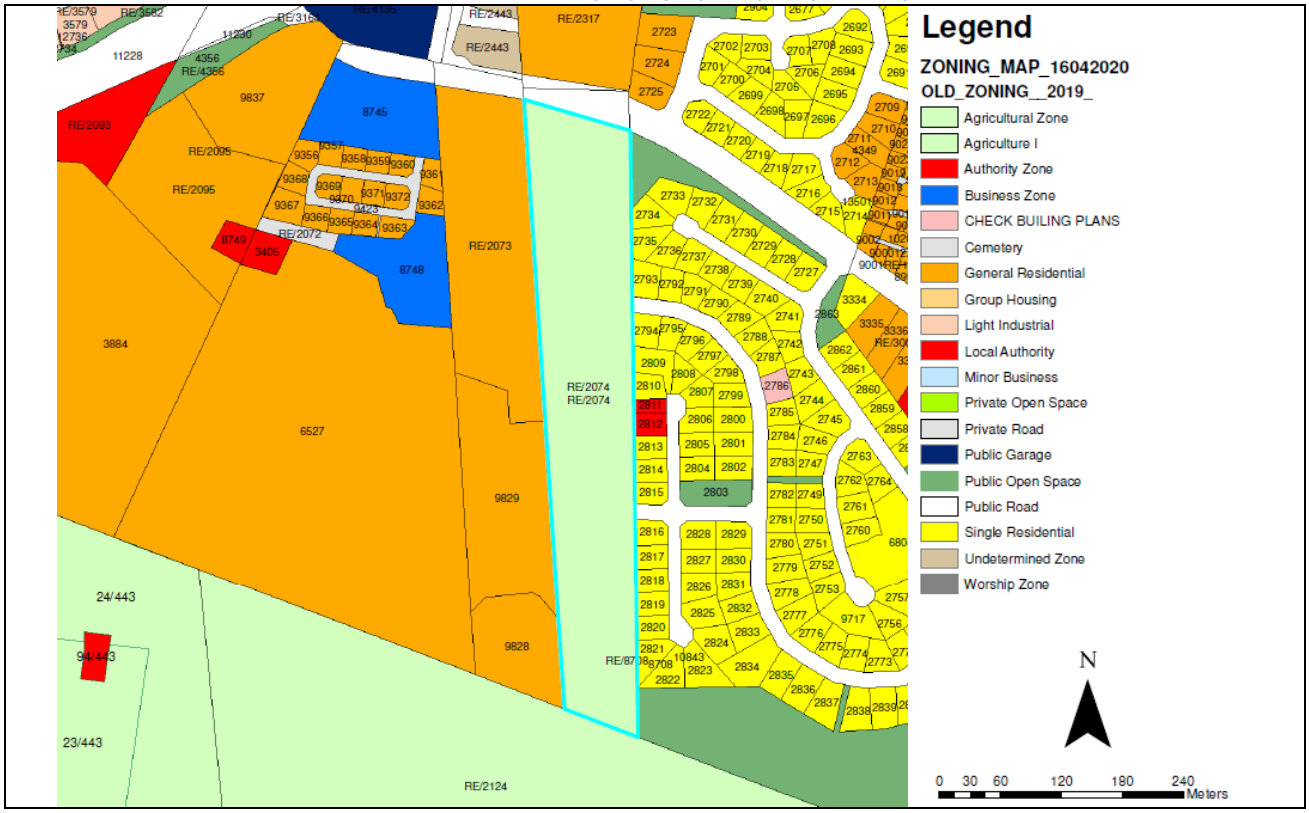
Final BASIC ASSESSMENT REPORT

In terms of the **National Environmental Management Act** (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations as amended for:

PROPOSED MEDIUM TO HIGH DENSITY RESIDENTIAL DEVELOPMENT ON RE / ERF 2074, MARINE WAY, BITOU LOCAL MUNICIPALITY, WESTERN CAPE

REFERENCE: 16/3/3/1/D1/14/0037/24



PREPARED FOR THE APPLICANT:	DUINESAND Pty Ltd
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PREPARED BY:	CLAIRE DE JONGH (EAPASA REG: 2021/3519)
DATE:	**3 February 2025**

EXECUTIVE SUMMARY

Introduction

A medium to high density residential development is proposed on RE / Erf 2074. The site is approximately 6.25 hectares (ha) in extent and located immediately south of Marine Way within the Bitou Local Municipality in the Western Cape Province.

The proposed development triggers activities included in Listing Notices 1 and 3 of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended, 2017) published in terms of the National Environmental Management Act (Act 107 of 1998) and therefore an Environmental authorisation to be issued by the Western Cape Department of Environmental Affairs and Development Planning (DEADP) prior to commencement of construction. The Environmental Authorisation process requires a basic assessment to be carried out.

The draft basic assessment report has been distributed to all registered interested and affected parties for a 30-day review and comment period (Review and comment period: 1 November to 2 December 2024). The report has been updated with all comments received and responses; **all changes are indicated in blue**. The final basic assessment report (this report) will be submitted to the DEADP for decision making (107 days).

Location

RE / Erf 2074 (Erf 2074) is situated within the urban edge of the Plettenberg town settlement, immediately south of Marine Way within the Bitou Local Municipality in the Western Cape Province. The approximate central coordinates of the site: 34° 3.209'S; 23° 21.621'E

Overview of proposed project

An estimated 230 units are proposed to be developed on Erf 2074; the units are proposed to be two- and three-bedroom units in three-storey buildings; each unit is proposed to be approximately 100 to 130m2 in extent. Supporting services and infrastructure will be installed, including; access roads, internal roads, sewage, electric and water reticulation systems, stormwater management structures as well as parking bays. The development including supporting services and infrastructure will occupy an estimated 50 000 m2 (5 ha) of the erf.

A concept design based on 250 residential units was initially proposed for the site (Alternative concept layout 1). A screening tool report and verification of site sensitivities were carried out. Based on the outcome of the verification reports, the concept layout 1 was updated to alternative concept layout 2 which reduces the density on the site to 228 units.

The development is proposed to be developed in 3 or 4 phases to allow the development to respond to changing market demands. It is proposed that site development plans be submitted to the local authority for each phase. The current development proposal has been designed for the maximum number of units that can be achieved taking into account access and parking requirements, existing structures, site characteristics, as well as infrastructure development parameters of the zoning Scheme. Any recommendations to the proposed layout based on outcomes of the assessment will inform the final SDP/s (layout 3).

Site sensitivities

The DFFE National Screening Tool indicates the following environmental sensitivities which has assisted in the identification of potential impacts:

- Agriculture theme: Medium sensitivity
- Animal species theme: High sensitivity
- Aquatic biodiversity theme: Very high sensitivity
- Archaeological and Cultural Heritage theme: Very High sensitivity
- Civil aviation theme: High sensitivity
- Defence theme: Low sensitivity
- Palaeontology theme: High sensitivity
- Plant species theme: Medium sensitivity.

- Terrestrial biodiversity theme: Very High Sensitivity

Aquatic, terrestrial biodiversity, fauna and flora studies have been carried out by specialists. The verification reports were based on a concept layout 1 and density (250 units). All verification reports showed that the central and northern areas of the site have a low sensitivity, with the southern section being of high sensitivity. The town planner and engineers considered the outcomes of the verification report; concept layout alternative 2 (228 units) was developed; stormwater calculations were updated from the 1: 50 year flood line to the 1: 100 year flood line and shows the expected stormwater flows before and after construction; The stormwater management plan was updated ensure that predevelopment stormwater flows are maintained and excessive flows are catered for using swales and dispersion in the south and directed to the existing stormwater system in the north. The aquatic specialist has reviewed the updated stormwater information and has confirmed that no further aquatic assessment will be necessary.
A terrestrial biodiversity and flora and fauna assessment have been carried out. All the specialist assessment show that development is to be avoided in the southern section of the site.
A Heritage Impact Assessment was carried out by Dr Lita Webley, 2005. No further assessment is deemed necessary as the old building will not be demolished but incorporated into the planned development; A paleontology desktop study has been carried out. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure is included in the EMPr and should be followed in the unlikely event that a significant fossil discovery is made during construction.
The South African Civils Aviation Association has provided comment to state that an obstacle assessment is required to be carried out for the proposed development. The draft BAR will be sent to the local airport and SACAA for comment.

Impact Assessment summary

Archaeological / heritage / paleontology

Heritage buildings will be incorporated into planned development. A paleontology desktop study has been carried out. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure is included in the EMPr and should be followed in the unlikely event that a significant fossil discovery is made during construction. With mitigation measures in place, a low positive impact could result.

Terrestrial Biodiversity

The proposed development is approximately 9km away from the Garden Route National Park and highly unlikely to negatively affect corridor connectivity and the buffer area. South Outeniqua Sandstone (FFs 19) is the mapped vegetation type on Erf 2074 (NatVeg Map, 2019) and has a conservation status of least threatened (NEMBA list of threatened ecosystems, 2022). Approximately 67% of the original area of South Outeniqua Sandstone (historically ca. 157 123 ha) of the vegetation type is still intact, with 32.2% formally conserved. In terms of the Western Cape Biodiversity Spatial Plan (WC BSP) the southernmost section of the site is falls within a terrestrial critical biodiversity area (CBA1). The southernmost section consists of fynbos and a steep terrain connecting to the Piesang River Valley. The overall Site Ecological Importance is low and very low in the central and northern portions, medium in the southern portion and high at the most southern section.
The steeper (steeper than 1:4) southern section falling within CBA / and representative of intact fynbos is not recommended to be developed. The northern and central sections of the site are recommended for a medium - high density residential development.
The project area of influence can be reduced by retaining the road as a footpath; removing buildings from the CBA; only 1200m2 development is recommended by the EAP in the area mapped as CBA (WCBSP) due to flatter gradient as opposed to developing on adjacent steeper gradient not mapped as CBA. The gazebo development footprint is recommended be planned to use the existing disturbed footprint. No vehicles should be permitted in the southern area; only foot traffic. Permeable pavers may be used on existing southern road but must be

retained as a footpath; no driving permitted in southern section; only foot traffic. No further tracks / roads to be developed in the southern area
Impacts on loss of biodiversity, increased activity in mapped CBA and sensitive southern section of the erf are rated as negative of low significance with mitigation measures in place

Indigenous vegetation and flora species
Historically the entire site was likely an open-canopy vegetation type which is consistent with the South Outeniqua Sandstone Fynbos mapped on the site. The northern section of the site has been confirmed to have a Low botanical theme sensitivity; permits will however be required to trim, remove, or alter the protected trees if necessary; permits will also be required for removal of species of conservational concern (SCC) or plants protected in terms of the Provincial Nature Conservation Ordinance. The southern section of the site (i.e. fynbos and valley fynbos-thicket) has been confirmed to have a high plant species sensitivity. Search and rescue must be carried out as per the measures provided in the EMPR. Impact on loss of flora Species of conservation concern (SCC) and indigenous vegetation are rated as negative with low significance with mitigation measures in place

Fauna habitats and species
Habitat types identified on the property includes a small, old agricultural field (olive grove); dense vegetation (trees/shrubs) in the north around the houses; modified fynbos with some Pine and Black Wattle (*Acacia mearnsii*) invasions in the middle of the property; heavily invaded areas of Blackwood *(A. melanoxylon*) in the middle of the property; and natural fynbos in the south. There are no mapped watercourses or waterbodies on the property, only a drainage line is present along the south-western boundary.
The property contains marginally suitable habitat characteristics for the Knysna Woodpecker (*Campethera notata*), Knysna Pale Copper Butterfly (*Aloeides pallida littoralis*), and the golden mole (*Amblysomus corriae*) SCC.

The south of the property has the most natural habitat (fynbos), greatest connectivity to adjacent natural/semi-natural areas along the Piesang River valley and access to water in the drainage line along the south-western boundary. The fynbos south of site has a low likelihood of providing suitable habitat for *Aloeides thyra orientis* (Red Copper Butterfly) (Endangered); the host plant was not observed, and soil in the fynbos area is not sandy as preferred by the species of conservational concern (SCC); the closest observation of this SCC is Brenton on Sea. Larval host plants of *Aloeides pallida littoralis* (Knysna Pale Copper) (NT) were observed in the south; the closest observation of this SCC is Brenton on Sea. The species is assigned a medium low occurrence on the property.
The old agricultural field is considered to have a low site ecological importance (SEI) and a medium likelihood occurrence of Knysna Woodpecker (*Campethera notata*) (NT) and Fynbos Golden Mole (*Amblysomus corriae*) (NT).
To ensure associated activities are limited and of low impact, the EAP recommends that only the identified flatter area in the NE section of the mapped CBA be developed (approximately 1200m2), as opposed to the steeper adjacent area not included in the mapped CBA; the existing road in the southern section should be retained as a footpath with no further tracks / paths permitted; the existing development footprint be used for the lookout / gazebo area.
This section of the property is likely to be utilised by many animal species in the surrounding areas and it is strongly recommended that the southern boundaries of the property not be fenced in order to maximize connectivity within the surrounding landscape and allow animals to continue using this natural space.
Search and rescue must be carried out as per the measures provided in the EMPR.
The impacts of the development layout on loss of high SEI faunal habitat rated as negative with low significance with mitigation measures in place. The impact of construction activities and on loss of fauna and habitat is rated as negative of low significance with mitigation measures in place. Impacts of noise on fauna during construction and operations on fauna is rated as negligible with mitigation in place. The impact of operations on fauna is rated as negative of low significance (harm to wildlife, loss habitat, visual) and negligible (habitat connectivity, huma-wildlife conflict).

Alien invasive species

Some sections of the site (central section) are heavily invaded with alien tress. Some of the fynbos on the site contains thicket elements and is invaded by wattles (*Acacia cyclops, A. mearnsii, A. melanoxylon, A. saligna*), pines (*Pinus radiata*), cotoneaster (*Cotoneaster glaucophyllus*), and purpletop vervains (*Verbena bonariensis*). The most serious invasion on the site is Blackwood wattles (*A. melanoxylon*). The implementation of an alien invasive management plan for the site is rated as a positive impact of low significance.

Fire Risk

With the occurrence of the high number of alien vegetation on the site and natural fynbos in the south, the site is considered to have a high fire risk; measures must be put in place to prevent unplanned fires and control planned fires (fynbos requires burning every 7 to 15 years). With no management of the South Outeniqua Sandstone Fynbos in the south, it will start to present a fire risk, and will result in long-term biodiversity loss. This application and basic assessment report must be reviewed by the Southern Cape Fire Protection Association (SCFPA) so they can provide comments on the development layout, and management recommendations from a fire risk reduction perspective. It is further recommended that the current / future owners of the property / development become members of the SCFPA.

Fire-proof hedges (Esler et al., 2014) can be made with indigenous species to reduce fire risk around the built environment.

With mitigation measures (Fire prevention and response plan in place), the imapct of fire is rated as negative of low significance.

Soil, geology and topography

The site is situated between contour levels of 105m – 140m; the site is moderately flat in the central section, a gentle slope to the north and a steep slope (12% - 40%) in the south. The highest part the site (140 MASL) is in the central section; the lowest part in the south (105MASL). Removal of vegetation (which has a binding action on underlying soils) could lead destabilization of sandy sediment leading to erosion. Exposed soils leads to erosion by wind and water. Foundations established for the development of the residential blocks and other buildings on sight will lead to compaction (densification) of the soil. Care must be taken to prevent wind erosion / dust generation, ensure correct stripping and stockpiling methods and ensure appropriate storm management measures are in place.

Development on areas with gradient steeper than 1:4 is not recommended. The EAP recommends that the identified flatter area in the NE section of the mapped CBA be developed (approximately 1200m2), as opposed to the steeper adjacent area not included in the mapped CBA.

The impact on soil loss / soil erosion is rated as negative of low significance with mitigation measures in place.

Aquatic Systems

The site falls within quaternary catchment K60G in the catchment of the Piesang River. The Piesang River is in the valley bottom below the cliffs approximately 250 m south of the property. The river is mapped as the Estuarine Functional Zone (EFZ) at this point. This flows in an easterly direction for approximately 1.8 km until it exits to the sea at the river mouth. The property is located on a watershed with approximately half of the property draining to the north and the other half draining to the south. The northern drainage would indirectly drain to the Keurbooms River via stormwater in urban areas, while the southern drainage would drain more directly to the Piesang River. There is a defined NWA watercourse in the valley bottom (Erven 9828 and 9829), west of RE/2074. This stream is a trickle flow with a densely vegetated riparian zone of indigenous plants. No other watercourses have been identified on RE/2074. The recommended buffer for the adjacent drainage line is 48 m. For the most part this buffer is aligned with the southwestern boundary of RE/2074, but a small area intrudes into the property boundary near the corner of the property. Any potential impacts to the drainage line on the neighbouring property or the Piesang River can be effectively managed to minimise the Project Area Of Influence (PAOI).

The impact on aquatic systems with mitigation measures in place (stormwater management mitigation measures, soil erosion mitigation measures, waste management measures) is rated as negative of low significance.

Social

The proposed site is located within the urban edge between existing residential developments, and it is in an area identified as a "Strategic Development Area". The northern section of the site forms part of the Restructuring Zones of the Bitou Local Municipality.

Visual and noise impacts can be mitigated during construction phase. Careful planning and positioning of the units, density and green spaces on the site can mitigate long terms noise and visual impacts of the development.

A Bulk Services capacity analysis report has been undertaken by GLS Consulting Engineers. Sewage from the proposed development will drain towards the existing Plettenberg Bay PS 1a. There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development. The existing water system has sufficient capacity to accommodate the proposed development in the present Upper Tower water distribution zone to comply with the pressure and fire flow criteria as set out in the master plan. Waste management should follow the waste management hierarchy to reduce cumulative impacts of waste generation.

Change is land use from agricultural to residential is viewed as a positive impact as additional housing to the middle-income earner will be provided in the area and a positive economic impact is expected through the generation of rates and income potential (i.e., work, service providers, suppliers). Careful planning must take place to ensure that long term social conflict is avoided, and social wellness is ensured by ensuring sufficient space is allocated per unit and for the required open space areas, bulk services and roads. Higher density buildings are recommended to be placed in northern, central and western areas (i.e., in the identified BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned in the east (quieter adjacent residential area) and environmentally sensitive southern sections. (i.e. gradation of building heights from west (tallest) to east (lowest)). Final plans must ensure the long-term privacy of neighbours bordering erf 2074 (i.e. Thulana Hills, Cutty Sark residents) (i.e. direction of units, window positions etc.). The final SDPs could include a central road as opposed to road alongside the Cutty Sark area if this will improve privacy and reduce noise levels.

Traffic

A traffic impact assessment has been carried out. Marine Way (Main Road 00383) is a major road providing access between the N2 and the town of Plettenberg Bay and beach areas. Traffic flow is currently controlled in this road by means of traffic circles. The primary access is proposed to be from Marine Drive directly from the existing circle. The TIA assessed the impact of the development for the 2025 and 2030 planning horizons and the impact of the proposed development during the peak holiday period:

When considering the traffic generated by the proposed development added to escalated background traffic, the affected intersections and access points all operate at acceptable Levels of Service in terms of capacity for the 2025 development horizon for normal season traffic conditions with the Ultra City intersection configured as a roundabout.

When considering the traffic generated by the proposed development added to escalated background traffic, the affected intersections and access points all operate at acceptable Levels of Service in terms of capacity for the 2030 development horizon for normal season traffic conditions with the Ultra City intersection configured as a roundabout.

The affected intersections and access points all operate at acceptable Levels of Service in terms of capacity for the 2030 development horizon with only the Challenge Drive intersection LOS worsening slightly from A to B. Access to the development can safely be accommodated from Marine Way (MR00383) at the Challenge Drive intersection provided the access is configured as indicated on Figure 15 in the TIA (Appendix G).

Access control gates to the development on erf 2074 should be configured with a minimum of two entry lanes set back a minimum of 19.5m (3 car lengths) from the erf 2073 access road so that entering vehicles do not block access to erf 2073. Additional secondary access points to the municipal road network to the east via Cutty Sark Avenue and Ariel Drive will be provided for use should an emergency arise in the complex comprising the main access onto Marine Way.

No-go alternative

The majority of impacts of the current activity (low residential; zoned Agricultural) have been rated as very low negative / negligible impacts. AIS is rated as negative of medium significance; the provision of low-density residential accommodation is rated as a positive impact of low significance. Not developing the medium-high residential development is rated as negative social impact with a medium- high significance.

Conclusion

The site is situated within an urban edge and located between existing residential development and is close to existing bulk services and bulk services can be accommodated by the Bitou LM. The site is deemed suitable for the development of medium- to high density residential accommodation; Measures are recommended to prevent / mitigate identified impacts. Solar power and water tanks are recommended to be included in the final SDP to augment water / energy requirements. Development in the sensitive southern area is recommended to be reduced; the steep areas (steeper than 1:4) in the south must be avoided. The EAP recommends that the identified flatter area in the NE section of the mapped CBA be developed (approximately 1200m2), as opposed to the steeper adjacent area (900m2) not included in the mapped CBA. It is further recommended that the existing road in the south be retained and used as a footpath with no further development of tracks / roads in this area. It is further recommended that the unfinished development footprint in the south be used as the footprint for the proposed gazebo area. Of the 6.25 ha, approximately 4.74 ha will be developed and approximately 1.5 ha (with approximately 1.4 ha in CBA) of sensitive southern area will not be developed. All mitigation measures included in the draft EMPr should be implemented as required in the planning, construction and operational phases of the proposed development.

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and the 2014 Environmental Impact Assessment (EIA) regulations (as amended, 2017), the proposed development requires an environmental authorisation to be issued by the Western Cape Department of Environmental Affairs and Development Planning (DEADP) before development can commence. A basic assessment has been carried out as part of the environmental authorisation application process.

The draft basic assessment report has been distributed to all registered interested and affected parties for a 30-day review and comment period (Review and comment period: 1 November to 2 December 2024). The report has been updated with all comments received and responses; **all changes are indicated in blue**. The final basic assessment report (this report) will be submitted to the DEADP for decision making (107 days).

TABLE OF CONTENTS

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

BASIC ASSESSMENT REPORT

THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS.

APRIL 2024

(For official use only)	
Pre-application Reference Number (if applicable):	
EIA Application Reference Number:	
NEAS Reference Number:	
Exemption Reference Number (if applicable):	
Date BAR received by Department:	
Date BAR received by Directorate:	
Date BAR received by Case Officer:	

GENERAL PROJECT DESCRIPTION

(This must Include an overview of the project including the Farm name/Portion/Erf number)

A medium to high density residential development is proposed on RE / Erf 2074. The site is approximately 6.25 hectares (ha) in extent and located immediately south of Marine Way within the Bitou Local Municipality in the Western Cape Province.

Erf 2074 is currently used for single residential purposes and existing infrastructure includes a house and an outbuilding. Indigenous trees and vegetation have been planted by the owner of the property; a small olive grove (3000m2) has been planted as part of previous agricultural activities; a small plantation of king proteas has been planted. A rezoning application was submitted in 2006 to rezone Erf 2074 from Agriculture to a subdivisional area., however this application was never concluded. In August 2012, an application was made for a second dwelling which allowed a new house to be constructed in the southern portion of the site. The application was approved, and the house construction commenced however it was not completed. Remnants of the building footprint and access road still exist.

A concept design based on 250 residential units was initially proposed for the site (Alternative concept layout 1). A screening tool report and verification of site sensitivities were carried out. Based on the outcome of the verification reports, the concept layout 1 was updated to alternative concept layout 2 which reduces the density on the site to 228 units.

Approximately 228 units are proposed to be developed on the site; the units are proposed to be two- and three-bedroom units in three-storey buildings; Units are planned to be approximately 100 to 130m2 in extent. Supporting services and infrastructure will be installed, including; access roads, internal roads, sewage, electric and water reticulation systems, stormwater management structures as well as parking bays. 1.5 bays per unit in PTA1 areas are proposed. The supporting bulk service infrastructure and internal roads will occupy an estimated 10 000 m2 (1 ha) of the erf. The total development footprint will be a maximum of 5 hectares.

The development is proposed to be developed in 3 or 4 phases to allow the development to respond to changing market demands. It is proposed that site development plans be submitted to the local authority for each phase. The current development proposal has been designed for the maximum number of units that can be achieved taking into account access and parking requirements, existing structures, site characteristics, as well as infrastructure development parameters of the zoning Scheme. Any recommendations to the proposed layout based on outcomes of the assessment will inform the final SDP/s (layout 3).

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THIS BASIC ASSESSMENT REPORT

1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.

2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".

3. *Submission of documentation, reports and other correspondence:*

   The Department has adopted a digital format for corresponding with proponents/applicants or the general public. If there is a conflict between this approach and any provision in the legislation, then the provisions in the legislation prevail. If there is any uncertainty about the requirements or arrangements, the relevant Competent Authority must be consulted.

   The Directorate: Development Management has created generic e-mail addresses for the respective Regions, to centralise their administration. Please make use of the relevant general administration e-mail address below when submitting documents:

   DEADPEIAAdmin@westerncape.gov.za
   Directorate: Development Management (Region 1):
   City of Cape Town; West Coast District Municipal area;
   Cape Winelands District Municipal area and Overberg District Municipal area.

   DEADPEIAAdmin.George@westerncape.gov.za
   Directorate: Development Management (Region 3):
   Garden Route District Municipal area and Central Karoo District Municipal area

   General queries must be submitted via the general administration e-mail for EIA related queries. Where a case-officer of DEA&DP has been assigned, correspondence may be directed to such official and copied to the relevant general administration e-mail for record purposes.

   All correspondence, comments, requests and decisions in terms of applications, will be issued to either the applicant/requester in a digital format via email, with digital signatures, and copied to the Environmental Assessment Practitioner ("EAP") (where applicable).

4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.

5. All applicable sections of this BAR must be completed.

6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.

7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.

9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.

10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.

11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.

12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.

13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.

14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.

15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-
Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

    Atmospheric Emissions Licence Applications, this report must also be (i.e., another hard copy and electronic copy) submitted for the attention of the Licensing Authority or this Department's Air Quality Management Directorate (Tel: 021 483 2888 and Fax: 021 483 4368) at the same postal address as the Cape Town Office.

DEPARTMENTAL DETAILS	
CAPE TOWN OFFICE: **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1)** (City of Cape Town, West Coast District, Cape Winelands District & Overberg District)	**GEORGE REGIONAL OFFICE:** **DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3)** (Central Karoo District & Garden Route District)
The completed Form must be sent via electronic mail to: DEADPEIAAdmin@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000	The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: DEADPEIAAdmin.George@westerncape.gov.za Tel: (044) 814-2006 Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 3) Private Bag X 6509 George, 6530

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.	
Locality Map:	The scale of the locality map must be at least 1:50 000. For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map. The map must indicate the following: • an accurate indication of the project site position as well as the positions of the alternative sites, if any; • road names or numbers of all the major roads as well as the roads that provide access to the site(s) • a north arrow; • a legend; and • a linear scale. For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken. Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report.
Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.	
Site Plan:	Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following: • The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale. • The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan. • On land where the property has not been defined, the co-ordinates of the area in which the proposed activity or development is proposed must be provided. • The current land use (not zoning) as well as the land use zoning of each of the adjoining properties must be clearly indicated on the site plan. • The position of each component of the proposed activity or development as well as any other structures on the site must be indicated on the site plan. • Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development **must** be clearly indicated on the site plan.

	• Servitudes and an indication of the purpose of each servitude must be indicated on the site plan. • Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to): o Watercourses / Rivers / Wetlands o Flood lines (*i.e.,* 1:100 year, 1:50 year and 1:10 year where applicable); o Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): o Ridges; o Cultural and historical features/landscapes; o Areas with indigenous vegetation (even if degraded or infested with alien species). • Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. • North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as **Appendix C**. The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as **Appendix D**.
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as **Appendix A3**.

ACRONYMS

DAFF:	Department of Forestry and Fisheries
DEA:	Department of Environmental Affairs
DEA& DP:	Department of Environmental Affairs and Development Planning
DHS:	Department of Human Settlement
DoA:	Department of Agriculture
DoH:	Department of Health
DWS:	Department of Water and Sanitation
EMPr:	Environmental Management Programme
HWC:	Heritage Western Cape
NFEPA:	National Freshwater Ecosystem Protection Assessment
NSBA:	National Spatial Biodiversity Assessment
TOR:	Terms of Reference
WCBSP:	Western Cape Biodiversity Spatial Plan
WCG:	Western Cape Government

ATTACHMENTS

Note: The Appendices must be attached to the BAR as per the list below. Please use a ✓ **(**tick) or a **x** (cross) to indicate whether the Appendix is attached to the BAR.

The following checklist of attachments must be completed.

APPENDIX			**✓ (Tick) or x (cross)**
Appendix A:	**Maps**		
	Appendix A1:	**Locality Map**	✓

	Appendix A2:	**Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning**	✓
	Appendix A3:	**Map with the GPS co-ordinates for linear activities**	
Appendix B:	**Appendix B1:**	**Site development plan(s)**	✓
	Appendix B2	**A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;**	✓
Appendix C:	**Photographs**		✓
Appendix D:	**Biodiversity overlay map**		✓
Appendix E:	**Permit(s) / license(s) / exemption notice, agreements, comments from State Department/Organs of state and service letters from the municipality.**		
	Appendix E1:	**Final comment/ROD from HWC**	✓
	Appendix E2:	**Copy of comment from Cape Nature**	✓
	Appendix E3:	**Final Comment from the DWS**	
	Appendix E4:	**Comment from the DEA: Oceans and Coast**	
	Appendix E5:	**Comment from the DAFF**	
	Appendix E6:	**Comment from WCG: Transport and Public Works**	✓
	Appendix E7:	**Comment from WCG: DoA**	
	Appendix E8:	**Comment from WCG: DHS**	
	Appendix E9:	**Comment from WCG: DoH**	
	Appendix E10:	**Comment from DEA&DP: Pollution Management**	
	Appendix E11:	**Comment from DEA&DP: Waste Management**	
	Appendix E12:	**Comment from DEA&DP: Biodiversity**	
	Appendix E13:	**Comment from DEA&DP: Air Quality**	

	Appendix E14:	**Comment from DEA&DP: Coastal Management**	✓
	Appendix E15:	**Comment from the local authority**	
	Appendix E16:	**Confirmation of all services (water, electricity, sewage, solid waste management) (requested; not yet received)**	
	Appendix E17:	**Comment from the District Municipality**	✓
	Appendix E18:	**Copy of an exemption notice**	
	Appendix E19	**Pre-approval for the reclamation of land**	
	Appendix E20:	**Proof of agreement/TOR of the specialist studies conducted. (included in specialist reports)**	
	Appendix E21:	**Proof of land use rights**	
	Appendix E22:	**Proof of public participation agreement for linear activities**	
Appendix F:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.**		✓
Appendix G:	**Specialist Report(s)**		✓
Appendix H:	**EMPr**		✓
Appendix I:	**Screening tool report**		✓
Appendix J:	**The impact and risk assessment for each alternative**		✓
Appendix K:	**Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline**		✓
Appendix L	Any other attachments must be included as subsequent appendices		

SECTION A: ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		GEORGE OFFICE: BEGION 3
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	(Central Karoo District & Garden Route District)

Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	DUINESAND Pty Ltd	
Name of contact person for Applicant/Proponent (if other):	Gerhard de Vos	
Company/ Trading name/State Department/Organ of State:	DUINESAND (EIENDOMS) BEPERK	
Company Registration Number:	IT 1996 / 001665 / 07	
Postal address:	PO BOX 74960, LYNNWOOD RIDGE, PRETORIA, GAUTENG	
		Postal code: 0040
Telephone:	+27(0) 836476794	Cell: +27(0) 836476794
E-mail:	gerhardjdevos@hotmail.com	Fax: ( )
Company of EAP:	Sub consultant to Ecoroute	
EAP name:	Claire De Jongh	
Postal address:	P.O. Box 1252	
		Postal code: 6573
Telephone:	+27(0) 846074743 / +27(0) 825577122	Cell: +27(0) 846074743 / +27(0) 825577122
E-mail:	claire@ecoroute.co.za / janet@ecoroute.co.za	Fax: ( )
Qualifications:	BSc Environmental Management BSC Hons Environmental Monitoring and modelling	
EAP registration no:	2021/3519	
Duplicate this section where there is more than one landowner Name of landowner:	DUINESAND Pty Ltd	
Name of contact person for landowner (if other):	Gerhard de Vos	
Postal address:	PO BOX 74960, LYNNWOOD RIDGE, PRETORIA, GAUTENG	
		Postal code: 0040
Telephone:	+27(0) 836476794	+27(0) 836476794
E-mail:	gerhardjdevos@hotmail.com	Fax: ( )
Name of Person in control of the land:	DUINESAND Pty Ltd	
Name of contact person for person in control of the land:	Gerhard de Vos	
Postal address:	Gerhard de Vos	
	PO BOX 74960, LYNNWOOD RIDGE, PRETORIA, GAUTENG	Postal code: 0040
Telephone:	+27(0) 836476794	Cell: +27(0) 836476794
E-mail:	gerhardjdevos@hotmail.com	Fax: ( )

Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	Bitou Municipality
Contact person:	Municipal Manager: Mbulelo Memainim
Postal address:	Private Bag X1002

		Postal code: 6600
Telephone	+27(0) 44 501 3000	Cell:
E-mail:	mmemani@plett.gov.za	Fax: ( )

SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS INLCUDED IN THE APPLICATION FORM

1.	Is the proposed development (please tick):	New		Expansion	
2.	Is the proposed site(s) a brownfield of greenfield site? Please explain.				

The proposed site (Re/ Erf 2074) is approximately 6.25 hectares (ha) in extent. Existing structures and infrastructure on site currently occupy approximately 1 hectare and is generally situated in the northern section of the site.
Structures include access roads, a main residential house, smaller residential dwellings, reservoir, telephone line, as well as a chicken coop, shed and shade structure. A small olive grove (3000m2) and a small plantation of king proteas has been planted. The development footprint of a house that was never finished is situated towards the southern section of the site.
The indigenous vegetation in the northern section has been transformed and includes higher densities of alien invasive trees. The southern section is relatively undisturbed indigenous vegetation with exception of the house that was not completed and access road leading to this unfinished structure.

3.	**For Linear activities or developments**	
3.1.	Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:	
3.2.	Development footprint of the proposed development for all alternatives.	m²
3.3.	Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.	
3.4.	Indicate how access to the proposed routes will be obtained for all alternatives.	
3.5.	SG Digit codes of the Farms/Farm Portions/Erf numbers for all alternatives	
3.6.	**Starting point co-ordinates for all alternatives**	
	Latitude (S)	° ‘ “
	Longitude (E)	° ‘ “
	Middle point co-ordinates for all alternatives	
	Latitude (S)	° ‘ “
	Longitude (E)	° ‘ “
	End point co-ordinates for all alternatives	
	Latitude (S)	° ‘ “
	Longitude (E)	° ‘ “

Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.

4.	**Other developments**	
4.1.	Property size(s) of all proposed site(s):	62457.1m2
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	10000m2
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	
	Concept layouts 1 and 2:	50000m2

	Estimated development footprint of 2850m2 in south CBA (new road, buildings, parking) (estimated southern area not developed falling within CBA – 12457m2)	
	Recommended for SDP/s: Reduce development footprint in south; No new road; Estimated development footprint reduced to 1200m2 in south CBA (buildings, parking); Remove steeper area (900m2)(estimated southern area not developed – 150571m2 with 14 157,1m2 within CBA)	47 400m2
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).	

Affordable housing

The development is proposed to cater for the identified need for affordable rental units to the middle-income bracket. In order to provide high-quality affordable housing, the development density is increased to reach the required economy of scale to make the project financially viable.

A concept design based on 250 residential units was initially proposed for the site (Alternative concept layout 1). A screening tool report and verification of site sensitivities were carried out. Based on the outcome of the verification reports, the concept layout 1 was updated to alternative concept layout 2 which reduces the density on the site to 228 units. (Refer to Figure 1, Figure 2 and Appendix B)

An estimated 228 units are proposed to be developed on the site; the units are proposed to be two- and three-bedroom units in three-storey buildings; each unit will be approximately 100m2 to 130m2 in extent. Each unit is proposed to have a lock up garage. Internal roads, parking bays, and required services infrastructure (sewage, water, electricity) will be developed. 1.5 bays per unit in PTA1 areas are proposed.

The developed footprint measures approximately 5 ha in extent. The identified development area (excluding steep slopes and natural vegetation to the south of the site) measures approximately 5.4ha and 228 units will calculate to a net density of ±45.6 units per hectare (Town Planning Report, 2024 – Appendix K)

There is an old farmhouse and outbuilding on the site; the intention it to preserve the original farmhouse and to use it as a communal facility on the planned estate: a second dwelling in the southern portion of the site was approved in 2012, however never completed; it is the intention to use this as a second communal facility equipped with a lookout point / viewing deck for residents.

Access

The traffic Impact on the existing residential road network has been assessed. The primary access is currently proposed to be from Marine Drive directly from the existing circle which is situated approximately 450 meters east of the N2 National Road. Only emergency access points will be provided as Cutty Sark Avenue and Ariel Street.

Internal roads and parking

Internal roads will be private roads and will not be taken over by Council
Internal access roads will have a width of 5 m to 5.5 m.
Parking modules will be to the standard 1.5 m or 17.5 m configuration.
Permeable pavers will be incorporated into the parking modules.
Internal roads are proposed to have standard SABS figure MK10 semi mountable kerbs on the high side with CK1 semi mountable kerb and channel on the low side of the crossfall.

Bulk Services

A Bulk Services capacity analysis report has been undertaken by GLS Consulting Engineers:

- The site is close to existing municipal service connections
- The development is inside the sewer priority area.
- There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development

- There is sufficient reservoir and tower storage capacity available in the existing "Close to Town" reservoir and "Upper" tower to accommodate the proposed development.
- A Services Level Agreement will need to be concluded with Bitou as a prerequisite for the Development to proceed.

Stormwater management
The stormwater management has been updated and designed to manage 1: 100-year storm events. Stormwater runoff in developed conditions and will utilise design standards including the CoCT 2009 Management of Urban Stormwater Impacts Policy (SUDS) and will include the following:

- Runoff from roofs will be partially discharged to road and parking surfaces and partially to landscaped gardens
- Discharge to road surfaces will be routed to permeable paved areas
- Discharge to landscaped areas will be partially routed to road surfaces and partially to grass lined swales.

In the Northern Catchment an underground piped system will collect the runoff from the swales and permeable paved areas and convey it to the discharge position at the north-eastern corner of the site, where it will be connected to the existing Municipal stormwater system in Marine Drive.
In the Southern Catchment an underground piped system will collect the runoff from the permeable paved areas and convey it to the swales positioned along the western boundary. From the swales the discharge will be released on surface in a manner engineered to simulate the existing spread of surface flow across the full area of discharge. Therefore, the detained runoff will be distributed on surface without concentration.

Waste Management
Waste generation is estimated to be 2.4 kg of waste generated per unit per day (based on 0.74 kg / person / day with an average of 3 persons per unit); Waste generation of the 250 units is estimated at 4.2 tons per week. A waste storage area is proposed to be provided and the main access area to the site. The responsibility will be on the Body corporate to arrange transport of refuse from individual units to the storage areas. The refuse is proposed to be stored in bins for weekly collection by Bitou Local municipality.

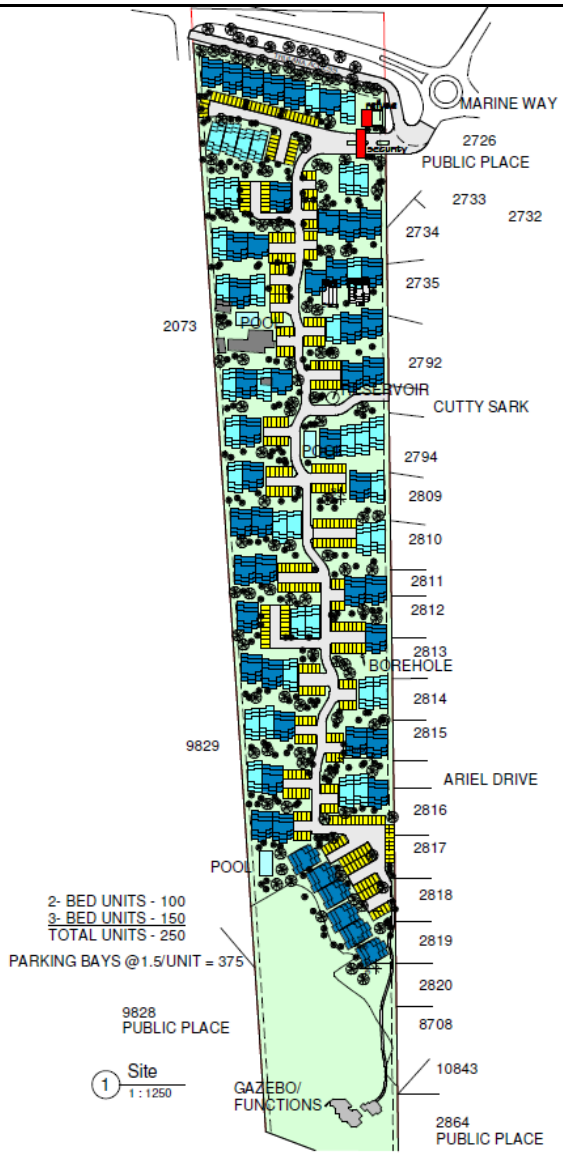

Figure 1: Alternative layout 1

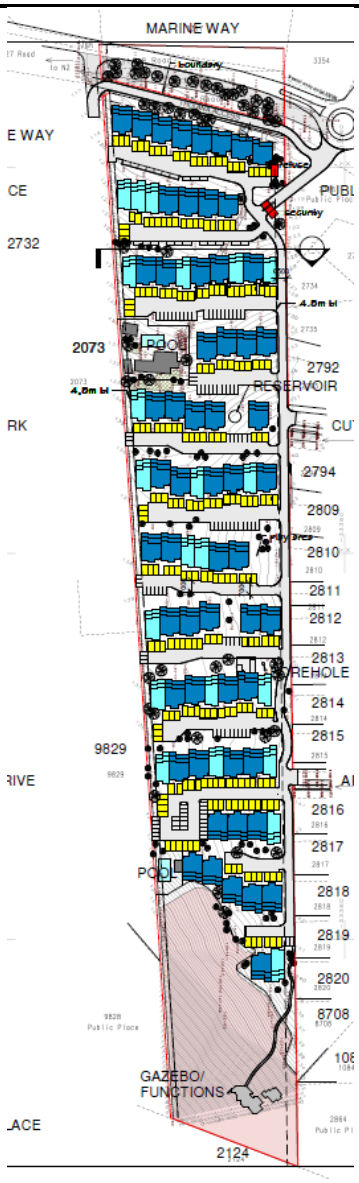

Figure 2: Alternative layout 2

4.5.	Indicate how access to the proposed site(s) will be obtained for all alternatives.																				
The traffic Impact on the existing residential road network has been assessed. The primary access will be from Marine Drive directly from the existing circle which is situated approximately 450 meters east of the N2 National Road. Only emergency access points will be provided as Cutty Sark Avenue and Ariel Street.																					
4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	**C**	**O**	**3**	**9**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**2**	**0**	**7**	**4**	**0**	**0**	**0**	**0**

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34°	3'	11.29"S
	Longitude (E)	23°	21'	37.63"E

SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS

1. Exemption applied for in terms of the NEMA and the NEMA EIA Regulations

Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy of the exemption notice in Appendix E18.	YES	NO

2. Is the following legislation applicable to the proposed activity or development.

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.		NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1. The rezoning of more than a hectare of land requires approval in terms of Section 38 of the Heritage Resources Act. A Notice of Intent to Develop (NID) has been submitted to Western Cape Heritage. A paleontology desktop study has been carried out. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure is included in the EMPr and should be followed in the unlikely event that a significant fossil discovery is made during construction.	YES	
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.		NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.		NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")		NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").		NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.		NO

3. Other legislation

List any other legislation that is applicable to the proposed activity or development.
Refer to Table 1

Table 1:Relevant legislation

Legislation	Administering Authority	Description
National		
Constitution Of The Republic Of South Africa (Act 108 Of 1996)	RSA	Section 24
Nature And Environmental Conservation Ordinance No 19 Of 1974	CAPE NATURE	Permit Application if EA is granted.
National Environmental Management Act (Act 107 Of 1998) and NEMA 2014 EIA Regulations (As Amended, 2017)	DEADP	Environmental Authorisation Required
National Environmental Management Amendment Act (Act 62 Of 2008)	DEADP CAPE NATURE DWS WC HERITAGE	Consultation With Relevant Authorities
National Veld and Forest Fire Act (Act 101 Of 1998)	DAFF	As required Firebreaks: property owners required to prepare and maintain firebreaks on the boundary of their property to prevent the spread of fires to neighbouring lands.

Legislation	Administering Authority	Description
		Fire Management Practices: Development of fire management practices to prevent and combat fires. Legal duty and responsibility to ensure that veld fires do not break out on their property, and to take preventative measures to minimize the risk of fires spreading. Due to the fire risk inherent for any fire driven ecosystem (fynbos), it is important that this application be reviewed by the Southern Cape Fire Protection Association (SCFPA) so they can provide comments on the development layout, and management recommendations from a fire risk reduction perspective. It is recommended that the landowner/ s of Erf 2074 become a member of the SCFPA
Subdivision Of Agricultural Land Act (Act 70 Of 1970)	DAFF	The property was originally earmarked in the Knysna wilderness Plettenberg bay guide plan for "township" purposes and does not have a farm number and does not form part of the agriculture register. This means that although the property is zoned for agricultural purposes, it is not subject to the provisions of the subdivision of Agricultural Land Act (Act 70 of 70).
National Health Act (Act 61 Of 2003)	DEPARTMENT OF HEALTH	As required
National Roads Act, Act 7 Of 1998	SANRAL	The proposed access to the development is approximately 420m from the intersection with the N2 but within an urban area. a formal approval from SANRAL may not be required, but the application will be forwarded to them for comment.
National Road Traffic Act (Act 93 Of 1996)	WC ROADS DPT, JURISDICTION	As required
Advertising on Roads and Ribbon Development Act (Act 21 Of 1940)	WESTERN CAPE ROAD AUTHORITY	The property borders a main road (Marine Drive), and it is our understanding that the road falls under the jurisdiction of the Provincial Roads Authority. There are conditions in the title deed that prevent the subdivision of the property without the consent of the controlling authority in terms of act 21 of 1940. An application to the Western Cape Road Authority Will Be Required
Land Use Planning Act (Act 3 Of 2014)	BITOU LOCAL MUNICIPALITY	Guided by the development principles
SPLUMA (Act 13 Of 2013)	BITOU LOCAL MUNICIPALITY	Guided by the development principles
Provincial Legislation - Western Cape		
Western Cape Constitution		

Legislation	Administering Authority	Description
Act 1 Of 1998		
Western Cape Nature Conservation Laws Amendment Act (Act 3 Of 2000)	CAPENATURE	
Western Cape Nature Conservation Board Act (Act 15 Of 1998)	CAPENATURE	
Western Cape Planning And Development Act (Act 7 Of 1999)	CAPENATURE	
Municipal Ordinance 20 Of 1974	LOCAL AUTHORITIES	
Municipal Planning Bylaw 2015	LOCAL AUTHORITIES	
Western Cape Land Administration Act (Act 6 Of 1998)	PROVINCIAL AND LOCAL AUTHORITIES	
Municipal		
Bitou Municipality: Standard Municipal Land-Use Planning By-Law (2016)	BITOU LOCAL MUNIPALITY	Rezoning in terms of Section 15 (2) (A): The property is currently zoned "Agricultural I". The property will have to be rezoned to "General Residential II". Subdivision in terms of Section 15 (2) (D) It is the intention to sell the units as sectional title. The development will however be phased and a subdivision plan indicating the different phases, private roads and communal open space will be submitted. Approval of site development plan: once the property has been successfully rezoned and subdivided, each phase of the development will be subject to the approval of a detailed site development plan that will have to comply with any conditions of approval and development parameters as set out in the bitou zoning scheme by-law.

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
Refer to **Table 2** below

5. Guidelines

List the guidelines which have been considered relevant to the proposed activity or development and explain how they have influenced the development proposal.
Refer to **Table 2**

Table 2: Policies and guidelines considered during assessment

POLICIES AND GUIDELINES	ADMINISTERING AUTHORITY
DEA (2014), Companion to the EIA Regulations 2014, Integrated Environmental Management Guideline Series 5, Department of Environmental Affairs, (DEA), Pretoria, South Africa	Department of Environmental Affairs, Republic of South Africa. All Provincial Departments that have been identified as Competent Authorities.

DEA&DP (2014) Guideline on Public Participation, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP)	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for Involving Heritage Specialists in EIA Processes June 2005	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for Environmental Management Plans June 2005	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Ecosystem Guidelines for Environmental Assessment in the Western Cape	Fynbos Forum
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Alternatives	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Appeals	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Exemption Applications	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Need and Desirability	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Public Participation	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
NEMA EIA Regulations Guideline and Information Document Series: Guideline on Transitional Arrangements	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for determining the Scope of Specialist Involvement in EIA Processes	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for involving Visual and Aesthetic Specialists in EIA Processes	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for involving Social Assessment Specialists in EIA Processes	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for involving Hydrogeologists in EIA Processes	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for involving Biodiversity Specialists in EIA Processes	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Guideline for Environmental Management Plans	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
Western Cape Provincial Spatial Development Framework 2014	Minister of Local Government, Environmental Affairs and Development Planning,
Bitou Spatial Development Framework 2021	Bitou Local municipality

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form
The Department of Forestry, Fisheries and Environment (DFFE) has launched an on-line screening tool that is applied at the initial stages of an assessment. A Screening Report has been generated for the site; the DFFE National Screening Tool indicates the following environmental sensitivities which has assisted in the identification of potential impacts: • Agriculture theme: Medium sensitivity • Animal species theme: High sensitivity • Aquatic biodiversity theme: Very high sensitivity • Archaeological and Cultural Heritage theme: Very High sensitivity • Civil aviation theme: High sensitivity • Defence theme: Low sensitivity • Palaeontology theme: High sensitivity • Plant species theme: Medium sensitivity. • Terrestrial biodiversity theme: Very High Sensitivity

Aquatic, terrestrial biodiversity, fauna and flora verification reports have been compiled by specialists. The verification reports were based on a concept design and density. The verification reports showed that the central and northern areas of the site have a low sensitivity, with the southern section being of high sensitivity.

The town planner and engineers considered the outcomes of the verification report; concept layout alternative 2 was developed; stormwater calculations were updated from the 1: 50 year flood line to the 1: 100 year flood line and shows the expected stormwater flows before and after construction; The stormwater management plan was updated ensure that predevelopment stormwater flows are maintained and excessive flows are catered for using swales and dispersion in the south and directed to the existing stormwater system in the north. The aquatic specialist has reviewed the updated stormwater information and has confirmed that no further aquatic assessment will be necessary.

A terrestrial biodiversity and flora and fauna assessment have been carried out. All the specialist assessment show that development is to be avoided in the southern section of the site.

A Heritage Impact Assessment was carried out by Dr Lita Webley, 2005. No further assessment is deemed necessary as the old building will not be demolished but incorporated into the planned development: A paleontology desktop study has been carried out. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure is included in the EMPr and should be followed in the unlikely event that a significant fossil discovery is made during construction.

The South African Civils Aviation Association has provided comment to state that an obstacle assessment is required to be carried out for the proposed development. The draft BAR has been SACAA for comment. Information requested for the obstacle assessment has been sent but no response received to date. The highest point of a building will not exceed 10,67 metres, the development site is situated between existing residential developments and is not expected to impact flight paths.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation.	RE/2074 is approximately 6.25 ha in extent. More than 1 ha indigenous vegetation will be required to be cleared for the proposed residential development.
67	Phased activities for all activities— (i) listed in this Notice, which commenced on or after the effective date of this Notice or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices, where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold	Development of the residential units will be developed in phases.
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. Western Cape ii. Within critical biodiversity areas identified in bioregional plans.	RE/2074 is approximately 6.25 ha in extent. More than 1 ha indigenous vegetation will be required to be cleared for the proposed residential development. Mapped vegetation on the property is South Outeniqua Sandstone Fynbos which has a conservation status of least concern in terms of the 2022 updated list of threatened ecosystems. The Western Cape Biodiversity Spatial Plan (WCBSP; 2017) excludes the majority of Erf 2074 from the conservation planning areas; the southern most section of the site is mapped as a terrestrial Critical Biodiversity Area 1 (CBA1); Ecological Support Areas 1 and 2 (ESA1 and ESA2) are mapped along the west-south-western boundary of Erf 2074.
26	Phased activities for all activities— i. listed in this Notice and as it applies to a specific geographical area, which	Development of the residential units will be developed in 3 or 4 phases to allow the development to respond to changing market demands. It is proposed that site

	commenced on or after the effective date of this Notice; or ii. similarly listed in [in] any of the previous NEMA notices, and as it applies to a specific geographical area, which commenced on or after the effective date of such previous NEMA Notices— where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold;	development plans be submitted to the local authority for each phase. The current development proposal has been designed for the maximum number of units that can be achieved taking into account access and parking requirements, existing structures, site characteristics, as well as infrastructure development parameters of the zoning Scheme. The development proposal will be assessed; recommendations will inform the final SDP/s developed for the site.

Note:

- The listed activities specified above must reconcile with activities applied for in the application form. The onus is on the Applicant to ensure that all applicable listed activities are included in the application. If a specific listed activity is not included in an Environmental Authorisation, a new application for Environmental Authorisation will have to be submitted.
- Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

List the applicable waste management listed activities in terms of the NEM:WA

Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Category A**	Describe the portion of the proposed development to which the applicable listed activity relates.

List the applicable listed activities in terms of the NEM:AQA

Activity No(s):	Provide the relevant **Listed Activity(ies)**	Describe the portion of the proposed development to which the applicable listed activity relates.

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1.	Provide a description of the preferred alternative.
An estimated 228 units are proposed to be developed on the site; the units are proposed to be two- and three-bedroom units in three-storey buildings; each unit will be approximately 100m2 to 130m2 in extent. Each unit is proposed to have a lock up garage. Internal roads, parking bays, and required services infrastructure (sewage, water, electricity) will be developed. 1.5 bays per unit in PTA1 areas are proposed.	
2.	Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.
The property was originally earmarked in the Knysna Wilderness Plettenberg Bay Guide plan for "Township" purposes and does not have a farm number and therefore does not form part of the agriculture register. This means that although the property is zoned for agricultural purposes, it is not subject to the provisions of the Subdivision of Agricultural Land Act (Act 70 of 70). A rezoning application was submitted in 2006 to rezone Erf 2074 from Agriculture to a subdivisional area; the application was not completed. The property is currently zoned "Agricultural I" in terms of the Bitou Zoning Scheme By-Law applicable to the area. To facilitate the development of the land the property will have to be rezoned to a "General Residential II". The landowner intends to rezone the property to the required "General Residential II". to facilitate the development proposal. The development proposal fits into the surrounding urban environment with similar land uses found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village).	
3.	Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.
To facilitate the development of the land the property will have to be rezoned to a "General Residential II"	
4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.
The proposed development aligns to the following plans and development planning frameworks: • National Development Plan (NDP 2030) – In terms of this plan, South Africa is mandated to be a developmental state. • Western Cape Provincial Spatial Development Framework 2014 - sustainable use of provincial assets is one of the main aims of the policy; The urban fringe must ensure that urban expansion is structured and directed away from environmentally sensitive land and farming land. • Bitou Spatial Development Framework 2022 - objective of this development framework is to achieve a balance between development and the environment to ensure that growth is spatially just, financially viable and environmentally sustainable. Erf 2074 is located in an identified Strategic Development Area and can contribute to spatial reform and integration as it will allow ±228 households to own a home in an established urban area that is near jobs, schools, and other urban amenities. The northern section of the site also forms part of the Restructuring Zones of the Bitou Local Municipality. • The proposed site is located within the urban edge between existing residential developments.	
4.2	The Integrated Development Plan of the local municipality.
The Garden Route SDF aims to promote balanced development that supports the integration and densification of settlements within the district. The report states that the "financial and economic viability of towns in the District should be improved by promoting the intensification of existing urban areas. This can be achieved through infill, densification, and redevelopment, which in turn makes the use of existing infrastructure capacity and services more efficient.	
4.3.	The Spatial Development Framework of the local municipality.
The proposed site is located within the urban edge between existing residential developments, and it is in an area identified as a "Strategic Development Area". The northern section of the site forms part of the Restructuring Zones of the Bitou Local Municipality.	
4.4.	The Environmental Management Framework applicable to the area.

Areas mapped in terms of WC BSCP have been considered. Coastal Protection Zones have been considered. Indigenous vegetation and watercourses have been considered. The EMF will overlap and include all mitigatory measures as highlighted in the Environmental Management Programme (EMPr) and any other pertinent conditions sated in the Environmental Authorisation.	
5.	Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.
The Western Cape Biodiversity Spatial Plan (WCBSP) was developed by Cape Nature, in collaboration with the Department of Environmental Affairs and Development Planning and is a spatial tool that comprises the Biodiversity Spatial Plan Map (BSP Map) of biodiversity priority areas and land-use guidelines. The southern section of the site falls within a critical biodiversity area (CBA) and some of the development (approximately 2500m2 buildings and parking; 250m2 road) is planned in this area. Aquatic, terrestrial biodiversity, fauna and flora compliance reports were prepared by the specialists. The initial studies were based on a concept layout 1 and density (250 units). The vreports showed that the central and northern areas of the site have a low sensitivity, with the southern section being of high sensitivity. The town planner and engineers considered the outcomes of the verification report; concept layout alternative 2 (228 units) was developed; stormwater calculations were updated from the 1: 50 year flood line to the 1: 100 year flood line and shows the expected stormwater flows before and after construction and have put in measures to ensure that predevelopment stormwater flows are maintained and excessive flows are catered for using swales and dispersion in the south and directed to the existing stormwater system in the north. The aquatic specialist has reviewed the alternative layout 2 and the updated stormwater information and has confirmed that no further aquatic assessment will be necessary with the proposed measures in place. Terrestrial biodiversity and flora and fauna imapct assessments were carried out; comment has been received from Cape Nature. Based on comments, studies and biodiversity planning information, development is recommended to be concentrated in the more central and northern areas of the site with minimal development in the southern areas where habitats and ecosystems are more sensitive. The South African Civils Aviation Association has provided comment and requested an obstacle assessment to be carried out. This is not deemed necessary based on proposed height of the development and the proposed site is situated within a dense urban area where multiple storey buildings are already in place. The draft BAR will be sent to the SACAA for further comment and to the local airport. The final SDP/s developed for the site must conform to the planning mitigation measures included in the draft EMPr (Appendix H – Draft EMPr)	
6.	Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.
Development is recommended to be concentrated in the more central and northern areas of the site with minimal development in the southern areas where habitats and ecosystems are more sensitive. The final site development plans must remain within the recommended go-areas and remain out of the no-go area (Appendix 2B) Additional stormwater management measures will be put in place in the more sensitive southern section of the site. The final SDP/s developed for the site must conform to the planning mitigation measures included in the draft EMPr (Appendix H – Draft EMPr)	
7.	Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.
The development does not fall within the Coastal Management Line. The very southern section of the area falls within the high erosion line in the Piesang River Estuary Management Plan; however, this is beyond the boundary of the erf; no development will take place here.	
8.	Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.
There have been no changes to the screening report. Refer to Appendix I.	
9.	Explain how the proposed development will optimise vacant land available within an urban area.
A medium to high residential units will be provided on approximately 5 hectares of the site; the site is situated between two existing housing developments.	

10.	Explain how the proposed development will optimise the use of existing resources and infrastructure.
The stone building on site is proposed to be incorporated into residential development. The development footprint of a house that was never completed is proposed to be incorporated into the proposed residential development as a gazebo area for residents. Stormwater management will be via existing municipal network in the north and stormwater management measures implemented on the south. Main access will be from an existing main road (Marine Way). Rainwater tanks and solar panels will be incorporated into the development to reduce operational water and energy demand from municipal services.	
11.	Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).
A bulk services report has been carried out for water and sewage treatment demand; the report confirms that Bitou Municipality has capacity. Confirmation from Bitou Local Municipality has not yet been received. An electrical report has been carried out by GLS for the proposed residential development.	
12.	In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.
Plettenberg Bay is a coastal resort town with a fairly small economy. The town has approximately 60 000 residents and continues to grow at a rate considerably above the national average. Demand for property and associated property prices are well above national averages. The property aims to provide residential accommodation for the middle-income earners. The planned residential development will create temporary construction jobs for local contractors and labourers. The employment opportunities associated with the construction phase are frequently regarded as temporary employment. The planned residential development will generate local income in terms of rates and taxes. A bulk services report has been carried out for water and sewage treatment demand; the report confirms that Bitou Municipality has capacity for the proposed residential development. Erf 2074 is located in an identified Strategic Development Area and can contribute to spatial reform and integration as it will allow ±228 households to own a home in an established urban area that is near jobs, schools, and other urban amenities. In addition, the northern section of the site forms part of the Restructuring Zones of the Bitou Local Municipality. The proposed site is located within the urban edge between existing residential developments. Refer to Needs and Desirability included in the Town Planning Report – Appendix K.	

SECTION F: PUBLIC PARTICIPATION

The Public Participation Process ("PPP") must fulfil the requirements as outlined in the NEMA EIA Regulations and must be attached as Appendix F. Please note that If the NEM: WA and/or the NEM: AQA is applicable to the proposed development, an advertisement must be placed in at least two newspapers.

1. Exclusively for linear activities: Indicate what PPP was agreed to by the competent authority. Include proof of this agreement in Appendix E22.

Not applicable to proposed development.

2. Confirm that the PPP as indicated in the application form has been complied with. All the PPP must be included in Appendix F.

A public participation process is being carried out in accordance with Section 24J of the NEMA; the following activities have been carried out: • Placing two posters close to the site to inform the public of the process.

- Submission of Notice of Intent and accompanying Screening Tool Report and Site verification report to the competent authority, Department of Environmental Affairs and Development Planning (DEADP) on 27 June 2024.
- Distribution of notice of proposed development and intent to submit application for the required NEMA Environmental Authorisation and background information document (BID) to identified landowners, surrounding landowners and organs of state on 4 July 2024 to encourage participation in the process. These parties have been automatically registered for the process.
- Placing an advertisement in the KNYSNA PLETT HERALD on THURSDAY 4 JULY 2024
- Allowing for a 30-day registration and comment on the advert, notice and BID
- Record of registration and comments received in response to the notices and BID

The draft basic assessment report (BAR) has been distributed to registered IAPs for a 30-day period in which to review the report and provided comments. Review and comment period: 1 November to 2 December 2024

All comments received as well as responses provided by the Environmental Assessment Practitioner and the proponent throughout the process are included in the Comments and Response Report.
The final BAR will be submitted to the competent authority for 107-day decision making period. The decision and details of the appeal process will be distributed to the full register of IAPs.
Refer to Appendix F.

3. Confirm which of the State Departments and Organs of State indicated in the Notice of Intent/application form were consulted with.

The following organs of state were notified of the proposed application for EA and have been sent the draft BAR for 30 day review and comment:

- Department of Environmental Affairs and Development Planning (DEA & DP)
- Department of Health
- Heritage Western Cape
- Transport & Public Works / Department of Infrastructure
- Department of Water & Sanitation
- DFFE: Forestry Management
- DFFE: Oceans and Coast
- Coastal Management Unit, DEA&DP
- Breede-Gouritz Catchment Management Agency
- Cape Nature Land Use Advice
- Southern Cape Fire Protection Agency
- SANPARKS
- South African Civil Aviation Authority
- Bitou Municipality
- Garden Route District Municipality

4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

5. if any of the State Departments and Organs of State did not respond, indicate which.

No comment has yet been received from the following organs of state:

- Department of Health
- Department of Water & Sanitation
- DFFE: Forestry Management
- SANPARKS
- Bitou Municipality

6. Provide a summary of the issues raised by I&APs and an indication of the manner in which the issues were incorporated into the development proposal.

The following concerns were raised by registered interested and affected parties, most which are adjacent landowners:

- Thulana Hill access road
- Traffic impacts
- Adjacent landowners in Cutty sark areas have concern over emergency access points; concern over access form Cutty Sark / Ariel Street
- Inadequate sewage, water, energy capacity, waste management
- Existing water pressure
- Fire risk
- Wildlife and bird life, protected trees
- Density is too high, reduce density to 30 units per hectare
- Height restriction to 8.5 meters
- Noise levels
- Security risks
- Privacy - – 5-meter buffer between road and eastern boundary
- Prefer layout 1
- Property values decrease
- Zoning details queried
- Internal roads of 5.5 meters is too narrow
- Ratepayers' association – design does not fit into nature of Plettenberg Bay area; too few green spaces / playground areas too close to main access road; buffer of 10 meters along eastern boundary
- Registered IAP – interested in buying property in Cutty Sark area; does not want purchase if access to the development will be via the quiet cutty sark area;
- Input on timeframes requested
- Current resident on Erf 2074 – keep informed, requires input on timeframes for relocation

Comments from organs of state:

- SACAA - Obstacle assessment required
- Southern Cape Fire Protection Agency – member of SCFPA
- Cape Nature – permits required for protected tress and DFFE to provide comments on application, last remaining natural fynbos habitat which provides refuge for animals, housing infrastructure not compatible in conserving fynbos, does not support any development to the south in the CBA which has pristine fynbos, reduce development footprint to relieve pressure on natural habitat and ecological processes, pristine and important habitat to be buffered; no development on steep slopes with a gradient that is greater than 1:4; suitable habitat for Aloeides pallida littoralis (Near Threatened) and Aloeides thyra orientis (Endangered); we recommend entomologist be consulted
- Coastal management: DEADP - property within a 'Strategic Development Area' in terms of the Bitou SDF (2022), with potential for medium-density residential development. The southern portion is located within the coastal protection zone ("CPZ") - notes that no development is proposed for this

specific portion of the property. The proposed development will not comprise the ecological functioning of the estuary. A 48m buffer for the adjacent drainage line noted; aligns with Priority Area 1: Social & Economic Development, of the WC Provincial Coastal Management Programme (2022-2027). Does not object to the proposed development on Erf RE/2074, provided that all relevant mitigations measures as stipulated in the Environmental Management Programme are strictly adhered to

- Heritage WC - The SAHRIS paleao-sensitivity map indicates that the property is of high palaeontological sensitivity. Consult a palaeontologist for comment on the sensitivity to determine whether a Palaeontological Impact Assessment is required before the development can be approved by Heritage Western Cape.
- Department Infrastructure - Proclaimed Main Road 383 (MR00383; Marine Way), for which Bitou Municipality is the Road Authority and this Branch the Approving Authority in terms of Roads Ordinance 19 of 1976, is affected by this proposed development. From an environmental point of view this Branch offers no objection to this development. The compilation of a traffic impact assessment (in accordance with this Branch's Access Management Guidelines, 2020) by a reputable traffic engineer and the Road Authority's subsequent traffic related comments and recommendation to approve will be required by this Branch.

All comments received, and responses provided have been recorded in the comments and response report. Refer to Appendix E and Appendix F.
Concerns have been addressed in the final BAR and accompanying appendices.

Summary of responses provided:

- **Thulana Hill access road, Traffic impacts, emergency access, Internal roads of 5.5 meters is too narrow**
  - TIA – access is only permitted at the existing intersection at Challenge Drive
  - TIA - Access to the proposed development as well as erf 2073 is proposed at the existing Marine Way / Challenge Drive intersection. The access road to serve erf 2073 is accommodated at the northern end of erf 2074 such that the planned development on Erf 2074 is contained from a security perspective.
  - TIA - The emergency access points at cutty sark area will only be permitted to be used in emergency situations (i.e. fire event which compromises the main entry / exit on Marine Way / Challenge Drive)
  - TIA - when considering the traffic generated by the proposed development added to escalated background traffic, the affected intersections and access points **all operate at acceptable Levels of Service in terms of capacity for the 2025 development horizon for normal season traffic conditions with the Ultra City intersection configured as a roundabout**
  - The 5.5-meter width of the internal roads is stated in the civil structural engineering report prepared by Poise consulting
- **Inadequate sewage, water, energy capacity, waste management, Existing water pressure**
  - A Bulk Services capacity analysis report and electrical report has been undertaken by GLS Consulting Engineers.
  - There is sufficient reservoir and tower storage capacity available in the existing "Close to Town" reservoir and "Upper" tower to accommodate the proposed development.

- Sewage from the proposed development will drain towards the existing Plettenberg Bay PS 1a. There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development.
- An estimated maximum demand of 500kVA for the proposed housing development was calculated by De Villiers and Moore Consulting Engineers on the behalf of the developers. The network around the erven is currently mainly supplied by SS-1 Main (Ferdinand), which is the substation supplying electricity to Plettenberg Bay town area. SS-1 Main currently has enough capacity to carry the additional 500kVA maximum demand brought by the proposed development on Erf 2074. The MV feeders supplying the surrounding area have sufficient capacity to carry the additional demand at the proposed development.
- The following measures are recommended: Solar panels on roofs; energy efficient lighting; energy saving designs and materials; avoid leaking taps and pipes / unnecessary water waste; rainwater collection; indigenous landscaping; investigations to reduce, reuse and recycle waste generated during the construction and operational phases

- **Fire risk**
  - The following mitigation measures are included: Due to the fire risk inherent for any fire driven ecosystem (fynbos), it is important that this application be reviewed by the Southern Cape Fire Protection Association (SCFPA) so they can provide comments on the development layout, and management recommendations from a fire risk reduction perspective; It is recommended that the landowner/ s of Erf 2074 become a member of the SCFPA.
- **Wildlife and bird life, protected trees**
  - A terrestrial biodiversity and flora assessment has been carried out. A fauna assessment has been carried out. It was found that The overall Site Ecological Importance is low and very low in the central and northern portions, medium in the southern portion and high at the most southern section. Project area of influence (PAOI) calculations for the property show that at least three quarters (75%) of the Erf will be transformed, and approximately 1 hectare will remain as a natural space and will connect to the High SEI area in the south and the Piesang Valley. None of the alternative options will have any effect on the High SEI area.
  - The following mitigations, inter alia, are recommended: Finals SDPs are recommended to be concentrate development outside CBA (WCBSP), and reduce footprint in the south (from 2850m2 to 1200m2), with no further roads in south permitted and no development on gradients steeper than 1:4; only existing road, gazebo developed on existing development footprint and 1200m2 area identified in NE section of CBA due to flatter area is recommended in the southern area. No vehicles permitted in southern area; only foot traffic; Conserve identified SCC and protected trees by marking them off during construction and incorporating the vegetation into landscaping on the site; Search and rescue of flora SCC (succulents and geophytes) must take place on site prior to start of construction. This vegetation must be transplanted (where possible) or seeded in suitable ecosystems; Site walkovers to be conducted by fauna search and rescue team prior to commencement of construction; ; During laying season for Knysna Woodpecker (August to November) a dedicated search for the SCC must be conducted by a Faunal Specialist in the agricultural fields and non-natural gardens habitat to check if the species is present; Permits required for fauna search and rescue (i.e., tortoises) must be obtained before any construction commences; mo construction may commence until the Faunal Specialist is satisfied that all fauna with limited mobility and/or SCC have been successfully removed from the demarcated footprint area.

- **Prefer layout 1; Density is too high, reduce density to 30 units per hectare, Height restriction to 8.5 meters, Privacy - – 5-meter buffer between road and eastern boundary; Property values decrease, Zoning details queried, design does not fit into nature of Plettenberg Bay area; too few green spaces / playground areas too close to main access road; buffer of 10 meters along eastern boundary**
    - The Bitou Spatial Development Framework has identified the property for development and specifically earmarked the site as a priority development area for medium-density residential development (3-4 storeys).
    - The maximum height is proposed to be 10.67-meter height (3 storeys).
    - Layout 1 was considered too dense; a maximum of 228 units is recommended.
    - The following mitigations measures, inter alia, have been included: Final plans must ensure the long-term privacy of neighbours bordering erf 2074 (i.e. Thulana Hills, Cutty Sark residents) (i.e. direction of units, window positions etc.); The final SDPs could include a central road as opposed to road alongside the cutty area if this will improve privacy and reduce noise levels.
    - The developer wants to rezone the property to "General Residential II" which permits flats, group housing and townhouses as primary rights.
    - Erf is approximately 6.25 ha. Development footprint is an estimated 4.7 ha; the no-go development area (intact fynbos, valley thicket within CBA) is an estimated 1.5 ha
    - The final BAR (inclusive of all comments and responses) will be submitted to the DEADP for environmental authorisation. The final SDPs will be based on any recommendations and / or conditions of the EA (if authorised); the final SDP/s will need to be submitted to the local authority for consideration.
- **Noise levels, security risks**
    - The following measures are recommended: Access during construction phase is only permitted from Marine drive, not from the cutty sark area; No loud music to be allowed on site; working hours restricted to day time hours (i.e. 8 am to 5pm), no construction work to take place after hours / Sundays / public holidays; indigenous landscaping; strict access control to and from the site, security guard on site for the duration of the construction phase and guard the site 24 / 7; movement of all personnel and workers must be limited to areas under construction. Access to surrounding areas is not permitted; Workers are not to be housed on site but to return to their homes after hours.
- **Input on timeframes requested**
    - EA process is estimated 7-month process from submission of application; final site development plans will need to be approved; all preconstruction requirements will be required to be met prior to start of construction.
    - Construction to commence between August 2025 and all phases complete by May 2032
- **SACAA.**
    - The DBAR will be sent to SACAA for review and comment; quote has been requested for obstacle assessment, but no response has been received.
- **Heritage WC**
    - Palaeontology desktop assessment has been carried out; The Chance Palaeontological Finds Procedure should be followed in the unlikely event that a significant fossil discovery is made during construction. Mitigation measures provided in draft EMPr
- **Department infrastructure - roads**
    - Received Engineering Advice and Services' traffic impact assessment Version 1 dated August 2024. From an environmental point of view this Branch remains to offer no objection to this

development. The Road Authority's traffic related comments and recommendation to approve this development remains a requirement during the land use application stage.

Refer to the following appendices of the BAR:
Appendix G2 – Fauna Assessment, Confluent
Appendix G3 – Flora and terrestrial biodiversity, confluent
Appendix G5 – Traffic Impact Assessment, EAS
Appendix G6 – GLS Services report, GLS
Appendix G7 – Engineering SWMP, Poise consulting
Appendix G8 – Electrical Report, GLS
Appendix K – Town Planning Report, Planning Space Twon and Regional Planners

Note:

A register of all the I&AP's notified, including the Organs of State, and all the registered I&APs must be included in Appendix F. The register must be maintained and made available to any person requesting access to the register in writing.

The EAP must notify I&AP's that all information submitted by I&AP's becomes public information.

Your attention is drawn to Regulation 40 (3) of the NEMA EIA Regulations which states that *"Potential or registered interested and affected parties, including the competent authority, may be provided with an opportunity to comment on reports and plans contemplated in subregulation (1) prior to submission of an application but **must** be provided with an opportunity to comment on such reports once an application has been submitted to the competent authority."*

All the comments received from I&APs on the pre -application BAR (if applicable and the draft BAR must be recorded, responded to and included in the Comments and Responses Report and must be included in Appendix F.

All information obtained during the PPP (the minutes of any meetings held by the EAP with I&APs and other role players wherein the views of the participants are recorded) and must be included in Appendix F.

Please note that proof of the PPP conducted must be included in Appendix F. In terms of the required "proof" the following is required:

- a site map showing where the site notice was displayed, dated photographs showing the notice displayed on site and a copy of the text displayed on the notice;
- in terms of the written notices given, a copy of the written notice sent, as well as:
  - if registered mail was sent, a list of the registered mail sent (showing the registered mail number, the name of the person the mail was sent to, the address of the person and the date the registered mail was sent);
  - if normal mail was sent, a list of the mail sent (showing the name of the person the mail was sent to, the address of the person, the date the mail was sent, and the signature of the post office worker or the post office stamp indicating that the letter was sent);
  - if a facsimile was sent, a copy of the facsimile Report;
  - if an electronic mail was sent, a copy of the electronic mail sent; and
  - if a "mail drop" was done, a signed register of "mail drops" received (showing the name of the person the notice was handed to, the address of the person, the date, and the signature of the person); and
- a copy of the newspaper advertisement ("newspaper clipping") that was placed, indicating the name of the newspaper and date of publication (of such quality that the wording in the advertisement is legible).

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	**NO**
1.2.	Provide the name and or company who conducted the specialist study.		
1.3.	Indicate above which aquifer your proposed development will be located and explain how this has influenced your proposed development.		
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and type of aquifer (if present) has influenced your proposed development.		

2. Surface water

2.1.	**Was a specialist study conducted?**	**YES**	NO
2.2.	**Provide the name and/or company who conducted the specialist study.**		
Dr. J. Dabrowski (PhD) & Franco de Ridder Confluent Environmental Pty (Ltd)			
2.3.	**Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.**		

There are no mapped water courses within the boundaries of RE/2074. A non-perennial drainage line flowing south occurs on the neighbouring property to the west which connects with the Piesang River. Mapped watercourses also include the Piesang River itself which is in the valley bottom below the cliffs approximately 250 m south of the site. The river flows in an easterly direction for approximately 1.8 km until it exits to the sea at the river mouth. The property is located on a watershed with approximately half of the property draining to the north and the other half draining to the south. The northern drainage would indirectly drain to the Keurbooms River via stormwater in urban areas, while the southern drainage would drain more directly to the Piesang River.

The watercourse and associated vegetated riparian zone in the valley bottom to the west of Erf 2074 was ground truthed by the specialist; vegetation provides an ideal buffer to this stream as well as excellent habitat for wildlife which would utilise it as a refuge from busier areas of the site. No watercourses of any sort were observed anywhere else on RE/2074.

The recommended buffer for the adjacent drainage line is 48 meters. The specialist concluded that the lack of any mapped watercourses on the property itself, along with fairly straightforward avoidance measures to limit impacts to watercourses nearby render the site sensitivity for Aquatic Biodiversity as Low.

To maintain a Low Sensitivity for Aquatic Biodiversity several recommendations are made to guide development of the SDP as follows:

- Concentrate higher density development on the northern section of the property s watershed where stormwater runoff can be diverted towards existing stormwater drains with low risk of erosion or major impacts to any watercourse. Avoid development on the southern section of the watershed as management of stormwater will be challenging in this area.
- Any construction of stormwater outlets, pipes or associated infrastructure directing stormwater into the drainage line on the neighbouring property will alter the sensitivity of this report to a Very High sensitivity meaning that an impact assessment will be required, as well as a Water Use Authorisation in terms of the National Water Act.
- Implement SUDS-type stormwater management systems to encourage water infiltration, improve quality of runoff, and minimise runoff velocities throughout the proposed development. This may require space set aside for features such as vegetated swales and check / attenuation dams.
- Volumes required to mitigate development runoff dictate the sizing for these features and must be calculated by the appointed civil engineer. These features are best incorporated up-front in development plans. Other design features include the use of grass / open pavers for parking areas or roads, and vegetated strips instead of concrete wherever possible.
- Each house unit should be equipped with a rainwater collection tank which should ideally be plumbed into some sort of permanent household use such as toilet flushing in the design phase.
- Protecting, rescuing and replanting as many indigenous plants on the site as possible will ensure less water requirements and ensure sustained vegetation cover to protect soil from erosion.
- It would be unwise to discharge any stormwater directly off the edge of the cliff due to high velocity flow creating erosion where it lands. It is assumed this would not be planned but this point is mentioned here to ensure clarity of high-risk actions.

Stormwater calculations were updated to shows 1:100-year stormwater calculations for pre- and post-development conditions. Stormwater management will be implemented to ensure the Piesang River receives the same amount of run off postconstruction; a combination of swales, dispersion and permeable pavers will be put in place to manage excess stormwater flows to the south. These measures will also prevent erosion. The northern drainage is planned to drain towards the Keurbooms via the urban stormwater system.

The updated engineering report and stormwater plan has been reviewed by the specialist and confirms that no further assessment will be necessary.

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO
3.2.	Provide the name and/or company who conducted the specialist study.		
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.		

4. Biodiversity

4.1.	Were specialist studies conducted?	YES	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Terrestrial Biodiversity & Terrestrial Plant Species Report Miss Bianke Fouche (MSc) (Cand. Sci. Nat. (Botanical Science) – 141757) Reviewer: Dr. Jackie Dabrowski (Pr.Sci.Nat 115166) Confluent Environmental Pty (Ltd) Terrestrial Animal Species Specialist Assessment: Site Sensitivity Verification Report Author: Monica Leitner (MSc) (SACNASP: Professional Natural Scientist (Ecological Sciences), 166055) Confluent Environmental Pty (Ltd)			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

Historically the entire site was likely an open-canopy vegetation type which is consistent with the South Outeniqua Sandstone Fynbos (Least threatened) mapped on the site. The northern section of the site has been confirmed to have a Low botanical theme sensitivity; permits will however be required to trim, remove, or alter the protected trees if necessary. The southern section of the site (i.e. fynbos and valley fynbos-thicket) has been confirmed to have a high plant species sensitivity.

Following specialist assessments, the sensitivity of the terrestrial biodiversity of the site is low for the central and northern sections of Erf 2074 (i.e., sections not classified as "fynbos" or "valley fynbos-thicket"), and Very High for the southern half (the sections classified as "fynbos" or "valley fynbos-thicket").

The original triggers for the terrestrial biodiversity theme sensitivity provided in the Screening tool report evaluated for the northern and southern halves of Erf 2074 respectively is provided below. Grey entries represent reasons that do not apply to the site, and green entries do apply to the site.

Sensitivity layer	**Northern Half of Erf 2074**	**Southern half of Erf 2074**
Critical Biodiversity Areas (CBAs)	None mapped	The southernmost section on fynbos and steep valley are part of a terrestrial CBA.
Ecological Support Areas (ESAs)	A thin section of ESA 1 & 2 is mapped along the western boundary of the site, but this is on a transformed lawn that borders an established, permanent, residential development.	.
SAN Parks Buffer Areas	The buffer is 10km wide, and the site is almost 10km away from the Garden Route National Park. The northern half of the site is highly modified and has limited connectivity to the surrounding landscape & habitats.	The buffer is 10km wide, and the site is almost 10km away from the Garden Route National Park. However, the southern half of the site is connected to the larger natural valley below, which is a functional ecological corridor.
Freshwater Ecosystem Catchments (terrestrial)	The only water resource here is the artificial reservoir. Erf 2074 does not have areas that directly add to FEPA.	The Piesang River is south of Erf 2074 in the valley. Erf 2074 does not have areas that directly add to FEPA.

The overall Site Ecological Importance is low and very low in the central and northern portions, medium in the southern portion and high at the most southern section.

The steeper (steeper than 1:4) southern section falling within CBA / and representative of intact fynbos is not recommended to be developed. The northern and central sections of the site are recommended for a medium - high density residential development.
The existing road in the south recommended to be used as a footpath only for residents; no other footpaths / roads permitted to be created in southern section.
The existing development footprint of unfinished building recommend to be converted to a lookout point for residents.

4.4.	Explain how the objectives and management guidelines of the Biodiversity Spatial Plan have been used and how has this influenced your proposed development.

The southern portion of the site is mapped as a CBA1 area within the WCBSP, indicating a management objective of maintaining a natural or near-natural state, with no further loss of habitat, and only low-impact, biodiversity-sensitive land uses considered appropriate.

Recommendations

- Reduce development footprint (proposed 2500m2 and new 300m2 road) (from 2850m2 to 1200m2) in southern CBA (WCBSP).
- Identified area (1200m2) within NE section of CBA (WCBSP) is not as steep as adjacent area (not within CBA) included in layouts 1 and 2. It is preferred that this flatter area is developed, and the steeper area (900m2) (which connects with remaining CBA) is included in the No-go area.
- Final SDP to reduce project area by retaining the road in the south as a footpath;
- No further tracks / roads / paths to be developed in the southern area.
- The gazebo development footprint must be planned to use the existing disturbed footprint.
- No vehicles are permitted in the southern area; only foot traffic
- Alien management and eradication plan to be put in place.
- Fire prevention and response plan to be put in place

4.5.	Explain what impact the proposed development will have on the site specific features and/or function of the Biodiversity Spatial Plan category and how has this influenced the proposed development.

Concept layout alternative 1 was 250 units; reduced after verification reports to Concept layout alternative 2 with 228 units.

4.6.	If your proposed development is located in a protected area, explain how the proposed development is in line with the protected area management plan.

The development is not located within a protected area.

4.7.	Explain how the presence of fauna on and adjacent to the proposed development has influenced your proposed development.

The Department of Forestry, Fisheries and the Environment (DFFE) Screening Tool shows a HIGH and MEDIUM sensitivity for the terrestrial animal species theme across Erf 2074

Habitat types identified on the property includes a small, old agricultural field (olive grove); dense vegetation (trees/shrubs) in the north around the houses; modified fynbos with some Pine and Black Wattle (Acacia mearnsii) invasions in the middle of the property; heavily invaded areas of Blackwood (A. melanoxylon) in the middle of the property; and natural fynbos in the south.

A MEDIUM sensitivity rating is applied to the property for the Terrestrial Animal Species Theme.

The land use suggested by alternative layouts 1 and 2 options is high impact and unsuitable for the HIGH SEI area of the property.

To limit the amount of habitat impacted, the final SDP developed is recommended to be place the development outside the CBA area with exception of 1200m2 development which is recommended in the NE section of the mapped CBA due to the gentler gradients; however, the adjacent western area (approximately 900m2) (not CBA) which consists of intact fynbos is recommended not to be developed due to steeper gradients.

To ensure associated activities are limited and of low impact, it is recommended that only the existing road is permitted in the southern section and used as a footpath, and the existing development footprint be used for the look out / gazebo area. This section of the property is likely to be utilised by many animal species in the surrounding areas and it is strongly recommended that the southern boundaries of the property not be fenced in order to maximize connectivity within the surrounding landscape and allow animals to continue using this natural space.

5. Geographical Aspects

Explain whether any geographical aspects will be affected and how has this influenced the proposed activity or development.

The final SDP developed is recommended to place the development outside the CBA area with exception of 1200m2 development which is recommended in the NE section of the mapped CBA due to the gentler gradients; the adjacent western area (approximately 900m2) (not mapped as CBA) consists of intact fynbos is recommended not to be developed due to steeper gradients. Fynbos areas will require strict fire prevention and response measures.

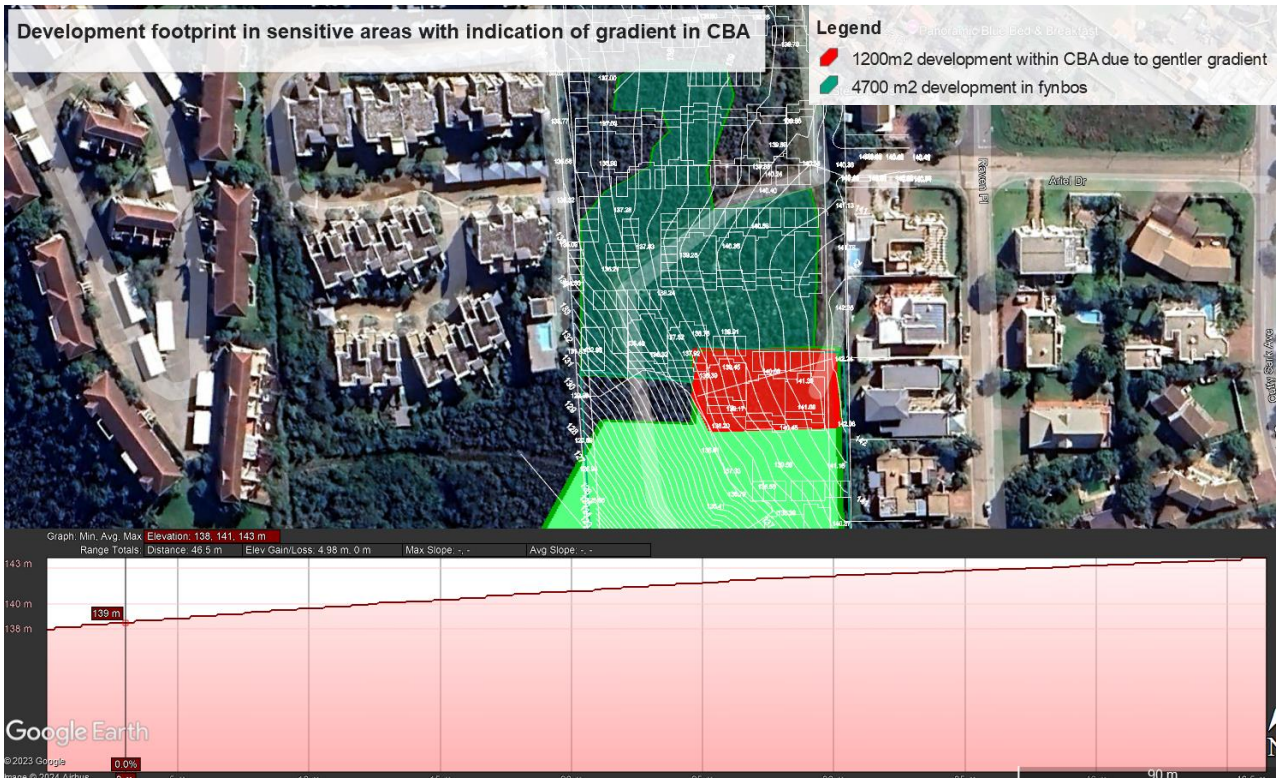

Figure 3: Development (100m2) preferred on gentler gradient falling within NE section of mapped CBA

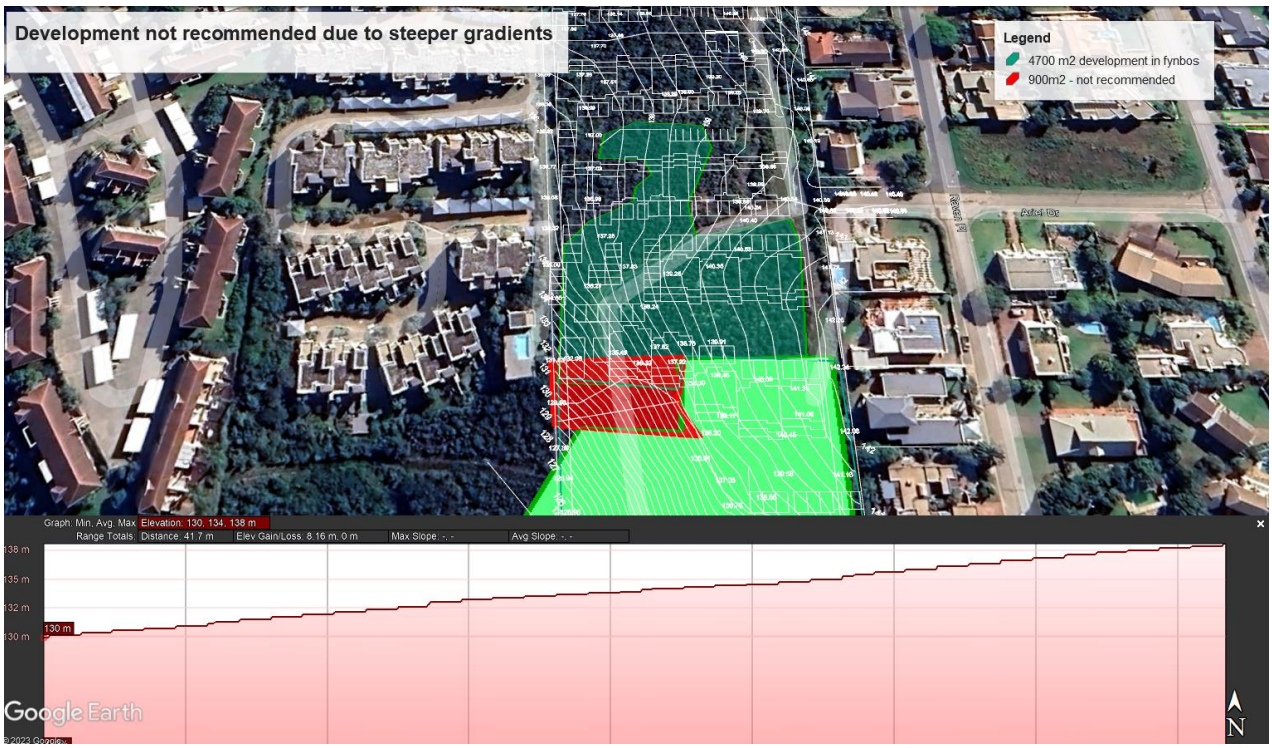

Figure 4: Development (900m2) not preferred on steeper gradient west of the NE section of mapped CBA

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO
6.2.	Provide the name and/or company who conducted the specialist study.		
A Heritage Impact Assessment was carried out by Dr Lita Webley, 2005. A paleontology desktop study has been carried out by Dr JF Durand (2024)			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
	The old building will not be demolished but incorporated into the planned development. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure should be followed in the unlikely event that a significant fossil discovery is made during construction (included in EMPr).		

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.
The old building will not be demolished but incorporated into the planned development.

8. Socio/Economic Aspects

8.1.	Describe the existing social and economic characteristics of the community in the vicinity of the proposed site.

Plettenberg Bay is known traditionally as a holiday town and summer playground of wealthy tourists; however, the town has started to mature in recent years into a more diverse and multi-faceted town. The town has seen a sharp rise in demand for permanent homes in recent years (Urban-Econ, 2019). According to the Bitou LM IDP 2024 – 2025, in 2022 the population totalled 65 240 individuals in 2022 and is expected to reach 80 628 by 2027. The largest population growth projection was recorded in the working age population (15 -64 years) which grew at an annual average rate of 3.0 per cent (2011 – 2022); Some houses have back yard dwellings; these backyards are there are a result of growing families and growing population. There has been talks of GAP housing between Shell Garage and Santini Village; The tender for Shell Ultra housing development planned on Erf 4367 has been advertised for middle-income units. According to a residential Market Assessment done in 2019 by Urban-Econ, the average income for households in Biotu is R11056 per household. This report highlighted the extreme lack of middle-income housing options in Plettenberg Bay. The town is split between suburbs offering properties above R 2 million and properties below R 200 000 with very few properties occupying the middle ground. This has resulted in high rates of rental in the middle-income brackets. In the coming years, it is critical that the housing shortage in this market is addressed to ensure the efficient functioning of the Plettenberg Bay economy. Without increased options it is unlikely that the town will be able to maintain its current trajectory. The Constitution stipulates that every citizen has the right to access to adequate housing and that the state must take reasonable legislative and other measures within its available resources to achieve the progressive realisation of this right. Access to housing also includes access to services such as potable water, basic sanitation, safe energy sources and refuse removal services, to ensure that households enjoy a decent standard of living.

Erf 2074 has been in the ownership of the current owners since 1981. The property is zoned for "Agricultural I" in terms of the Bitou Zoning Scheme By-Law. The land is not currently actively farmed; however, remnants of agricultural activities (protea orchard, olive grove) are evident. An old farmhouse and outbuildings on the northern section of the property currently provide low density residential housing accommodation. The majority of the site is open and accessible by vagrants; Alien invasive vegetation on the central / northern sections of the property, and fynbos vegetation in the south, puts the land at fire risk.

The Bitou Spatial Development Framework has identified the property for development and specifically earmarked the site as a priority development area for medium-density residential development (3-4 storeys). The northern section of the site also forms part of the Restructuring Zones of the Bitou Local Municipality. The southern section of the site connects the Piesang River and is identified to have high conservational value; the central and northern sections of the site have been transformed and the area is adjacent to low density and medium- high density residential development; To the north (Santini village), the density is approximately 44 units / hectare; the residential area to the west (Thulana) has a density of approximately 33 units per ha; the residential area directly east (cutty sark) has a density of approximately 12 units per hectare.
The development proposal fits into the surrounding urban environment with similar land uses and densities found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village).

8.2.	Explain the socio-economic value/contribution of the proposed development.

The provision of residential units in line with the long-term development vision of the town and contributes to the need of housing stock, job creation and economic growth. According to the Planning Report the density is motivated to be in line with the average density currently permitted in the area with the northern section of the erf included

8.3.	Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

The development is proposed to cater for the identified need for affordable rental units to the middle-income bracket. In order to provide high-quality affordable housing, the development density is increased to reach the required economy of scale to make the project financially viable. The density proposed is 46.5 units per hectare.
The primary access is currently proposed to be from Marine Drive directly from the existing circle which is situated approximately 450 meters east of the N2 National Road. Only emergency access points will be provided at the quieter Cutty Sark Avenue and Ariel Street.
The access road to serve erf 2073 (Thulana Hills) is accommodated at the northern end of erf 2074 such that the planned development on Erf 2074 is contained from a security perspective.
Higher density buildings are recommended to be placed in northern, central and western areas (BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned for the east (quieter adjacent residential area) and environmentally sensitive southern sections (i.e. gradation of building heights from west (tallest) to east (lowest)).
The development proposal fits into the surrounding urban environment with similar land uses and densities found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village).

8.4.	Explain whether the proposed development will impact on people's health and well-being (e.g. in terms of noise, odours, visual character and sense of place etc) and how has this influenced the proposed development.

The development proposal fits into the surrounding urban environment with similar land uses and densities found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village). The proposed development is situated in an area that has been identified as a "strategic Development Area" with the potential for medium density (3 to 4 storey) residential development. This development will be residential, and it will be designed to be aesthetically appealing and fit into surrounding land uses (low and high residential developments). This visual impact may therefore become negligible in the short – medium term as local residents become accustomed to the new development in the area.
The construction site and related activities will be visible to surrounding residential areas (north, east, west) and receptors on Marine Way. Construction activities are not likely to be visible to receptors in the south.
The ambient level of noise in the area is low. Sources of noise during construction phase include construction personnel, vehicles and machinery used for clearing of vegetation, levelling, excavation, concrete etc. The noise generated is likely to be experienced by those in the immediate vicinity of the construction activity (residential areas to the east and west). No loud music to be allowed on site. Working hours and deliveries / collections to be restricted to day time hours (i.e. 8 am to 5pm) and no construction work to take place after hours or on Sundays or on public holidays.
The proposed development will be developed in phases. Construction timeframes have not been confirmed but based on experience it is estimated to be between 24 - 36 months per phase. Construction should take place during daylight hours to prevent the use of artificial lighting. Good housekeeping measures will be required. Access during construction phase is only permitted from Marine drive, not from the cutty sark area.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1.	Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.
Provide a description of the **preferred property and site alternative**.	
Erf RE 2074 is the only site alternative assessed for the development of residential units.	
Provide a description of any other property and site alternatives investigated.	
Erf RE 2074 is the only site alternative assessed for the development of residential units.	
Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.	
Erf RE 2074 is the only site alternative assessed for the development of residential units.	
Provide a full description of the process followed to reach the preferred alternative within the site.	
Concept layout alternative 1 was 250 units; Following the verification studies, concept layout alternative 2 was developed with a density of 228 units.	

Alterative layout 1 is deemed to be too dense and is not considered further. Alternative layout 2 is assessed; changes to this layout are recommended based on comments and specialists to inform final SDP/s.

Provide a detailed motivation if no property and site alternatives were considered.

Erf Re 2074 is owned by the applicant; The property was originally earmarked in the Knysna Wilderness Plettenberg Bay Guide plan for "Township" purposes and does not have a farm number and therefore does not form part of the agriculture register. This means that although the property is zoned for agricultural purposes, it is not subject to the provisions of the Subdivision of Agricultural Land Act (Act 70 of 70).
A rezoning application was submitted in 2006 to rezone Erf 2074 from Agriculture to a subdivisional area; the application was not completed.
The property is currently zoned "Agricultural I" in terms of the Bitou Zoning Scheme By-Law applicable to the area. To facilitate the development of the land the property will have to be rezoned to a "General Residential II". The landowner intends to rezone the property to the required "General Residential II". to facilitate the development proposal. The development proposal fits into the surrounding urban environment with similar land uses and densities found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village).
A concept design based on 250 residential units was initially proposed for the site (Alternative concept layout 1). A screening tool report and verification of site sensitivities were carried out. Based on the outcome of the verification reports, the concept layout 1 was updated to alternative concept layout 2 which reduces the density on the site to 228 units. The current development proposal (228 units) has been designed for the maximum number of units that can be achieved taking into account access and parking requirements, existing structures, site characteristics, as well as infrastructure development parameters of the zoning Scheme.
The development is proposed to be developed in 3 or 4 phases to allow the development to respond to changing market demands. It is proposed that site development plans be submitted to the local authority for each phase. Any recommendations to the proposed layout (concept layout 2) based on outcomes of the assessment will inform the final SDP/s (layout 3).

List the positive and negative impacts that the property and site alternatives will have on the environment.

Refer to Appendix J

1.2.	Activity alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred activity alternative.

The preferred activity is a medium to high residential developments.

Provide a description of any **other activity** alternatives investigated.

The activity assessed is a medium to high density residential development.
The no go alternative (zoning remains agricultural and low density residential) was assessed.

Provide a motivation for the **preferred activity** alternative.

Middle income housing has been identified as a need in the area. The development proposal fits into the surrounding urban environment with similar land uses and densities found immediately west on Erf 2073 (Thulana Hills) to the north on RE/2317 (Santini Village).

Provide a detailed motivation if no activity alternatives exist.

The growth rate in Bitou municipality exceeds the national average. Middle income housing is urgently required in the area. Use of renewable energy, energy saving measures and catchment of water are highly recommended for the proposed residential development to reduce energy and water demand and manage increased stormwater runoff.

List the positive and negative impacts that the activity alternatives will have on the environment.

No go Alternative
The majority of impacts of the current activity (low residential; zoned Agricultural) have been rated as very low negative / negligible impacts. AIS is rated as negative of medium significance; the provision of low-density residential accommodation is rated as a positive impact of low significance. Not developing the medium-high residential development is rated as negative social impact with a medium- high significance.

1.3.	**Design or layout alternatives** to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts

Provide a description of the preferred design or layout alternative.

Concept layouts – Alternatives 1 (250) and 2 (228 units) has been assessed.
Recommendations and mitigation measures are provided to inform the final SDP/s developed for the site.

An SDP inclusive of recommendations would be the preferred design / layout.

Provide a description of any other design or layout alternatives investigated.

Concept layout - Alternative 1 (250 units)
Concept layout - Alternative 2 (228 units)

Provide a motivation for the preferred design or layout alternative.

Aspect	Alternative 1	Alternative 2	Recommendation for Final SDPs
Planning - Density	250 units; 50 units / ha	228 units 45 units / ha	Maximum density of 228 units at 100m2 – 130m2 units preferred. • Reduce development in CBA (WCBSP); no development on radient steeper than 1:4. Higher density buildings are recommended to be placed in northern, central and western areas (BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned for the east (quieter adjacent residential area) and environmentally sensitive southern sections (i.e. gradation of building heights from west (tallest) to east (lowest)).
Bulk Services – Water and Sewage	Municipal	Bulk services report carried out	Augment water supply with rainwater tanks
Energy Requirements	Municipal	Municipal	Augment energy supply with solar panels
Stormwater management	1: 50 year	1: 100 year	As per 1:100 SWMP and recommendations by aquatic specialist
Site access and traffic impact	Access from Marine Drive and Cutty Sark area	TIA carried out; access to Thulana in the north; main access from Marine Drive; no main access from Cutty Sark area, only emergency access	As per TIA
Conservation Status / value and flora	Development placed in CBA	Development (2850m2) proposed CBA Development proposed on steeper area which exceeds 1: 5 gradients. New road in south proposed	Reduce development in CBA (WCBSP) from 2850m2 to 1200m2; No new paths / roads / tracks in southern CBA section – convert existing road to

				footpath; no driving permitted on this path. Approved firebreaks / fire proof hedges in southernmost areas of development
	Fauna			No fencing at southern edge of erf
	Erosion Risk			No development on gradient steeper than 1:4.

Provide a detailed motivation if no design or layout alternatives exist.

Concept layout - Alternative 1 (250 units)
Concept layout - Alternative 2 (228 units)
Finals SDPs – to be developed based on recommendations

List the positive and negative impacts that the design alternatives will have on the environment.

The Final SDP is recommended to ensure:

- The only development permitted in the CBA mapped on site is the identified area of approximately 1200m2 located in the NE section of the CBA. This area is not as steep as immediate adjacent western area (900m2 not within mapped CBA) included in layouts 1 and 2. It is preferred that this flatter area within mapped CBA is developed, in order to meet the required density needed to make the development financially viable and affordable to middle income families, and the steeper area (which connects with remaining CBA) is not developed.
- No development on steep gradients (steeper than 1:4)
- Existing development footprint is used as lookout point / gazebo area; no new paths / tracks / roads permitted in southern section,
- Southern section of erf to remain unfenced;
- Align to TIA and Revised SWMP;
- 48-meter buffer around drainage line,
- Incorporate existing heritage structures into the layout and design.
- Solar panels to be planned into development
- Rainwater tanks to be planned into development
- Higher density buildings are recommended to be placed in northern, central and western areas (BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned for the east (quieter adjacent residential area) and environmentally sensitive southern sections (i.e. gradation of building heights from west (tallest) to east (lowest)).
- Final plans must ensure the long-term privacy of neighbours bordering erf 2074 (i.e. Thulana Hills, Cutty Sark residents) (i.e. direction of units, window positions etc.)
- The final SDPs could include a central road as opposed to road alongside the cutty area if this will improve privacy and reduce noise levels.

Recommendations provided for the development of a Final SDP result in the following impacts:

	Concept Alternative Layout 2		**Recommendations – Final SDP/s**	
	Impact Status	**Significance of impact**	**Impact Status**	**Significance of impact**
Construction Phase				
Terrestrial Biodiversity	Negative	Medium	Negative	Low
Loss of vegetation	Negative	Medium	Negative	Low
Loss of fauna habitat	Negative	Medium	Negative	Low

Loss / Disturbance of soil	Negative	Medium High	Negative	low
Aquatic systems	Negative	Medium	Negative	low
Operational Phase				
Terrestrial Biodiversity	Negative	High	Negative	Low
Negative Edge Effects on Habitats and Plant Species	Negative	Medium	Negative	Low
Loss of fauna habitat	Negative	Medium	Negative	Low
Habitat connectivity	Negative	Medium High	Negligible	Negligible
Loss / Disturbance of soil (development on steep areas)	Negative	Medium High	Negative	low
Aquatic systems	Negative	Medium	Negative	low
SWMP on aquatic and soil erosion	Negative	Medium	Negligible	Negligible
Traffic impact	Negative	Medium	Negative	Low
Density – social conflict	Negative	Medium	Positive	Medium
Visual	Negative	Low	Negative	Low
Noise	Negative	Medium	Negative	Low

Refer to Appendix J for full impact assessment.

1.4.	Technology alternatives (e.g., to reduce resource demand and increase resource use efficiency) to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred technology alternative:

A Bulk Services capacity analysis report has been undertaken by GLS Consulting Engineers:

- The site is close to existing municipal service connections
- The development is inside the sewer priority area.
- There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development
- There is sufficient reservoir and tower storage capacity available in the existing "Close to Town" reservoir and "Upper" tower to accommodate the proposed development.
- A Services Level Agreement will need to be concluded with Bitou as a prerequisite for the Development to proceed.

The following is recommended to be included in the final SDP/s:
Reduce energy demand:

- Solar roofs, energy efficient lighting, energy saving designs and materials

Refer to Appendix J for full impact assessment.

Provide a description of any other technology alternatives investigated.

The following were considered:
Package plant for sewage treatment – this was considered however it was deemed too costly, there is also limited space on the site to accommodate a package plant, and minimal irrigation is deemed necessary on the residential development as rainwater will be harvested and all landscaping will be indigenous (fynbos, thicket) and therefore reduce watering needs.

Provide a motivation for the preferred technology alternative.

Sewage management - The site is close to existing municipal service connections. The development is inside the sewer priority area. There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development.
Water demand - There is sufficient reservoir and tower storage capacity available in the existing "Close to Town" reservoir and "Upper" tower to accommodate the proposed development.

The following is recommended to be included in the final SDP/s:
Augment power supply - Solar roofs, energy efficient lighting, energy saving designs and materials

Stormwater management - Detailed modelling and finalization of permeable paving and swale areas
Reduce water demand – rainwater tanks incorporated into development design and operations

Refer to Appendix J for full impact assessment.

Provide a detailed motivation if no alternatives exist.

Not applicable.

List the positive and negative impacts that the technology alternatives will have on the environment.

The following is recommended to be included in the final SDP/s / operational planning:
Augment power supply - Solar roofs, energy efficient lighting, energy saving designs and materials
Reduce water demand – rainwater tanks incorporated into development design and operations
Soft and waterwise landscaping. Use of indigenous vegetation in landscaping.

	Without mitigation		**With mitigation – Final SDP/s / operational**	
	Impact Status	**Significance of impact**	**Impact Status**	**Significance of impact**
Planning / Operational Phase				
Energy Use	Negative	Low	Negative	Low
Sewage management	Negligible		Negligible	
Water use	Negative	Low	Negative	Low
SWMP on aquatic and soil erosion	Negative	Medium	Negligible	

Refer to Appendix J for full assessment.

1.5.	Operational alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred operational alternative.

Stormwater management (Poise Consulting Engineers):

- Designed for 1: 100 stormwater events
- Runoff discharged partially to gardens – routed to road surfaces and grass lined swales
- Road surfaces will be routed to permeable paved areas
- Swales and permeable paving designed to detain runoff of the pre-development flow rates
- In the Northern Catchment an underground piped system will collect the runoff from the swales and permeable paved areas and convey it to the discharge position at the north-eastern corner of the site, where it will be connected to the existing Municipal stormwater system in Marine Drive.
- In the Southern Catchment an underground piped system will collect the runoff from the permeable paved areas and convey it to the swales positioned along the western boundary. From the swales the discharge will be released on surface in a manner engineered to simulate the existing spread of surface flow across the full area of discharge. Therefore, the detained runoff will be distributed on surface without concentration.
- Detailed modelling and finalization of permeable paving and swale areas will be undertaken in the Detailed Design Stage.

Traffic management

- Main access from Marine drive; only emergency access points at Cutty Sark area

Waste management

- Waste management plan - Investigate disposal / reuse/ recycling services., suitable receptacles, storage areas

Terrestrial biodiversity (including fauna and flora)

- No new paths / tracks / driving permitted in the southern CBA

- Soft landscaping with indigenous vegetation
- Lighting recommendations
- Alien invasive management
- Fire management

Provide a description of any other operational alternatives investigated.

Mitigation measures informed the updated SWMP developed for the development.
The TIA was carried out for the development.
Waste management measures and mesures to reduce impacts on biodiversity have been recommended by EAP and specialists

Provide a motivation for the preferred operational alternative.

Mitigation measures informed the updated SWMP developed for the development.
The TIA was carried out for the development.
Waste management measures and mesures to impacts on biodiversity have been recommended by EAP and specialists

Provide a detailed motivation if no alternatives exist.

NA

List the positive and negative impacts that the operational alternatives will have on the environment.

	Without mitigation		**With mitigation – Final SDP/s / operational**	
	Impact Status	**Significance of impact**	**Impact Status**	**Significance of impact**
Operational Phase				
Noise and visual - wildlife	Negative	Medium	Negative	Low
Human wildlife contact	Negative	Low	Negligible	
Collision with fauna	Negative	Medium High	Negative	Low
Habitat connectivity	Negative	Medium High	Negligible	
AIS management	Negative	Medium	Positive	Low
Landscaping	Negative	Medium	Positive	Low
Fire Risk	Negative	Medium	Negative	Low
SWMP –soil / aquatic	Negative	Medium	Negligible	
Noise - social	Negative	Low	Negative	Low
Visual - social	Negative	Low	Negative	Low
Waste management	Negative	Medium High (Cumulative)	Negative	Medium (Cumulative)

Refer to Appendix J for full impact assessment.

1.6.	The option of not implementing the activity (the 'No-Go' Option).

Provide an explanation as to why the 'No-Go' Option is not preferred.

The growth rate in Bitou municipality exceeds the national average. Middle income housing is urgently required in the area. The proposed land use fits in with surrounding land uses.
Refer to Appendix J.

1.7.	Provide an explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

- Final SDP/s to be developed based on recommendations and mitigation measures.
- Onsite sewage treatment was considered but demand to expensive and no irrigation areas exist on the planned residential development.

1.8.	Provide a concluding statement indicating the preferred alternatives, including the preferred location of the activity.

The site is situated within an urban edge and located between existing residential development and is close to existing bulk services and bulk services can be accommodated by the Bitou LM. The site is deemed suitable for the development of medium- to high density residential accommodation.

Concept layouts have been assessed and the following is recommended for the final SDP/s:

- No development within the WC BSP CBA area with exception of 1200m2 development in NE section of mapped CBA due to gentler gradient.
- No development on gradient or 1:4 steeper
- Use existing development footprint as lookout point / gazebo area.
- No new paths / tracks / roads in southern section – convert existing road to footpath – no driving permitted on this path.
- Ongoing alien invasive clearing
- A maximum density of 228 units proposed at 100 – 130m2 per unit is recommended.
- Higher density buildings are recommended to be placed in northern, central and western areas (BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned for the east (quieter adjacent residential area) and environmentally sensitive southern sections (i.e. gradation of building heights from west (tallest) to east (lowest)).
- Final plans must ensure the long-term privacy of neighbours bordering erf 2074 (i.e. Thulana Hills, Cutty Sark residents) (i.e. direction of units, window positions etc.)
- The final SDPs could include a central road as opposed to road alongside the cutty area if this will improve privacy and reduce noise levels.
- Solar panels
- Rainwater tanks
- Indigenous landscaping
- Ongoing AIS clearing
- Fire management plan
- Waste management plan

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).
No development within the WC BSP CBA area with exception of 1200m2 development in NE section of mapped CBA due to gentler gradient. No development on steep areas with gradient steeper than 1:4 Any plants identified as SCC to be cordoned off until permits in place and plant can be removed for transplantation elsewhere on the site (i.e. in southern area of site) Search and rescue of fauna to be carried out to confirm presence of fauna SCC. Measures to be carried out as recommended by the specialist and Cape Nature as applicable. Search and Rescue report to be submitted to DEADP and Cape Nature and any required permit applications prior to the start of construction.

3. Methodology to determine the significance ratings of the potential environmental impacts and risks associated with the alternatives.

Describe the methodology to be used in determining and ranking the nature, significance, consequences, extent, duration of the potential environmental impacts and risks associated with the proposed activity or development and alternatives, the degree to which the impact or risk can be reversed and the degree to which the impact and risk may cause irreplaceable loss of resources.
Refer to Section B in Appendix J

4. Assessment of each impact and risk identified for each alternative

Note: The following table serves as a guide for summarising each alternative. The table should be repeated for each alternative to ensure a comparative assessment. The EAP may decide to include this section as Appendix J to this BAR.

Refer to Appendix J.

Alternative:	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
OPERATIONAL PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	
Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk:	
Nature of impact:	
Extent and duration of impact:	
Consequence of impact or risk:	
Probability of occurrence:	
Degree to which the impact may cause irreplaceable loss of resources:	
Degree to which the impact can be reversed:	
Indirect impacts:	
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	
Degree to which the impact can be avoided:	
Degree to which the impact can be managed:	

Degree to which the impact can be mitigated:	
Proposed mitigation:	
Residual impacts:	
Cumulative impact post mitigation:	
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

Refer to Appendix J.

1.	Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.
The aquatic specialist has reviewed the alternative layout 2 and the updated stormwater information and has confirmed that no further aquatic assessment will be necessary with the proposed measures in place. A terrestrial biodiversity and flora and fauna assessment were carried out. All specialists recommend that development is concentrated in the more central and northern areas of the site with minimal development in the southern areas where habitats and ecosystems are more sensitive.	
2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr
- Reduce development in southern CBA / intact fynbos area - Buffer of 48 meter of drainage line - Updated SWMP - Alien invasive management - Fire prevention and response - Waste management Requirements - Lighting Requirements - Landscaping requirements	
3.	List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.
Alternative concept layout 3 provided In terrestrial assessment will not be developed. A small area with gentle gradient has been identified in the NE section of the CBA for 1200m2 development footprint in order to achieve required number of units to make the project financially viable and affordable; this area is preferable to the immediate adjacent western area which is included in the development plan but not included in the mapped CBA. Development in southern area will be minimal, existing development footprint will be used as lookout point / gazebo area; no new paths / tracks / roads permitted in southern section	
4.	Explain how the proposed development will impact the surrounding communities.
The Bitou Spatial Development Framework has identified the property for development and specifically earmarked the site as a priority development area for medium-density residential development (3-4 storeys). This development will be residential, and it will fit into surrounding land uses (low and high residential developments). Access will be from Marine Drive and only emergency access points provided at the quieter Cutty Sark residential area. Noise, visual and dust impacts may be experienced during construction phase. This development will be residential, and it will be designed to be aesthetically appealing and fit into surrounding land uses (low and high residential developments). This visual impact may therefore become negligible in the short – medium term as local residents become accustomed to the new development in the area. Alien invasive management on the erf could contribute to a reduction of fire risk in the area.	
5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
The site is not at risk from sea level rise associated with climate change. Increased storm events associated with climate change has been addressed by using 1: 100 storm events in stormwater management planning.	
6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.
None. Development in more sensitive southern area has been reduced and 48 meter buffer around drainage line will be put in place.	
7.	Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

Aquatic specialist – 48-meter buffer around drainage line; Recommendations for SWMP will be implemented
Terrestrial, flora, and fauna – Development will be concentrated on central and norther section; development footprint is reduced in sensitive southern area; no fencing of southern boundary of erf; Search and Rescue will be carried out
A Traffic Impact Assessment has been carried out; Access will be provided from Marine Way; Additional secondary access points to the municipal road network to the east via Cutty Sark Avenue and Ariel Drive will be provided for use should an emergency arise in the complex comprising the main access onto Marine Way.

8.	Explain how the mitigation hierarchy has been applied to arrive at the best practicable environmental option.

Potential impacts have been identified and mitigation measures have been proposed to prevent (avoid or mitigate), rather than remediate identified impacts. Successive steps in the hierarchy are only considered once the previous step has been exhausted. Avoidance of negative impacts is a priority. If the rating shows that an impact cannot be managed through preventative measures of avoidance and minimization, then restoration and, as a last resort, offsets or compensation would have been considered.
The assessment found that the majority of impacts identified as negative impacts could be reduced to negative impacts of low significance / negligible with mitigation measures in place; the remaining identified impacts could be changed to low positive (AIS / heritage). Identified positive impacts were found to be enhanced by management measures.

SECTION J: GENERAL

1. Environmental Impact Statement

1.1.	Provide a summary of the key findings of the EIA.

Provision of residential housing is needed in the Bitou LM. Erf 2074 is situated within an urban edge and located on Marine Way between existing residential development and situated close to existing bulk services; bulk services can be accommodated by the Bitou LM. Main access will be from Marine Way; emergency access points will be provided at Ariel st and Cutty Sark avenue. Heritage buildings will be incorporated into planned development. A paleontology desktop study has been carried out; The Ordovician-aged Peninsula Formation of the Table Mountain Group of the Cape Supergroup that underlies the study area has a High Palaeontological Sensitivity due to the presence of fossil trackways and microfossils in this geological formation. These fossils are however sparsely distributed and scarce and the chances of making a significant discovery are low. Due to the improbability of making a significant fossil find during development, because of the scarcity and uneven distribution of trace fossils, the significance of development in the study area is LOW. There is a possibility of finding fossils at the study site when unweathered rock is exposed during development. The Chance Palaeontological Finds Procedure should be followed in the unlikely event that a significant fossil discovery is made during construction.
The site is located in an area historically mapped as South Outeniqua Sandstone Fynbos; intact fynbos occurs in the southern area of the site. Alien invasive species identified on the site increase fire risk. An alien invasive management plan and fire management plan will be required for the site.
A drainage line is situated on an adjacent erf, south west of erf 2074. A buffer of 48 meters is recommended and the updated stormwater management plan developed should be implemented to prevent aquatic impacts.
The northern section of the site has been confirmed to have a Low botanical theme sensitivity; permits will however be required to trim, remove, or alter the protected trees if necessary. The southern section of the site (i.e. fynbos and valley fynbos-thicket) has been confirmed to have a high plant species sensitivity. Search and rescue as recommended must be carried out.
The property contains marginally suitable habitat characteristics for the Knysna Woodpecker (*Campethera notata*), Knysna Pale Copper Butterfly (*Aloeides pallida littoralis*), and the golden mole (*Amblysomus corriae*) SCC. This fynbos area in the southern section of the property is considered to have a medium likelihood occurrence of Knysna Pale Copper Butterfly (*Aloeides pallida littoralis*). The old agricultural field is considered to have a medium likelihood occurrence of Knysna Woodpecker (*Campethera notata*) (NT) and Fynbos Golden Mole (*Amblysomus corriae*) (NT). Search and rescue measures must be put in place as recommended.
The site is moderately flat in the central section, a gentle slope to the north and a steep slope (12% - 40%) in the south.

The overall Site Ecological Importance is low and very low in the central and northern portions, medium in the southern portion and high at the most southern section.
The northern and central sections of the site are recommended for a medium - high density residential development. The development footprint in the sensitive southern area is recommended to be reduced; Development on the steeper southern areas gradient steeper than 1:4 is not recommended.

It is recommended that the project area of influence be reduced by:

- Reduced development footprint in mapped CBA (WCBSP) from 2850m2 to 1200m2; development on the flatter CBA (WCBSP) area is preferred as opposed to the adjacent steeper area (900m2) not mapped as CBA. Retaining existing road in the south as a footpath; no further tracks / roads to be developed in southern area.
- The gazebo development footprint must be planned to use the existing disturbed footprint.

Higher density buildings are recommended to be placed in northern, central and western areas (BLM Restructuring Zone) away from quieter eastern residential areas and sensitive southern fynbos area. Lower density buildings recommended to be planned for the east (quieter adjacent residential area) and environmentally sensitive southern sections (i.e. gradation of building heights from west (tallest) to east (lowest)).

Density should not exceed 228 units at estimated 100m2 to 130m2 per unit. Solar power and water tanks are recommended to be included in the final SDP to augment water / energy requirements.

The assessment found that the majority of impacts identified as negative impacts could be reduced to negative impacts of low significance / negligible with mitigation measures in place; the remaining identified impacts could be changed to low positive (AIS / heritage). Identified positive impacts were found to be enhanced by management measures.

All mitigation measures included in the draft EMPr should be implemented as required in the planning, construction and operational phases of the proposed development.

1.2.	Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)
	Refer to Appendix B2
1.3.	Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

PLANNING AND DESIGN					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	Planning and Design				
Aspect	Planning and design				
Impact	**Direct – Project delays and economic consequences**				
Impact Rating	**Impact Status**	**Negative Impact**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**15**	**Negligible**	
	Mitigation	Likely - Impact can be avoided with mitigation which has proven results.			
Nature of impact	**Direct - Fauna, Flora, Water, Soil - Poor environmental management planning and / or lack of budget for environmental management will result in unmitigated impacts.**				
Impact Rating	As per impact ratings for construction and operational impact				

HERITAGE			
Phase	**Planning, Construction and Operational Phase**		
Aspect	**Site clearing; construction activities; operations**		
Impact	**Direct – Loss of archaeological resources / disturbance to heritage**		
Impact Rating	**Impact Status**	**Negative**	**Positive**

		Without mitigation		With mitigation		
	Impact Significance	**Medium**	**13**	**Low**	**10**	
	Mitigation	Possible – impacts can be prevented with mitigation during construction phase.				
Activity	**No go alternative**					
Description	Baseline conditions will likely remain the same – negligible impacts on heritage.					
Impact Rating	**Impact Status**	**Negligible**				
	Impact Significance	Negligible	**5**			

TERRESTRIAL BIODIVERSITY						
Activity	**Medium to high residential development**					
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***					
Phase	**Planning and Construction Phase**					
Aspect	**Construction activities – site clearing, earthworks, excavations, lay down areas**					
Impact	**Direct impact on terrestrial biodiversity**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation (including recommendations for layout 3)		
	Impact Significance	**Medium**	**15**	**Low**	**10**	
	Mitigation	Possible – impacts can be minimised with mitigation during planning and construction phase.				
Phase	**Planning and Operational Phase**					
Aspect	**Increased activity within CBA**					
Imapct	**Direct - impact on terrestrial biodiversity - development within CBA**					
Impact rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation (including recommendations for layout 3)		
	Impact Significance	**High**	**21**	**Low**	**10**	
	Mitigation	Possible – layout change				
Activity	**No go alternative**					
Impact	Baseline conditions will likely remain the same – modified ecosystems in the north and intact ecosystems in the south. Continued spread of alien trees. Existing incomplete development footprint within sensitive CBA1.					
Impact rating	**Impact Status**	**Negative**				
	Impact Significance	**Low**	**10**			

INDIGENOUS VEGETATION AND FLORA SPECIES OF CONSERVATIONAL CONCERN						
Activity	**Medium to high residential development**					
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***					
Phase	**Planning and Construction Phase**					
Aspect	**Site clearing and construction activities**					
Impact	**Direct – Loss of vegetation and** flora species of special concern					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation (including recommendations for layout 3)		
	Impact Significance	**Medium**	**13**	**Low**	**10**	
	Mitigation	Possible – impacts can be managed with mitigation during construction phase.				
Phase	**Planning and Operational Phase**					
Aspect	**Management of habitats and plant species; landscaping activities**					
Impact	**Direct / Indirect - *Negative Edge Effects on Habitats and Plant Species*** -					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation (including recommendations for change in layout 2)		
	Impact Significance	**Medium**	**15**	**Low**	**8**	
	Mitigation	Possible				
Activity	**No go alternative**					
Impact	Direct - Baseline conditions will likely remain the same – modified ecosystems in the north and intact fynbos in the south with development footprint of unfinished building and access road. Minimal disturbance to fynbos in the south as a result of existing activities.					
Imapct Rating	**Impact Status**	**Negative**				
	Impact Significance	**Low**	**8**			

FAUNA HABITATS AND FAUNA SPECIES					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Planning and construction Phase**				
Aspect	**Layout and Planning, Construction**				
Impact	**Direct Loss of high SEI Faunal Habitat - it important to limit the loss of natural ecosystems, which benefits all SCC and biodiversity more widely.**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation (including recommendations for layout 3)	
	Impact Significance	**Medium**	**14**	**Low**	**10**
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.			
Phase	**Construction Phase - The construction phase will have the highest impacts on fauna species due to increased moving vehicles, noise and habitat destruction associated with these activities.**				
Aspect	**Construction Activities**				
Impact:	**Direct -** Loss of habitat for fauna within the footprint of the proposed development				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium High**	**15**	**Low**	**10**
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.			
Aspect	**Construction Activities - Noise**				
Impact	**Direct – noise impacts on fauna**				
Impact Rating	**Impact Status**	**Negative**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Low**	**10**	**Negligible**	**5**
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.			
Aspect	**Construction Activities – Management of materials**				
Impact	**Direct – mismanagement of materials – litter, fauna, flora**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	**Low**	**7**
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.			
Aspect	**Construction Activities**				
Impact	**Direct - Harm/Death of fauna**				
Impact Rating	**Impact Status**	**Negative**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium High**	**15**	**Low**	**10**
	Mitigation	Possible – impacts can be prevented with mitigation during construction phase.			
Phase	**Planning and Operational Phase**				
Aspect	**Operational and maintenance activities;**				
Impact	**Direct – Loss of fynbos habitat for fauna during maintenance activities.**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	**Low**	**8**
	Mitigation	Likely			
Aspect	**Operational activities – visual and noise**				
Nature of impact:	**Direct -** changes in noise and artificial lighting levels				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	**Low**	**8**
	Mitigation	Likely			
	Confidence	High			
Aspect	**Operational activities**				
Nature of impact:	Direct - Human-wildlife conflict				
Impact Rating	**Impact Status**	**Negative**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Low**	**10**	**Negligible**	**5**

	Mitigation	Likely			
Aspect	**Operational activities**				
Impact	**Direct - Harm/Death to wildlife due to collisions with vehicles.**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium High**	**18**	**Low**	**10**
	Mitigation	Likely			
	Confidence	High			
	Reversibility	Possible			
Aspect	**Operational activities**				
Impact	Direct - Reduction of habitat connectivity to the greater landscape				
Impact Rating	**Impact Status**	**Negative**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium High**	**20**	Negligible	5
	Mitigation	Likely			
Activity	**No go alternative**				
Impact	Direct - Baseline conditions will likely remain the same – modified ecosystems in the north, medium to high invasion of alien trees in some sections, and intact fynbos in the south.				
Impact rating	**Impact Status**	**Negative**			
	Impact Significance	**Low**	**10**		

ALIEN INVASIVE SPECIES					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Planning and Construction Phase**				
Aspect	**Site clearing; construction activities**				
Impact	**Direct -** Increase in alien invasive vegetation can displace indigenous vegetation and increase fire risk. Decrease in alien vegetation can increase indigenous vegetation and reduce the fire risk.				
Impact Rating	**Impact Status**	**Negative**		**Positive**	
	Impact Significance	**Medium**	**12**	**Low**	**10**
	Mitigation	Possible – impacts can be managed with mitigation during construction phase.			
Phase	**Planning and Operational Phase**				
Aspect	**Operational activities; landscaping**				
Impact	**Direct - Increase / decrease alien invasive vegetation; poor planning for alien clearing (herbicide use / dumping slash material); disturbance of fauna SCC**				
Impact Rating	**Impact Status**	**Negative**		**Positive**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**14**	**Low**	**8**
	Mitigation	Possible			
Activity	**No go alternative**				
Impact	Direct - Baseline conditions will likely remain the same – modified ecosystems in the north, medium to high invasion of alien trees in some sections, and intact fynbos in the south.				
Imapct rating	**Impact Status**	**Negative**			
	Impact Significance	**Low**	**8**		

FIRE RISK					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Planning, Construction and Operational Phase**				
Aspect	**Fire Risk - *Effect of Management on Habitats & Plant Species***				
Impact	**Direct - Damage to surrounding vegetation and fauna and infrastructure due to fires**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Medium	15	Low	10
	Mitigation	Possible			
Activity	**No go alternative**				
Impact	Direct - Baseline conditions will likely remain the same – alien invasive trees on site; fynbos in the south – high risk fire area				

Impact Rating	**Impact Status**	**Negative**	
	Impact Significance	**Medium**	**13**

Housing developments – habitat degradation					
Activity	Medium to high residential developments				
Phase	Planning				
Aspect	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Nature of impact:	Cumulative - surrounding environment around Erf 2074 is already very developed, and cumulative impacts on habitat degradation in area already in place				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation			
	Impact Significance	High	22		
	Mitigation	Difficult – this cumulative impact and management of edge effects, biodiversity and AIS clearing would need to addressed jointly by the local municipality and various landowners along the southern CBA / Piesang river Valley area			
Activity	**No go alternative -**				
Imapct	Cumulative - The surrounding environment around Erf 2074 is already very developed; high cumulative impact has already occurred on the biodiversity in this area.				
Impact rating	**Impact Status**	**Negative**			
	Impact Significance	High	22		

SOIL, GEOLOGY, TOPOGRAPHY					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Planning, Construction, Operational Phase**				
Aspect	**Removal of vegetation, excavation activities, general construction activities, bare soil, stockpiling, stormwater management, vehicle entrainment, general maintenance activities**				
Impact	**Direct - Loss of soil; damage to soil structure, dust generation, impacts on flora and fauna**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation (including recommendations for layout 3)	
	Impact Significance	**Medium High**	**16**	**Low**	**10**
	Mitigation	Possible – impacts can be managed during construction phase.			
Activity	**No go alternative**				
Impact	Direct - Baseline conditions will likely remain the same – minimal soil erosion as a result of existing activities.				
Impact Rating	**Impact Status**	**Negative**			
	Impact Significance	**Low**	**10**		

AQUATIC SYSTEMS					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Planning, Construction and Operational Phase**				
Aspect	**Site clearing; construction activities, increased hard surfaces**				
Impact	**Direct - Impacts on aquatic system -** Any potential impacts to the drainage line on the neighbouring property or the Piesang River can be effectively managed to minimise the Project Area Of Influence (PAOI).				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**15**	**Low**	**9**
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.			
Impact	Baseline conditions will likely remain the same – negligible impact on aquatic systems as a result of existing activities				
Impact Rating	**Impact Status**	**Negligible**			
	Impact Significance	Negligible	**5**		

STORMWATER MANAGEMENT	
Activity	**Medium to high residential development**
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***
Phase	**Planning, Construction and Operational Phase**
Aspect	**Stormwater management measures**

Impact	**Direct / indirect - Soil erosion; impact on aquatic systems**					
Impact Rating	**Impact Status**	**Negative**		**Negligible**		
		Without mitigation		With mitigation (revised SWMP)		
	Impact Significance	**Medium**	**15**	Negligible	Negligible	
	Mitigation	Possible				
Activity	**No go alternative**					
Nature of impact:	Baseline conditions will likely remain the same – negligible impact on aquatic systems as a result of existing activities.					
	Impact Status	**Negligible**				

Social impacts – NOISE and visual						
Activity	**Medium to high residential development**					
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***					
Phase	**Construction Phase**					
Aspect	**Noise impact**					
Impact	**Direct - Noise impacts on residents in the area**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	Medium	13	Low	10	
	Mitigation	Possible				
Phase	**Operational Phase**					
Aspect	**Noise generation**					
Impact	**Direct - Noise impacts on residents in the area**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	**Low**	**8**	**Low**	**8**	
	Mitigation	Likely				
Phase	**Planning and Construction Phase**					
Aspect	**Construction site**					
Impact	**Direct – Visual impact on receptors**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	Medium	11	Low	10	
	Mitigation	Possible				
Phase	**Planning and Operational Phase**					
Aspect	**Medium – high residential area**					
Impact	**Direct / cumulative – Visual impact on receptors (biodiversity, surrounding residential areas)**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	Low	9	Low	8	
	Mitigation	Likely				
Activity	**No go alternative**					
Impact	Baseline conditions will likely remain the same – negligible visual or noise impacts; residents					
Impact Rating	**Impact Status**	**Negligible**				

WASTE POLLUTION AND HAZARDOUS MATERIALS						
Activity	**Medium to high residential development**					
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***					
Phase	**Planning and Construction Phase**					
Aspect	**General waste**					
Impact	**Incorrect waste management can result in pollution of soil; polluted runoff, aquatic systems, fauna and flora**					
Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	**Medium**	**15**	**Low**	**9**	
	Mitigation	Possible – impacts can be minimised with mitigation during construction phase.				
Phase	**Planning and Construction Phase**					
Aspect	**Hazardous materials**					
Impact	**Incorrect waste management can result in pollution of soil; polluted runoff, aquatic systems, fauna and flora**					

Impact Rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation		
	Impact Significance	**Medium**	**12**	**Low**	**10**	
	Mitigation	Possible – impacts can be managed during construction phase.				
Phase	**Operational Phase**					
Aspect	**Waste management (general and hazardous)**					
Impact	**Cumulative - Increasing disposal at landfill and few recycling options in Bitou LM**					
Impact rating	**Impact Status**	**Negative**		**Negative**		
		Without mitigation		With mitigation (recycling / reuse options)		
	Impact Significance	**Medium - High**	**17**	Medium	**14**	
	Mitigation	Difficult – few recycling options available in Bitou LM / recycling will likely not be implemented				
Activity	**No go alternative**					
Impact	Direct / cumulative - Baseline conditions will likely remain the same – waste generated by low density residential disposed at landfill; some litter / dumping by vagrants continue					
Impact Rating	**Impact Status**	**Negative**				
	Impact Significance	**Low**	**8**			

SOCIAL - CHANGE IN LAND USE – AGRICULTURAL TO RESIDENTIAL II						
Activity	**Medium to high residential development**					
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***					
Phase	**Planning, operational**					
Aspect	**Medium to high density housing**					
Impact:	**Economic – rates / sales from units**					
Impact Rating	**Impact Status**	**Positive**		**Positive**		
		Without mitigation		With mitigation		
	Impact Significance	**Medium High**	**18**	**Medium High**	**17**	
	Mitigation	Not applicable				
Impact	**Density - social conflict**					
Nature of impact	**Indirect**					
	Impact Status	**Negative**		**Positive**		
		Without mitigation		With mitigation		
	Impact Significance	**Medium**	**13**	**Medium**	**15**	
	Mitigation / Management	Possible – potential social conflict impacts can be addressed during planning phase.				
Impact	**Provision of housing for middle income families**					
	Impact Status	**Positive**		**Positive**		
		Without mitigation		With mitigation		
	Impact Significance	**Medium**	**15**	**Medium High**	**16**	
	Management	Possible				
	Confidence	High				
Activity	**No go alternative**					
Impact	**Direct – Provision of residential accommodation (Low density) on agricultural zone area**					
Impact rating	**Impact Status**	**Positive**				
	Impact Significance	**Low**	**10**			
Impact	Residential units will not be developed					
Impact	**Direct – N**o p**rovision of housing (m**edium high **density)**					
Impact rating	**Impact Status**	**Negative**				
	Impact Significance	**Medium High**	**16**			

SOCIAL – EMPLOYMENT CREATION AND SKILLS DEVELOPMENT	
Activity	**Medium to high residential development**
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***
Phase	**Planning Phase, Construction Phase; Operational Phase**
Aspect	**Development of residential housing and associated infrastructures**
Impact	**Direct / Indirect - Employment creation and skills development**

Impact Rating	**Impact Status**	**Positive**		**Positive**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**14**	**Medium High**	**16**
	Mitigation	Possible			
Activity	**No go alternative**				
Impact	Baseline conditions will likely remain the same – no additional employment				
Impact Rating	**Impact Status**	**Negligible**			

SOCIAL – CRIMINAL ACTIVITIES					
Activity	**Medium to high residential development**				
Layout	***Concept Layouts 1 and 2 and final SDP (developed based on recommendations)***				
Phase	**Construction Phase**				
Aspect	**Criminal activities**				
Impact	**Direct -** Increased crime during construction phase.				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	**Low**	**8**
	Mitigation	Possible			
Phase	**Operational phase**				
Aspect	**Criminal activities**				
Impact	**Direct -** Increased crime during construction phase.				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	**Low**	**8**
	Mitigation	Possible			
Activity	**No go alternative**				
Impact	Baseline conditions will likely remain the same – criminals can access site				
Impact Rating	**Impact Status**	**Negative**			
	Impact Significance	**Low**	**8**		

TRAFFIC MANAGEMENT					
Activity	**Medium to high residential development**				
Layout	***Concept Layout 2 and final SDP (developed based on recommendations)***				
Phase	**Construction Phase**				
Aspect	**Personnel vehicles, construction vehicles, deliveries / collections, machinery**				
Impact	**Direct - Impact on other road users**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Medium	12	Low	9
	Mitigation	Possible			
Phase	**Planning and Operational Phase**				
Aspect	Residential Development				
Impact	**Direct / cumulative - Impact on other road users**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation (Recommendations of TIA)	
	Impact Significance	Medium	12	Low	9
	Mitigation	Possible			
Activity	**No go alternative**				
Impact	Baseline conditions will likely remain the same – negligible impacts on traffic conditions as a result of existing activities				
Impact Rating	**Impact Status**	**Negligible**			

ENERGY USE	
Activity	**Medium to high residential development**
Layout	***Concept Layout 2 and final SDP (developed based on recommendations)***
Phase	**Planning and Operational Phase**

Aspect	Residential Development				
Impact	**Direct** impact of the development on non renewable energy resources				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Low	10	Low	8
	Mitigation	Possible			
Activity	**No go alternative**				
Nature of impact:	Baseline conditions will likely remain the same – energy requirements for low density residential				
Impact Rating	**Impact Status**	**Negligible**			

AVIATION

The South African Civil Aviation Authority (SACAA) has requested that a formal obstacle assessment be conducted to determine if the proposed residential development will impact flight safety due to its close proximity to Plettenburg Bay Airport. The assessment is required to be conducted by Air Traffic and Navigation Services (ATNS) and is an independent process in line with obtaining final approval from the South African Civil Aviation Authority (SACAA). The ATNS has been contacted to determine relevant assessments required to evaluate whether the proposed development will affect the safety of flight for aerodromes in close vicinity as well as communication, navigation, and surveillance (CNS) equipment however no formal proposal has yet been received to carry out the required assessment.

No impact on aviation is expected during construction phase or operational phase. The authority will be requested to comment on the draft BAR and EMPr.

Activity	**No go alternative**	
Impact	Baseline conditions will likely remain the same – no impacts on aviation.	
Impact Rating	**Impact Status**	**Negligible**

SEWAGE MANAGEMENT

Activity	**Medium to high residential development**				
Layout	***Concept Layout 2 and final SDP (developed based on recommendations)***				
Phase	**Construction Phase**				
Aspect	**Sewage waste**				
Impact	Direct - Impacts on social / natural environment from mismanagement of ablution facilities.				
Impact Rating	**Impact Status**	**Negative**		**Negligible**	
		Without mitigation		With mitigation	
	Impact Significance	**Medium**	**11**	Negligible	
	Mitigation	Likely			
Phase	**Operational Phase**				
Aspect	**Sewage management**				
Description	There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development. The negative impact from this development on treatment capacity is considered to be low; the cumulative impact of rapid development on the LM sewage treatment capacity is considered high however it is beyond the scope of this assessment.				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Low	10	Low	10
	Mitigation	Difficult			
Activity	**No go alternative**				
Nature of impact:	Baseline conditions will likely remain the same sewage generated by low density residential disposed at WWTW				
Impact rating	**Impact Status**	**Negligible**			

WATER USE

Activity	**Medium to high residential development**
Layout	***Concept Layout 2 and final SDP (developed based on recommendations)***
Phase	**Planning, Construction Phase**
Aspect	**Water requirements**
Impact	**Direct – water use**

Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Low	10	Low	8
	Mitigation	Possible			
Phase	**Planning, Operational Phase**				
Aspect	**Water requirements**				
Nature of impact:	**Direct impact on available water resources**				
Impact Rating	**Impact Status**	**Negative**		**Negative**	
		Without mitigation		With mitigation	
	Impact Significance	Low	10	Low	9
	Mitigation	Possible			
Activity	**No go alternative**				
Nature of impact:	Baseline conditions will likely remain the same – negligible impacts on water use				
	Impact Status	**Negligible**			

2. Recommendation of the Environmental Assessment Practitioner ("EAP")

2.1.	Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr

Planning Team:

Targets:

- ✓ EA in place
- ✓ EM file in place
- ✓ Detailed design and approval of SWMP
- ✓ Approval of TIA
- ✓ Detailed design and approval of Final SDP developed after applicable planning mitigation measures have been considered
- ✓ Rezoning in place
- ✓ Bitou bulk services SLA in place
- ✓ Permits in place (trees, flora, fauna)
- ✓ SACAA approval / comment

Construction Team:

Targets:

- ✓ Site ECO
- ✓ EM file in place
- ✓ Specialist appointed to do search of plants and permits and search and rescue report in EM file.
- ✓ Search for plants taken place on construction footprint prior to site clearing; nursery, plants transplanted as required with specialist guidance
- ✓ Any SCC permits and search and rescue reports on record
- ✓ Necessary training provided as per scope of work and records kept i.e., toolbox talks
- ✓ Working house: Restrict to weekdays between 07:00 to 17:00; Saturday 08:00 to 13:00; no Sundays or public holidays
- ✓ No blanket clearing of vegetation.
- ✓ Designated footprint and demarcated laydown area, no unnecessary disturbance to vegetation (2meter disturbance); Laydown, stockpiles areas, waste management area, turning areas, access roads selected and designated - Pegs / tape / screening material for demarcation of site clearing footprint

- ✓ No go areas designated
- ✓ Topsoil separated; stockpiled at 1 m height, suitably mulched and reused
- ✓ Subsoils reused where necessary; excess is disposed correctly
- ✓ No disturbance of indigenous plants outside development footprint
- ✓ No AIS in construction footprint
- ✓ No disturbance to archaeological / palaeontological artefacts – paleontology change find procedure followed as required
- ✓ No disturbance to fauna
- ✓ The main access to the development **only** from Marine Way (MR00383) at the Challenge Drive intersection;
- ✓ Secondary locked access gates be provided at Cutty Sark Avenue and Ariel Drive for use **ONLY** in the event of emergency(ies);
- ✓ Ablution facilities (Ratio of 1:10)
- ✓ Waste management measures in place, no burning / dumping of waste / no litter
- ✓ No refuelling on site; no service of vehicles on site
- ✓ Drip trays, spill kits and hazardous waste bin
- ✓ Mixing containers and plastic liners (cement)
- ✓ Water cart / shade cloth for dust control
- ✓ Fire prevention training provided, and records kept
- ✓ Sand bucket for disposal cigarettes
- ✓ Fire response measures in place; emergency numbers on hand
- ✓ No off-road driving
- ✓ Swales / stormwater control / water erosion prevention measures in place
- ✓ Code of conduct
- ✓ Incident / complaint register in place
- ✓ Records of waste management / toilet service
- ✓ External monthly audits carried out and kept on record
- ✓ Close out audits and any actions required

Operational Team

- ✓ EM file in place
- ✓ Stormwater management measures in place as per approved design
- ✓ The main access to the development **only** from Marine Way (MR00383) at the Challenge Drive intersection;
- ✓ Secondary locked access gates be provided at Cutty Sark Avenue and Ariel Drive for use **ONLY** in the event of emergency(ies);
- ✓ AIS management plan in place Internal monitoring of AIS as required
- ✓ Indigenous landscaping
- ✓ Effective Pet control measures
- ✓ No fencing in southern section
- ✓ No feeding of wildlife
- ✓ Rainwater tanks
- ✓ Solar Panels
- ✓ Effective Waste management measures in place – receptacles, recycling measures, composting
- ✓ Fire prevention measures in place and response plan in place and fireproof hedge / firebreak in place as required
- ✓ No driving in south / no additional paths / tracks / roads created

- ✓ Annual external audit

2.2.	Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

All mitigation measures provided in EMPr to be implemented.

2.3.	Provide a reasoned opinion as to whether the proposed activity or development should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be included in the authorisation.

It is recommended that the proposed medium – high residential development on Erf 2074 be authorised provided that:

- Mitigation measures included for the planning and design phase inform the final SDP/s developed for the development.
- Mitigation measures included for construction phase are implemented
- Mitigation measures recommended for operational phase are implemented

2.4.	Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

- The proposed development is aimed to provide affordable housing for middle income group. Social housing has not been assessed.
- Fauna and flora assessments have been carried however strict search protocols will need to be implemented to confirm the presence or absence of identified SCC (particularly Knysna woodpecker and Knysna Cooper butterfly) on the site and to ensure impacts on fauna and flora are adequately mitigated.
- Search and rescue of flora SCC (succulents and geophytes) must take place on site prior to start of construction. Search and rescue for fauna (particularly Knysna woodpecker and Pale cooper butterfly) must be carried out prior to start of construction.
- The fynbos area in the southern section of the property is considered to have a high site ecological importance (SEI) and considered to have a medium likelihood occurrence of Knysna Pale Copper Butterfly (Aloeides pallida littoralis) (NT). The southern extent of the footprint of the development needs to be assessed by a Botanical Specialist for the presence of butterfly larval host plants: *Aspalathus spp*. (especially *A. acuminata, A. laricifolia and A. cymbiformis), Chrysanthemoides incana, C. monilifera, Indigofera erecta, Lebeckia plukenetiana, Osteospermum polygaloides, Thesium spp, Zygophyllum spp*.). If located, a botanical specialist needs to oversee the transplanting of these species from the development footprint into an appropriate natural environment (outside the development footprint) closest to where the plant was originally found. By limiting the distance that the plant is moved from its original location, impacts on associated faunal communities and changes to its growing conditions (microclimate, soil texture, soil moisture) are reduced.
- A walk through and search should be conducted to ensure that any birds are not nesting in vegetation prior to clearing of aliens and construction. If a nest with eggs is encountered, construction must be halted and a wildlife rehabilitation facility contacted.
- During laying season for Knysna Woodpecker (August to November) a dedicated search for the SCC must be conducted by a Faunal Specialist in the agricultural fields and non-natural gardens habitat to check if the species is present.
- If a Knysna Woodpecker nest is found, no construction should take place in the dwelling and non-natural garden and old agricultural field habitat for 6 weeks hence (time for incubation and development of the nestling before it can relocate) and in October (peak laying month to account for other Knysna Woodpeckers that may not have nested in a place that is as conspicuous as those found).

2.5.	The period for which the EA is required, the date the activity will be concluded and when the post construction monitoring requirements should be finalised.

Phased development:
Construction to commence between August 2025 and all phases complete by May 2032 (within 7 years of authorisation).

Construction Phase	August 2025 – May 2032
Construction Phase – Phase 1 within 2 years (commence August 2025 – May 2027)	3 years construction
Construction Phase – Phase 2 within 3 years (commence August 2025 – May 2028)	3 years construction
Construction Phase – Phase 3 within 4 years (commence August 2025 – May 2029)	3 years construction
Operational Phase	**2032**
Operational Phase – Phase 1 within 5 years of EA (2028 - 2030)	3 years construction
Construction Phase – Phase 2 within 6 years of EA (2028 - 2031)	3 years construction
Construction Phase – Phase 3 within 7 years of EA (2028 - 2032)	3 years construction

3. Water

Since the Western Cape is a water scarce area explain what measures will be implemented to avoid the use of potable water during the development and operational phase and what measures will be implemented to reduce your water demand, save water and measures to reuse or recycle water

A Civil Engineering Report, Version 1, July 2024, was prepared by Poise Consulting Engineers and contained concept water designs. GLS prepared a bulk services report and provided a revised analysis.

The proposed development on Erf 2074 should be accommodated in the existing Upper Tower water distribution zone. The connection to the existing system should be done to the existing 100 mm Ø pipeline from the Upper Tower water distribution zone,

The development is situated inside the water priority area.

Re-analysis, the total annual average daily demand (AADD) and fire flow for the proposed development were calculated and classified as follows:

- *228 Residential units @ 0,5 kL/d/unit = 114,0 kL/d*
- *There is therefore sufficient reservoir and tower storage capacity available in the existing "Close to Town" reservoir and "Upper" tower to accommodate the proposed development.Fire flow criteria (Moderate risk 2) = 25 L/s @ 10 m*

It is recommended that rainwater collection is incorporated into the development for re-use (i.e washing / irrigation) to reduce the water demand.

4. Waste

Explain what measures have been taken to reduce, reuse or recycle waste.

Sewage from the proposed development will drain towards the existing Plettenberg Bay PS 1a. There is sufficient capacity in the existing Plettenberg Bay sewer reticulation system to accommodate the proposed development.

Waste Removal:

The solid waste from the development will be collected by the Bitou refuse removal trucks from a waste storage area which will be provided at the main access to the site. Arrangement will be made by the Development Body Corporate for the transport of refuse from the individual units to the storage area. At the storage area the refuse will be stored in bins for the weekly Bitou collection.

Quantity:

Based on the South African middle-income average of 0.74 kilograms per person day, and an average of 3 people per unit, an average of 2.4 kilograms per unit is adopted. An estimated total weekly quantity for the 228 units will be 547 kg / 0.6 ton.

Investigations to reduce, reuse and recycle waste generated during the construction and operational phases of the development are recommended.

On site composting is recommended for green waste; compost can be used in landscaping.

5. Energy Efficiency

8.1.	Explain what design measures have been taken to ensure that the development proposal will be energy efficient.

An electrical report has been compiled by GLS. An estimated maximum demand of 500kVA for the proposed housing development was calculated by De Villiers and Moore Consulting Engineers on the behalf of the developers. The network around the erven is currently mainly supplied by SS-1 Main (Ferdinand), which is the substation supplying electricity to Plettenberg Bay town area. SS-1 Main currently has enough capacity to carry the additional 500kVA maximum demand brought by the proposed development on Erf 2074. The MV feeders supplying the surrounding area have sufficient capacity to carry the additional demand at the proposed development.
The recommended solution is to supply electricity at the proposed development on Erf 2074 is through a connection to RMU Thulana Hill.

It is recommended that energy saving measures and reduction on fossil fuel be investigated for the site.

The following measures are recommended to be incorporated into the design to reduce energy demands of the residential development on the grid:

- Solar panels on roofs
- Energy efficient lighting (i.e. LED / compact fluorescent)
- Energy saving designs and materials

SECTION K: DECLARATIONS