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BASIC ASSESSMENT REPORT: PRE-CONSULTATION

FOR

The Proposed Development of a Primary Dwelling and Access Road on Portion 79 of Farm 205, Ruygte Valley, Sedgefield, Western Cape

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended).

PREPARED FOR:	DANIEL SENSTER AND PARTNERS INC.
PREPARED BY:	ECO ROUTE ENVIRONMENTAL CONSULTANCY
DEPARTMENT REF:	TBC
AUTHOR:	BIANCA GILFILLAN (EAPASA REG 2023/7929)
DATE:	MARCH 2025

BASIC ASSESSMENT REPORT: PRE-CONSULTATION
The Proposed Development of a Primary Dwelling and Access Road on Portion 79 of Farm 205, Ruygte Valley, Sedgefield, Western Cape
DFFE REF: TBC

"On 08 December 2014, the Minister of Environmental Affairs promulgated regulations in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), viz, the NEMA Environmental Impact Assessment (EIA) Regulations 2014, (GN R982, R983, R984 and R985 of 04 December 2014) as amended. The NEMA EIA Regulations, 2014 and listing notices were subsequently amended on 07 April 2017 (refer to GN R324, R325, R327 of 07 April 2017) and are being referred to as NEMA EIA Regulations, 2014, as amended. The same referencing would apply to the listing notice containing the listed activities that would require Environmental Authorisation.

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Appendix D5: Town Planning Report

Appendix E = Public Participation

Appendix F = Draft EMPr

Introduction

The property, located east of Cola Beach within the Groenvlei rural area of Sedgefield, Western Cape, spans 5.1576 hectares and shares its southern boundary with coastal public property. It adjoins Portion 78 of Farm Ruygte Valley No. 205, a private nature reserve zoned Agriculture Zone I and is adjacent to the Lake Pleasant Private Nature Reserve. The northern portion is designated a Critical Biodiversity Area (CBA1), and the southern portion a degraded Critical Biodiversity Area (CBA2), per the Western Cape Biodiversity Spatial Plan (WCBSP 2025). Within Knysna Municipal Area, the property is primarily accessed via Groenvlei Beach Road, a gravel thoroughfare leading to the beach at Goukamma Nature Reserve's western edge. A Public Servitude Road (Bushy Way, SG Diagram 6532/61) along the northern boundary connects to the N2 via Groenvlei Divisional Road (DR 1594) but is overgrown, requiring clearing along existing disturbed paths to enable motor vehicle access with minimal vegetation loss.

Forming part of a small holding area from the 1961 subdivision of Portion 70 (originally Portion 38, Lake Pleasant Estate), the property is undeveloped and zoned Agriculture Zone I under the Knysna Zoning Scheme By-Law, permitting a dwelling house as a primary right. The Lake Pleasant Estate Pty Ltd, the original owner, imposes title deed conditions requiring consent for additional residences and building plan approvals, to be sought by Q3 2025 via submission to Knysna Municipality. A company search confirms the company's active status.

The site supports Goukamma Strandveld (Vulnerable, SANBI VegMap2025), with Western Cape Milkwood Forest primarily in the CBA1 northern portion, while the CBA2 southern portion is degraded by *Acacia cyclops* invasion. Sandstone sea cliffs (>80 m) form a significant southern landscape feature above the coast. Surrounding natural areas to the north and northeast, including the proposed Goukamma Nature Reserve buffer expansion (SAPAD_OR_2025_Q1), provide a critical ecological buffer, enhancing connectivity with Goukamma's vegetation.

The Applicant proposes a primary residence (200 m²), three self-catering tourist accommodation chalets (65 m² each), staff housing (50 m²), an equipment shed (80 m²), a parking area, and a gravel access road (<3 m wide, 200 m long) within a 1175 m² (0.1175 ha) development footprint, targeting the degraded CBA2 southern portion to minimise impacts on the sensitive CBA1 forest. A boardwalk will access the dwelling and chalets, reducing soil compaction. The footprint, comprising 525 m² for buildings and 660 m² for the road/parking, affects <0.02% of the site, leaving 99.98% natural. Infrastructure includes rainwater tanks for water, conservancy tanks for sewer, solar electricity, and off-site waste removal to a designated pickup point.

Mitigation Measures:

- Register a conservation easement for 4.25 ha with the Western Cape Nature Conservation Board by Q4 2025.

- Rezone to Open Space III (Nature conservation area) via an application to Knysna Municipality by Q3 2025, supporting consent for tourist accommodation.
- Implement a Biodiversity Offset Agreement, restoring 1 ha of invaded thicket in Goukamma Nature Reserve, agreed with CapeNature (April 2025).
- Develop an Alien Invasive Management Plan by Q3 2025, with annual *Acacia cyclops* monitoring by a registered ecologist.
- Obtain a National Forests Act permit for Western Cape Milkwood Forest impacts.

The development aligns with the Knysna Spatial Development Framework 2020, promoting eco-tourism and conservation, and the Rural Areas Guidelines 2019, permitting low-impact tourism in degraded CBA2 areas. The low visual impact, confirmed by specialists, is ensured by eco-sensitive design (steel, timber, glass, stone) and vegetation screening, per SPLUMA principles of spatial sustainability and efficiency. The ecological buffer and rezoning to Open Space III support long-term conservation within Knysna Municipality Ward 1, balancing economic and environmental goals.

Scope of assessment and contents of basic assessment reports

Appendix 1 of Regulation 982 of the 2014 EIA Regulations describes the contents required to complete a basic assessment report. The table below indicates how Appendix 1 requirements were incorporated into the basic assessment report:

Scope of assessment and content of basic assessment reports	Index
(1) A basic assessment report must contain the information that is necessary for the competent authority to consider and come to a decision on the application, and must include -	
(a) Details of – (i) The EAP who prepared the report; and (ii) The expertise of the EAP, including curriculum vitae.	**Section A** of the Report.
(b) The location of the activity, including – (i) The 21-digit surveyor General Code of each cadastral land parcel. (ii) Where available the physical address and farm name. (iii) Where the required information items (i) and (ii) is not available, the co-ordinates of the boundary of the property.	(i) **Section B** of the Report. (ii) **Section B** of the Report. (iii) **Section B** of the Report.
(c) a plan which locates the proposed activity or activities applied for as well as the associated structures and infrastructure at an appropriate scale, or, if it is (i) A linear Activity, a description and coordinates of the corridor in which the proposed activity or activities is to be undertaken; or (ii) On land where the property has not been defined, the coordinates within which the activity is to be undertaken.	**Section C** of this Report (i) N/A (ii) N/A

(d) a description of the scope of the proposed activity, including – (i) All listed and specified activities triggered and being applied for; and (ii) A description of the activities to be undertaken including associated structures and infrastructure	**Section D** of this Report (i) **Section D** of this Report (ii) **Section D** of this Report
(e) A description of the policy and legislative context within which the development is proposed, including – (a) An identification of all legislation, policies, plans, guidelines, spatial tools, municipal development planning frameworks and instruments that are applicable to this activity and have been considered in preparation of the report; and (b) How the proposed activity complies with and responds to the legislation and policy context, plans, guidelines, tools frameworks and instruments.	**Section E** of this Report (i) **Section E** of this Report (ii) **Section E** of this Report
(f) A motivation for the need and desirability for the proposed development, including the need and desirability of the activity in the context of the preferred location.	**Section F** of this report
(g) A motivation for the preferred site, activity and technology alternative	**Section G** of this report.
(h) A full description of the process followed to reach the proposed preferred alternative within the site including: (i) Details of all alternatives considered. (ii) Details of the public participation process undertaken in terms of regulation 41 of the regulations, including copies and supporting documents and inputs. (iii) A Summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them. (iv) The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects. (v) The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration and probability of the impacts, including the degree to which these impacts – (aa) can be reversed (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed or mitigated. (vi) The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives. (vii) Positive and negative impacts that the proposed activity and alternatives will have on the	 **Section G** of this report. **Section H** to be completed in Draft and Final BAR. **Section H (1)** to be completed in Draft and Final BAR. **Section H (2)** only the preferred alternative has been assessed, as further updated specialist studies will be required. This is just a consultation BAR however a proposed alternative is mentioned. **Section H (4)** Same as above. **Section H (3)** of this report for the preferred alternative in the draft BAR and Final BAR this section will be completed fully.

environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects. (viii) The possible mitigation measures that could be applied and level residual risk (ix) The outcome of the site selection matrix (x) If no alternatives, including alternative locations for the activity were investigated, the motivation for not considering such; and (xi) A concluding statement indicating the preferred alternatives, including the preferred location of the activity.	**Section H (5)** of this report for the preferred alternative in the draft BAR and Final BAR this section will be completed fully. **Section I** to be included in draft and Final BAR. **Section G** to be included in draft and Final BAR. **Section I** to be included in draft and Final BAR.

Section A

Details of the EAP that prepared the draft Basic Assessment Report

Consultation Basic Assessment Report has been compiled by:	Eco Route Environmental Consultancy
Environmental Assessment Practitioner:	Bianca Gilfillan
Highest Qualification:	BSc. Hons. Environmental Science, ND and BTECH: Environmental Management
Postal Address:	P.O. Box 1252 Sedgefield 6573
Office Tel:	044 343 2232
Cell:	079 189 5060
Fax:	086 402 9562
Email:	bianca@ecoroute.co.za

Expertise of the EAP, including a Curriculum Vitae

EXPERIENCE AND COMPETENCY– Environmental Impact Assessment

Name of Team member and role	Project	Notes
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Basic Assessment Applications for Municipalities in the Western Cape Region and ASLA Devco (Pty)Ltd, including Hessequa Municipality, Cape Agulhas Municipality, Matzikama Municipality etc.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Low-cost housing development in Swellendam.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Various residential developments along the West Coast incl. Langebaan, Jacobsbaai, St Helena Bay, Dwarskersbos and Elands Bay.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Extension and development of Zweletemba Township (Worcester) abutting the Hex River including river flood mitigation works.	Environmental Authorization was obtained.

Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of resorts, tourist facilities, golf course and residential accommodation at Quaggaskloof, Worcester.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Applications for equestrian Estate in the West Coast and Boland areas.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Upgrade of the Water Treatment Works in Vanryhnsdorp.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Optimisation of existing Radnor Compost Facility, Parow and establishment of a Materials Recovery Facility (MRF), a Refuse Transfer Station (RTS) and a Composting Facility - i.e. an Integrated Waste Management Facility (IWMF).	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Rezoning and construction of an incinerator at Swartklip Products, Khayelitsha.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Extension of the Khayelitsha Railway Line, Cape Town.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development and upgrading of various service stations, convenience stores and car wash facilities for ENGEN Petroleum Ltd.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Construction of a pipeline from the Potsdam Wastewater Treatment Works (WWTW) to a reservoir, Durbanville.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Relocation of a golf course and development of tourist facilities and residential accommodation at Clanwilliam Dam, Clanwilliam.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of chicken farms and upgrading of abattoirs, Cape Town.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Wind farm development in Hopefield and Beaufort West.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Rerouting and establishment of a new pipeline at Lebanon, mountain area.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of housing units at Royal Palms, Paarl.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of a waste disposal site in Murraysburg, Beaufort West.	Environmental Authorization was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner – Environmental Control Officer	• Soil erosion as a result of wildfires in the Cape Peninsula Mountains. • Zweletemba Township extension, Worcester. • Mfuleni flood relief housing project. • Extension of Khayelitsha Railway Line, Cape Town. • Various projects in sensitive environments for Sentech, the City of Cape Town, Breede Valley Municipality, Shoprite Checkers Properties etc. • Housing developments in Dwarskersbos, Velddrift and Laaiplek. • Housing development in Atlantis, Kanonkop. • Construction of substations in Cape Town for COCT. • Low-cost housing in Swellendam for the Municipality.	Approval obtained.
Name: Bianca Gilfillan	• Boskloof Farm Eurepgap compliance for the use of "virgin land" for export vineyards.	Approval obtained.

Role: Environmental Assessment Practitioner- Audits	• Food and human health safety at Protea Boerdery, Worcester for Eurepgap. • ISO 14000 Management systems. • Various Filling Service Stations	

CURRICULUM VITAE (CV)

Position Title and No.	Senior Environmental Assessment Practitioner
Name of Expert:	Bianca Gilfillan
Date of Birth:	20/12/1981
Country of Citizenship/Residence	South Africa

Education:

Institution: University of Technology: CPUT

Year: 2002

Degree: National Diploma in Environmental Management

Institution: University of Technology: CPUT

Year: 2003

Degree: BTECH: Environmental Management

Institution: University of the Western Cape

Year: 2009

Degree: BSc. Hons in Environmental Science

Institution: Stellenbosch University

Year: present

Degree: MPhil.: Environmental Management

Employment record relevant to the assignment:

Period	Employing organization and your title/position. Contact info for references	Country	Summary of activities performed relevant to the Assignment

2003 -2021	Senior Environmental Assessment Practitioner Reference: Mr Dupré Lombaard	South Africa	Basic Assessment Reports, Scoping and EIA Reports, Environmental Control Officer, Environmental Management Programmes, Audits
2021-2024	Senior Environmental Assessment Practitioner	South Africa	Environmental Impact Assessments and Environmental Impact Reports pertaining to: • Residential Developments • Industrial Developments • Game Farm Management • Air quality license applications • Environmental Management Programmes • Environmental Control Officer • Filling stations • Agricultural Developments • Audits Environmental Management Programmes & Frameworks pertaining to: • Residential Developments • Industrial Developments • Water use license • Applications • Filling stations • Air quality license applications

Membership in Professional Associations:

International Association for Impact Assessment and EAPASA

Language Skills:

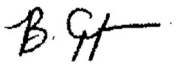
Languages	**Speaking**	**Reading**	**Writing**
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Adequacy for the Assignment:

Detailed Tasks Assigned on Consultant's Team of Experts:	**Reference to Prior Work/Assignments that Best Illustrate Capability to Handle the Assigned Tasks**
{List all deliverables/tasks as in TECH- 5 in which the Expert will be involved)	Ms. Gilfillan has successfully completed a variety of Environmental Impact Assessment applications and Environmental Management Programme reports. Her expertise encompasses the assessment of diverse development projects, contributing significantly to well-informed planning and decision-making processes.

Certification :

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the assignment in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client, and/or sanctions by the Bank.

Bianca Gilfillan  March 2025

Name of Expert | Signature | Date

Section B

Location Information

Province:	Western Cape
District Municipality:	Garden Route Municipality
Local Municipality:	Knysna Municipality
Ward number(s):	Ward 1
Nearest town(s):	Knysna
Erf name(s) and number(s):	79/205

Property Information

Erf Number	Portion 79/205
Surveyor General 21-digit code:	C03900000000020500079
Zoning:	Agriculture Zone I
Urban Edge:	Outside
Applicant name:	Daniel Sevenster and Partners In
Registration number (if the applicant is a company):	2008/004690/21
Trading name (if any):	The Optical Center Sandton
Responsible person name:	Mr Daniel Sevenster
Responsible position, e.g. Director, CEO, etc.:	Director
Physical address of applicant:	Shop L14D lower level ENTRANCE 4 Sandton City Shopping Center 83 Rivonia Rd, Sandhurst, Sandton
Postal code:	2196
Telephone:	(011) 883 1312
Fax:	0832973398
E-mail:	Daniel.Sevenster@gmail.com
GPS point middle of property: **Portion 0** **Portion 79**	 - 34°0'54.38S 22°50'31.21E - 34°2'23.85S 22°49'28.57E

Property Description

Portion 79 of Farm Ruygte Valley No. 205, located to the east of Cola Beach in the Groenvlei rural area of Sedgefield, Western Cape, encompasses an area of 5.1576 hectares. It is bordered to the south by coastal public property and adjoins Portion 78, which is designated as a private nature reserve, as well as the Lake Pleasant Private Nature Reserve. The northern section of this property falls within a Critical Biodiversity Area (CBA1), while the southern section is classified as a degraded Critical Biodiversity Area (CBA2), according to the Western Cape Biodiversity Spatial Plan (WCBSP 2025). The site features Goukamma Strandveld, which is categorized as Vulnerable (SANBI VegMap2025), with the Western Cape Milkwood Forest situated in the CBA1 to the north and vegetation invaded by *Acacia cyclops* present in the CBA2 to the south. The southern coastal boundary is characterized by steep sandstone cliffs exceeding 80 meters in height, presenting a significant geological feature. The proposed development site is adjacent to portions of the Lake Pleasant Private Nature Reserve, and the northern area of the property is located within a Critical Biodiversity Area. Given the presence of the sandstone sea cliffs and the critical biodiversity, it is imperative that this site be regarded as a wilderness special area. Any proposed development must align with the existing unique wilderness character and sense of place inherent to the location.

Access to the property is facilitated via Groenvlei Beach Road, a gravel road that leads to the western beach of the Goukamma Nature Reserve, as well as a partially overgrown Public Servitude Road, known as Bushy Way. This road connects to the N2 highway via Groenvlei Divisional Road (DR 1594). Currently, the property remains undeveloped and is designated as Agriculture Zone I under the Knysna Zoning Scheme By-Law, permitting a dwelling house as a primary right. This property is part of a smallholding area established following the subdivision of Portion 70 of Farm Ruygte Valley in 1961. The original farm portion was designated as Portion 38, referred to as Lake Pleasant Estate.

The proposed development encompasses a dwelling of 200 square meters, three self-catering tourist chalets each measuring 65 square meters, 50 square meters of staff housing, an equipment shed totaling 80 square meters, a designated parking area, and a 200-meter long gravel access road with a width of less than three meters. The overall footprint of the development will be 1,175 square meters (0.1175 hectares) within the degraded Critical Biodiversity Area 2 (CBA2) in the southern region. The infrastructure will include rainwater harvesting tanks, conservancy tanks, solar electricity systems, and arrangements for off-site waste removal. This development proposal is in accordance with the Knysna Spatial Development Framework 2020 and the Rural Areas Guidelines 2019, aiming to foster eco-tourism and conservation initiatives through the rezoning process to Open Space III.

The landowners intend to establish residency on the property, necessitating the construction of a modest dwelling of approximately 200 square meters. The establishment of a dwelling house is classified as a primary right under the current zoning regulations. To augment their income, the landowners plan to develop three small self-catering tourist accommodation units, each approximately 65 square meters in area. Additional structures will comprise staff housing of around 50 square meters and an 80-square-meter shed dedicated to the storage of agricultural equipment essential for land maintenance. A gravel access road, measuring less than three meters wide, is proposed along the eastern boundary, which will provide access to a designated parking area. Access to the dwelling and the accommodation units will be facilitated through a constructed boardwalk.

The overarching development concept aims to create a tranquil private retreat within a natural setting. The architectural design will prioritise environmental sensitivity, employing building materials such as steel, timber, glass, and natural stone, as opposed to traditional brick and concrete. The total building footprint will amount to 525 square meters, with the planned access road extending approximately 200 meters in length and three meters in width, concluding at a parking area that will comprise around 660 square meters. In total, the developed area will constitute approximately 1,175 square meters, representing less than 0.02% of the entire site, thereby preserving 99.98% of the site in its natural state.

Although the property is classified for Agricultural I purposes, it is deemed unsuitable for farming activities due to the presence of indigenous vegetation and its designation as a Critical Biodiversity Area (CBA). Currently, the property remains undeveloped and is accessible via an unimproved road, which is legally protected as a servitude road registered over the Remainder of Portion 70/205.

The region is characterised by coastal sand dunes, underlain by fossilized dune formations. This area features a layer of soft and semi-consolidated materials that overlay a sandstone formation with an east-west orientation, dipping at an angle of 45 degrees to the south at depths ranging from 60 to 80 meters. Observations derived from the geophysical survey indicate a significant transition in the sandy overburden, occurring between depths of 15 meters and 25 meters. Additionally, a structurally weak point has been identified at a depth of 120 meters.

The designated area is classified as having low slopes, distinguished by the presence of tall trees at the 65-meter contour, with slope angles varying from 0 to 21 degrees. In contrast, there are substantial slope gradients originating from the benchmark area and extending towards the lookout point and the coastline, where the terrain is primarily covered in coastal shrubs. This segment spans from the 75-meter contour to sea level, exhibiting slope angles between 26 and 70 degrees over a distance of 50 meters. The expanse extending from the lookout to the coastal zone is identified as a high-risk area due to the pronounced steepness of the slopes.

The soil profile at the Lookout Point test pit is predominantly composed of silty loam, sandy loam, and sand at varying depths. One of the test pits showcases a combination of silty loam and sandy loam. Both sites feature organic-rich top layers; however, the organic layer is observed to be significantly deeper at one location, indicating a more developed and mature soil profile with in-situ development. The topsoil in this region is characterized by a loose texture, which renders it highly susceptible to erosion. The combination of steep slopes and high erodibility values serves as a significant indicator of potential soil movement. The moisture content is within anticipated parameters, typical for coastal regions characterized by substantial organic layers.

A well-established coastal forest is present, extending from the 65-meter contour and gradually tapering towards the 30-meter coastal zone, where it transitions to shrubbery. This observation is corroborated by historical satellite imagery. Soil samples have revealed the presence of roots at depths of 60 centimeters and greater, indicative of robust vegetation that contributes to the stabilization of the dune system. Furthermore, from 2005 to 2024, there has been consistent vegetative growth from the 25-meter contour inland, which demonstrates the long-term stability of the dune system.

A modest increase in seasonal rainfall is anticipated, rising from 196 mm to 202 mm over the next century, while a decline in average rainfall is projected. By the year 2050, the region is expected to experience four fewer days of extreme rainfall events. Currently, the risk of coastal flooding at the property is low, and this is expected to remain very low by 2050. Additionally, average wind speeds in the area are recorded at 5.75 m/s.

The 100-year low-risk projection indicates that the coastal zone will coincide with the 40-meter contour, which serves as the property boundary. In contrast, the high-risk projection suggests that the coastal zone will reach Lookout Point, located 50 meters from the current coastal line.

Section C - Locality Map

FIGURE 1: LOCALITY MAP

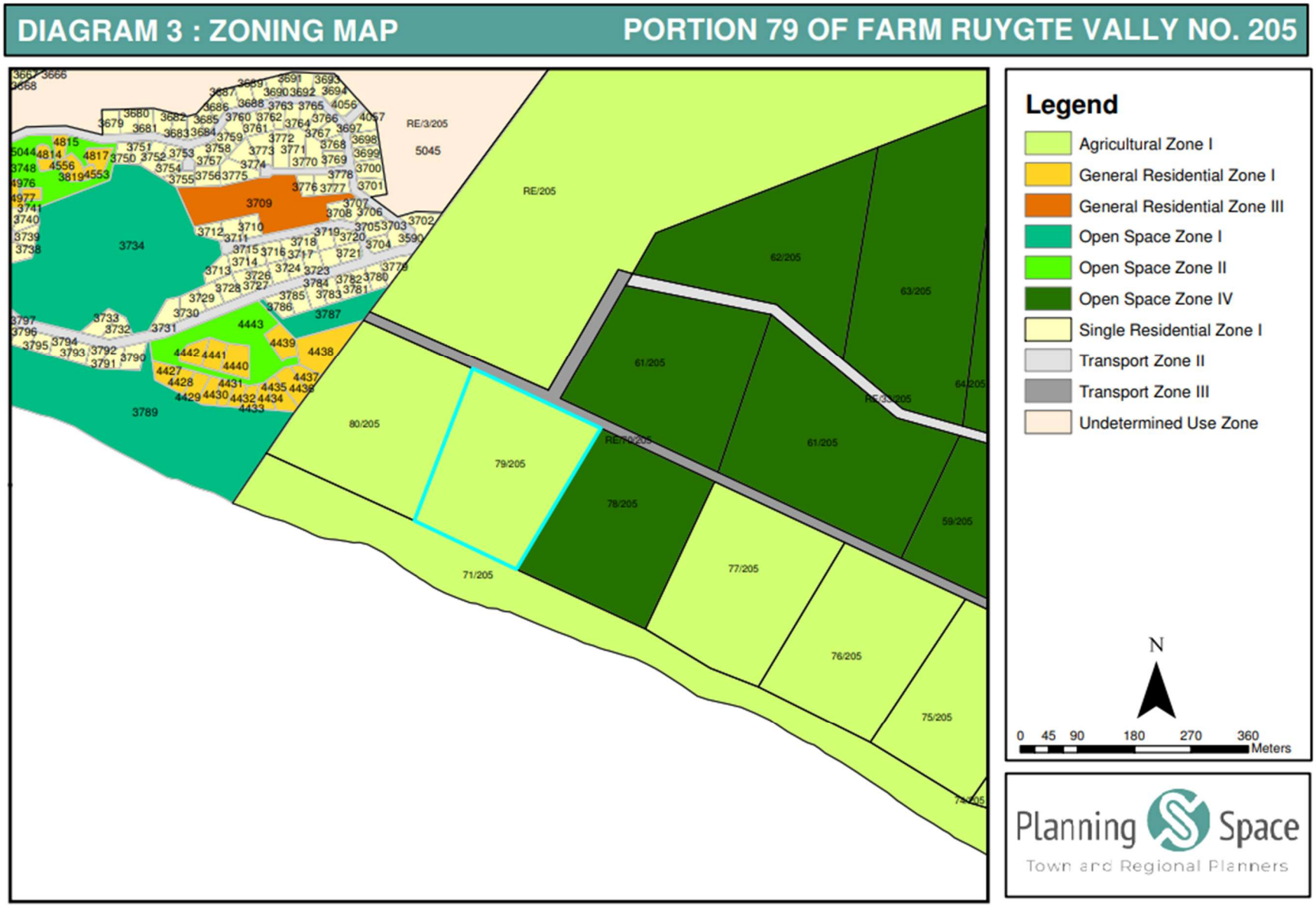


FIGURE 2: ZONING MAP, TOWN PLANNING REPORT, PLANNING SPACE TOWN AND REGIONAL PLANNERS

SITE:

FIGURE 3: INDICATION THAT THE ENTIRE PROPOSED DEVELOPMENT WILL FALL WITHIN THE 100-METER HIGH-WATER MARK

The Western Cape Biodiversity Spatial Plan (WCBSP) designates the property as situated within a Critical Biodiversity Area (CBA:1 – to maintain and CBA:2 – to restore), including features related to terrestrial biodiversity and forest regions.

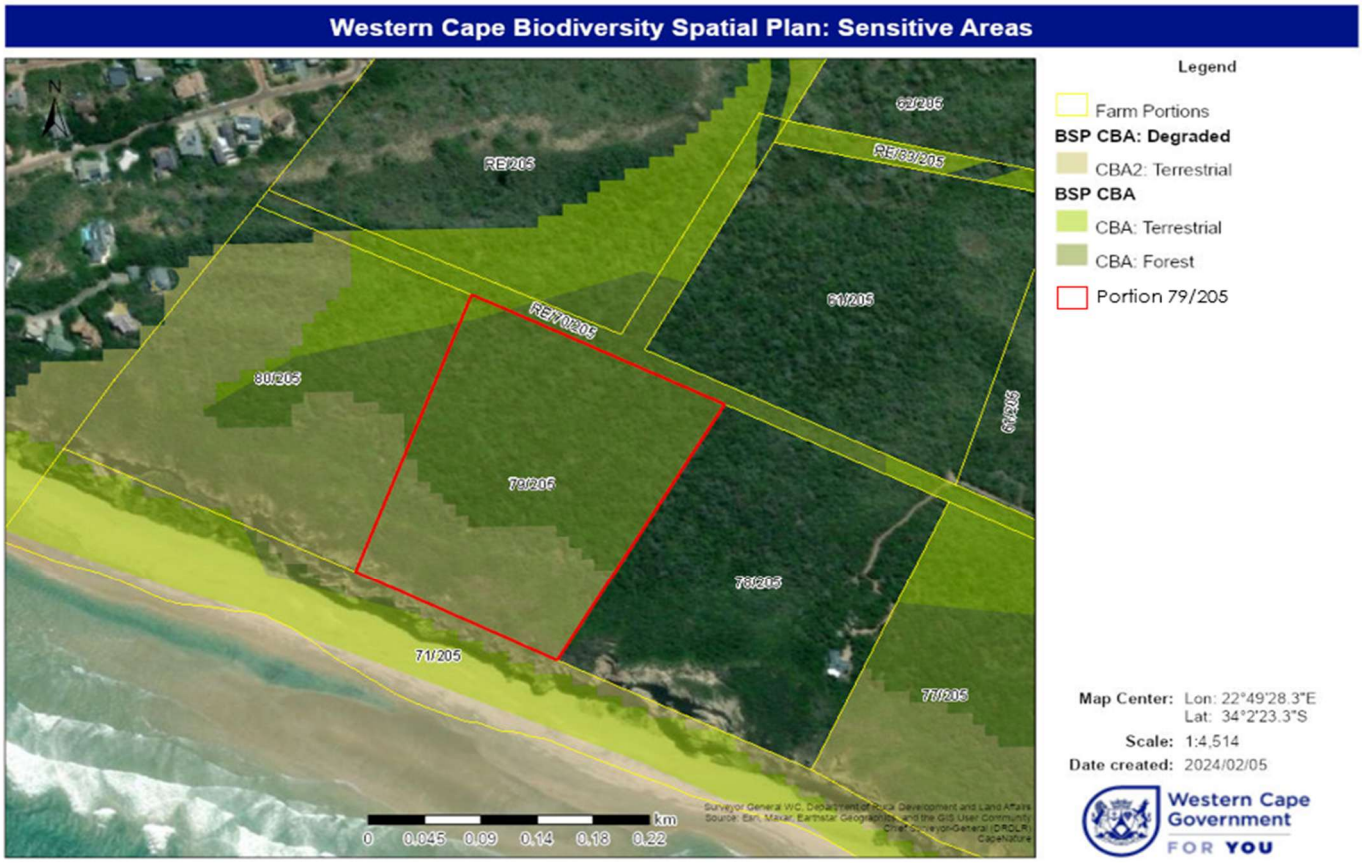


FIGURE 4: WESTERN CAPE BIODIVERSITY SPATIAL PLAN (2017) PROTECTED AREAS (CBA 1 AND CBA 2)

FIGURE 5: SANBI ORIGINAL ECOSYSTEM STATUS INDICATING GOUKAMMA DUNE THICKET

FIGURE 6: SANBI REMAINING ECOSYSTEM STATUS STILL INCLUDING GOUKAMMA DUNE THICKET

Critical Biodiversity Area 1:

Definition: Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.

Objective: Maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.

Critical Biodiversity Area 2:

Definition: Areas in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.

Objective: Maintain in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land-uses are appropriate.

FIGURE 7: INDICATION THAT THE ENTIRE PROPOSED DEVELOPMENT WILL FALL WITHIN THE 100-METER HIGH-WATER MARK

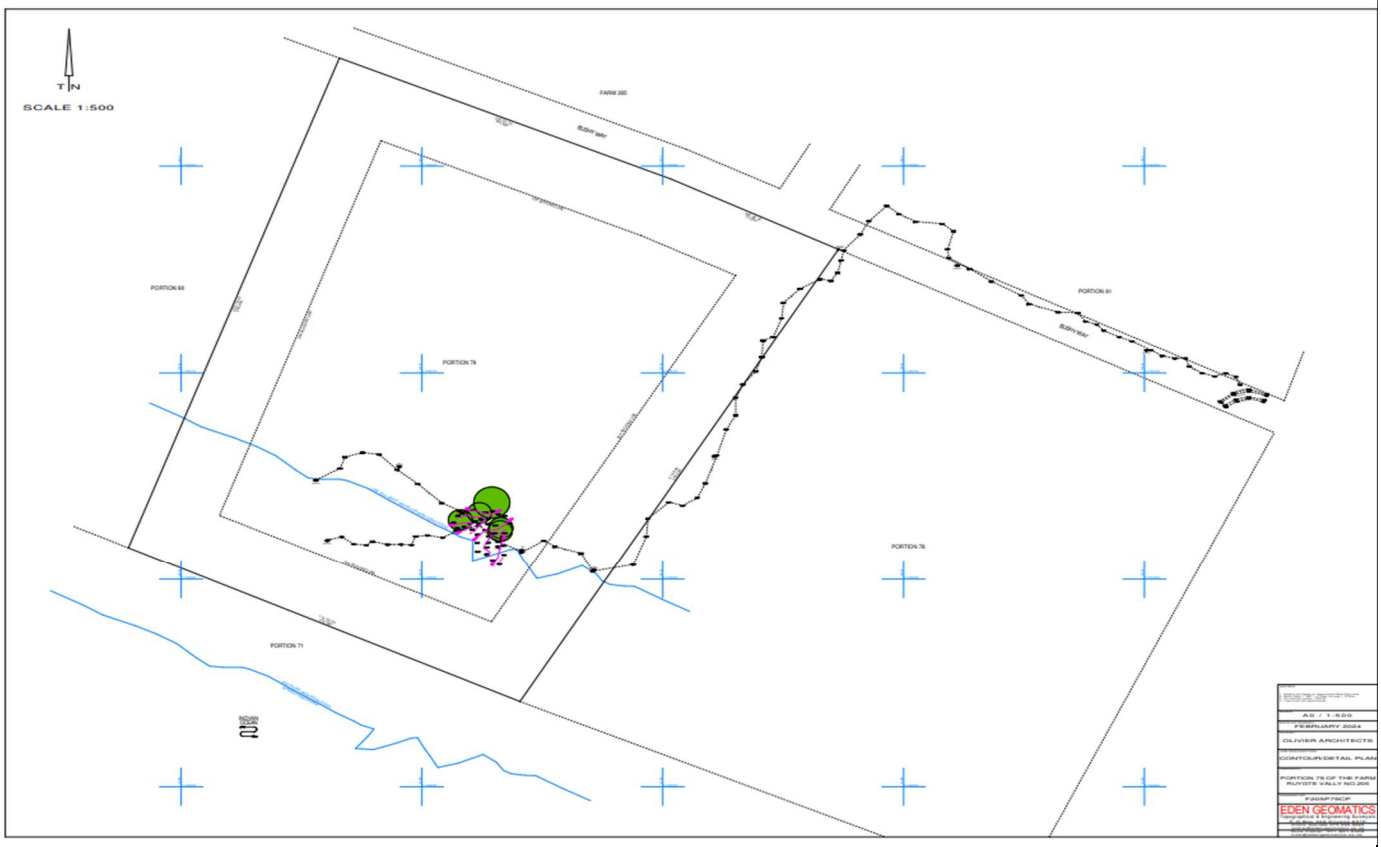


FIGURE 8: 100-METER HIGH-WATER MARK (AS INDICATED BY OLIVIER ARCHITECTS, FEBRUARY 2024)

The 100-year low-risk projection indicates that the coastal zone is expected to align with the 40-meter contour line, which represents the property boundary. In contrast, the high-risk projection suggests that the coastal zone may reach Lookout Point, situated 50 meters from the current coastal area.

Flooding projections for the year 2100 indicate that the 100-year coastal flood line may coincide with the coordinates of Lookout Point. Satellite imagery measurements from the period 2005 to 2024 suggest that the coastal zone could potentially advance inland by 30 meters over the next century, based on an observed rate of 6 meters of movement every 20 years. This projection aligns with the low-risk coastal flooding estimates, which correspond with the 40-meter contour line and reflect the current property boundary.

Section D

Description of the scope of the proposed activity

The Applicant plans to develop a primary residence, three cottage accommodations, a vehicle parking facility, and a garage/storeroom on the property. Additionally, the establishment of an access road through the existing dense vegetation on the site is required. This property is situated within Knysna Municipality Ward 1, to the east of Sedgefield, and is currently classified under Agriculture 1 zoning.

The landowners aspire to reside on the property and are therefore seeking to construct a modest dwelling of approximately 200 square meters. The construction of a dwelling house constitutes a primary right under the current zoning regulations. To enhance their income, it is their intention to create three small self-catering tourist accommodation units, each measuring approximately 65 square meters. Ancillary structures will include staff housing of approximately 50 square meters and a shed of 80 square meters, intended for the storage of agricultural equipment necessary for land maintenance. A gravel access road, less than three meters in width, is proposed along the eastern boundary and will lead to a designated parking area. Access to the dwelling and accommodation units will be facilitated via a constructed boardwalk.

The development concept is to create a quiet private hideaway within a natural environment. The architecture will be light and environmentally sensitive. Building materials will be steel & timber and glass & natural stone as opposed to brick and concrete. The building footprint will measure 525m² in total, and the planned access road will be about 200m long and 3m wide, ending in a parking area that calculates to about 660m². The total development area will amount to about 1 175m², which accounts for less than 0.02% of the site, leaving 99.98% of the site in a natural state. The Preliminary Geotechnical and Geomatic Report (Page 38) identifies the PE location (75 m above sea level) as within the 100 m HWM, 15 m north of the 100-year high-risk flooding projection, while BM (72 m) is on the 100 m HWM line and HW2 (70 m) is north of it.

The WCBSP map for Knysna shows that most of the site is within a CBA1 area, with a band of CBA2 along the southern part of the site. There are also two ESA2 areas on site. There are several protected areas in nearby areas, including the neighbouring property to the east (which is already partly developed!). The more inland areas that are protected are Lake Pleasant Nature Reserve.

According to CapeNature (2024) 2023, Western Cape Biodiversity Spatial Plan and Guidelines the northern portion of the site is identified as a Critical Biodiversity area while the southern section is identified as a degraded Critical Biodiversity Area. The buildings are proposed in the degraded southern section of the site. The requirement for CBA2 areas is that the site should be maintained in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate.

The placement of the units aligns with the findings of the Terrestrial Biodiversity Assessment. The study confirmed that the property is within one mapped regional terrestrial vegetation type, namely Goukamma Strandveld. The vegetation map also shows Cape Seashore Vegetation, which occurs at the base of the cliffs and not above the cliffs

where the proposed development is situated. Any natural vegetation on site would therefore fall within Goukamma Strandveld. Parabolic dunes occur along the coastal margin, with inland ridges supporting Knysna Sand Fynbos. Mesic Dune Thicket patches are common in the Goukamma Strandveld, and in fire-protected and locally wet areas, they grow into forests. Altitude ranging between 1 – 196 metres (median 49 m). The property is zoned for Agriculture, which carries rights with respect to dwellings that can be constructed. Given the existing rights, the small, proposed footprint and intent to protect the remaining undeveloped parts of the site from any other loss of vegetation, the proposal provides a compromise that is supportive of conservation. This makes the proposed development as compatible as possible with conservation planning and biodiversity protection while exercising existing rights. On condition the risks to coastal forest ecosystems are well managed, the proposed project can be approved.

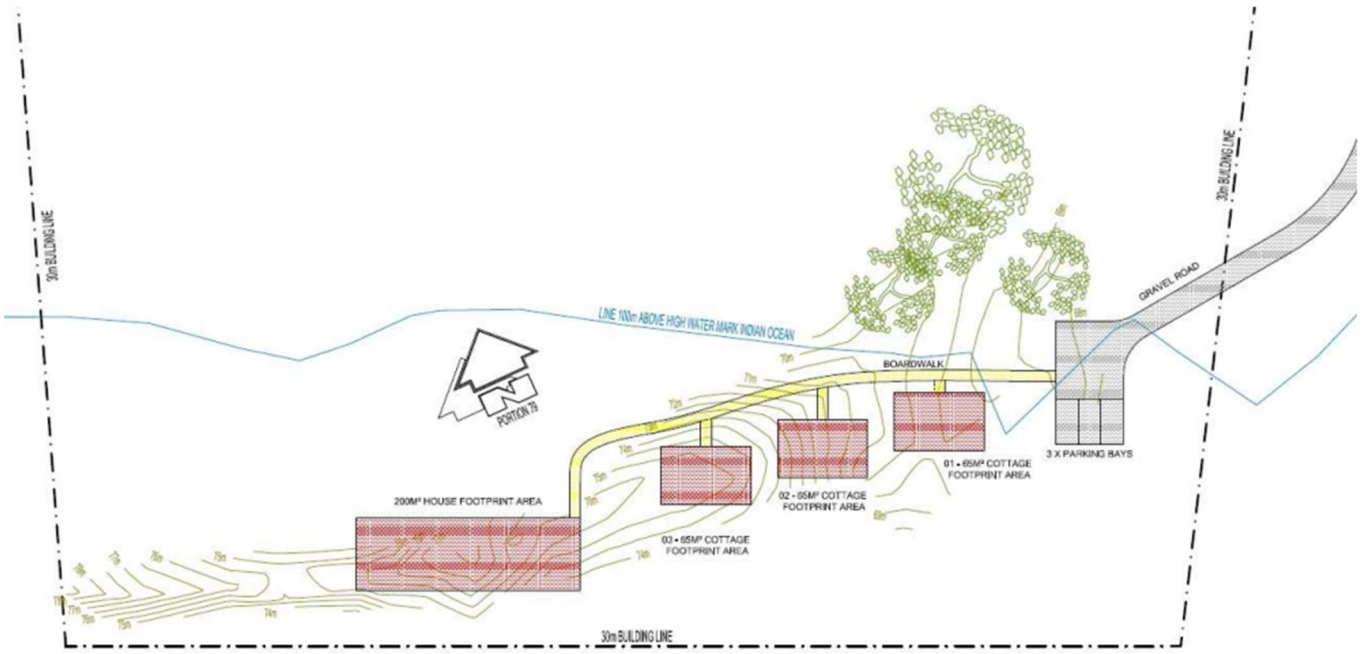


FIGURE 9: SITE PLAN AND CONCEPT DESIGN

Electricity

There is currently no electrical infrastructure present on the property or in the adjacent road reserve. It is advisable to consider the installation of a solar power facility in this location.

Solar plant

Type and system

The solar plant will be developed as an off-grid installation, utilizing solar energy to supply the load during daylight hours while recharging the batteries at night. Furthermore, grid-tied photovoltaic inverters may be integrated into this micro-grid configuration through AC coupling, should the energy demand surpass the generation capacity.

Plant location

It is advisable to consider the installation of a roof-mounted solar power system on the roofs of both the main residence and the three small self-catering tourist accommodation units, should there be a requirement for increased energy generation capacity.

Plant capacity

The proposed system is designed with a capacity of 15 kWh, while the anticipated peak consumption is estimated to reach 30 kWh per day.

Energy Storage
A sealed Lithium Iron Phosphate battery system is proposed, which is expected to provide a lifespan exceeding 10 years at a depth of discharge of 70%. Additionally, this system offers an expedited charging time, enhancing its operational efficiency.

Area/Street lighting
The road lighting system will utilise low-intensity, low-level bollard luminaires. Each luminaire will be powered by an individual small solar cell and will activate solely upon detecting motion.

Description of the NEMA listed activities associated with the project

Before any of the below-listed activities can commence, authorisation must be obtained from the Department of Environmental Affairs (DEA). The following activities, as per NEMA Regulations, have been identified below:

Listed activity as described in GN R.325, 324, 327	Description of project activity
GN R.327 activity 17: Development— (i) in the sea. (ii) in an estuary. (iii) within the littoral active zone. (iv) in front of a development setback; or (v) if no development setback exists, within a **distance of 100 metres inland** of **the high-water mark** of the sea or an estuary, whichever is the greater. in respect of— (a) fixed or floating jetties and slipways. (b) tidal pools. (c) embankments. (d) rock revetments or stabilising structures, including stabilising walls; or (e) **infrastructure or structures with a development footprint of 50 square metres or more** — but excluding— (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour. (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies. (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.	The current indicated area for proposed development falls within the 100-meter high-water mark.

GN R.327 activity 19A: The infilling or depositing of any material of more than 5 cubic metres into, or the **dredging, excavation, removal or moving of** soil, sand, shells, shell grit, pebbles or rock of more than **5 cubic metres** from— (i) the seashore; (ii) the littoral active zone, an estuary or a distance of **100 metres inland** of the **high-water mark** of the sea or an estuary, whichever distance is the greater: or (iii) the sea; — but excluding where such infilling, depositing, dredging, excavation, removal or moving— (a) will occur behind a development setback. (b) is for maintenance purposes undertaken in accordance with a maintenance management plan. (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies. (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	Excavation of building the primary property within 100-meter of the high-water mark will require excavation of more than 5 cubic meters.

FIGURE 10: AN INDICATION THAT THE ENTIRE PROPOSED DEVELOPMENT WILL FALL WITHIN THE 100-METER HIGH-WATER MARK

GN R.327 activity 27: The **clearance of an area of 1 hectares or more**, but less than 20 hectares, **of indigenous vegetation**, except where such clearance of indigenous vegetation is required for—	Construction of both the primary dwelling and an access road may require the removal of indigenous Goukamma Dune Thicket more than 1 Ha.

the undertaking of a linear activity; or maintenance purposes undertaken in accordance with a maintenance management plan.	
GN R.324 activity 4: The development of a road wider than 4 metres with a reserve less than 13,5 metres. **Western Cape:** i. Areas zoned for use as public open space or equivalent zoning. ii. **Areas outside urban areas**. (aa) Areas containing indigenous vegetation. (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: Areas zoned for conservation use, or Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	Portion 79 of Farm 205 is located outside the urban area; therefore, the development of an access road that exceeds this threshold will trigger this listed activity and require environmental authorisation.

FIGURE 11: SANBI REMAINING ECOSYSTEM STATUS STILL INCLUDES GOUKAMMA DUNE THICKET

The principles articulated in Section 2 of the National Environmental Management Act of 1998 (Act 107 of 1998), as amended, stipulate that environmental management must prioritise the needs of individuals. It is essential that this approach addresses the physical, psychological, developmental, cultural, and social interests of people in a just and equitable manner.

The Applicant plans to develop a primary residence and three cottage accommodations, alongside a vehicle parking facility and a garage/storeroom on the property. Located in Knysna Municipality Ward 1, east of Sedgefield, the land is currently zoned for Agriculture 1. The owners intend to build a modest dwelling of about 200 square meters, which aligns with zoning regulations. To generate income, they will create three small self-catering tourist units of

approximately 65 square meters each. Ancillary structures will include staff housing (50 square meters) and a shed for agricultural equipment (80 square meters). A less than three-meter-wide gravel access road is planned along the eastern boundary, leading to a parking area and a constructed boardwalk for access to the dwelling and accommodations.

Development must be socially, environmentally and economically sustainable:

Social Sustainability

Social sustainability involves fostering community well-being, ensuring equitable access to resources, and minimizing negative impacts on local lifestyles. The public will evaluate the development based on its effects on community cohesion, cultural heritage, and environmental quality.

Positive Impact: The development's eco-tourism focus, with three self-catering cottages, aligns with Sedgefield's identity as a seaside village along the Garden Route, attracting low-impact tourism (Town Planning Report, Appendix D5, Page 8). This can enhance local pride and provide opportunities for community engagement, such as guided nature walks or cultural tours linked to the Goukamma Strandveld ecosystem (Terrestrial Biodiversity Assessment, Appendix D4).

Public Concern: Residents, particularly those near Cola Beach (700 m west) or the neighbouring residence (250 m east), may worry about restricted access to Groenvlei Beach, a local favourite for fishing and recreation (Visual Compliance Statement, Appendix D1, Page 10). The Preliminary Geotechnical and Geomatic Report (Appendix D2, Page 38) notes the 100 m high-water mark (HWM) as a regulatory boundary, and any perceived privatization of coastal access could spark opposition.

Mitigation: Ensure public access to Groenvlei Beach via the existing Public Servitude Road (Bushy Way) and Groenvlei Beach Road, as outlined in the Town Planning Report (Appendix D5, Page 10). Engage the community through public consultations by Q3 2025 to address access concerns and promote the project as a community asset, potentially offering local educational programs on coastal conservation.

The proposed development will generate valuable employment opportunities during the construction phase, providing jobs for local workers, supporting skilled trades, and stimulating economic growth in the community.

Environmentally

The proposed development aligns with environmental legislation and sustainability principles by incorporating responsible land-use planning within a Critical Biodiversity Area (CBA). This designation underscores the site's ecological significance, ensuring that conservation measures are integrated into the development process. The project is designed to minimise environmental impact by preserving indigenous vegetation, which serves as a habitat for diverse flora and fauna while maintaining the integrity of the coastal forest. This forest plays a vital role in stabilising the dunes, preventing erosion, and safeguarding the broader ecosystem.

Additionally, the development framework adheres to climate resilience strategies, as projections indicate a low risk of coastal flooding. The sandy loam and organic-rich soil present on-site further contribute to biodiversity conservation and carbon sequestration, enhancing long-term environmental sustainability. While climate variability may alter rainfall patterns, the site's ecological resilience ensures its continued stability. By incorporating environmentally sensitive design principles and adhering to relevant environmental legislation, the proposed development strikes a balance between sustainable use and ecological preservation, supporting long-term conservation objectives.

Positive Impact: The Visual Compliance Statement (Appendix D1, Page 11) confirms minimal visual impact due to the site's high Visual Absorption Capacity (VAC), with dense Fynbos vegetation and 70 m cliffs screening the development from Groenvlei Beach, the N2, and Cola Beach. The public values the unspoilt natural landscape, including vistas

toward Gericke's Point and the Outeniqua Mountains (Visual Compliance Statement, Appendix D1, Page 6), which the project preserves.

Public Concern: Temporary construction impacts, such as dust, debris, and vegetation removal in the degraded CBA2 area, could disrupt the area's aesthetic appeal and ecological balance, particularly within the 100 m HWM (Visual Compliance Statement, Page 11; Preliminary Geotechnical and Geomatic Report, Appendix D2, Page 36). Residents may fear long-term erosion risks, given the 4-6 m dune retreat over 19 years (2005-2024) and projected 30 m inland movement by 2100 (Preliminary Geotechnical and Geomatic Report, Page 27).

Mitigation: Implement dust suppression, daylight-only construction, and a rehabilitation strategy to salvage and replant native vegetation, as recommended (Visual Compliance Statement, Appendix D1, Page 11). Use erosion control measures (e.g., dune stabilization) at the **PE** location if chosen, and prioritize **BM** or **HW2** (on/north of the 100 m HWM) to reduce erosion risks (Preliminary Geotechnical and Geomatic Report, Appendix D2, Page 38). Communicate these measures through community forums to build trust.

Economically

The economic viability of the proposed development is strongly rooted in the property's pristine natural environment, which offers substantial opportunities for sustainable, eco-friendly growth. By leveraging the site's ecological assets, the project can foster low-impact tourism and conservation-based land use, aligning with global trends in responsible tourism and green investment. This approach not only ensures economic sustainability but also reinforces environmental preservation as a key driver of long-term value.

Strategically located near well-established ecotourism hubs such as the Goukamma Nature Reserve and the Sedgefield tourism corridor, the property is well-positioned to attract visitors seeking immersive nature experiences. This proximity enhances the potential for eco-tourism initiatives that contribute to the local economy while maintaining ecological integrity. Additionally, the site's conservation value presents opportunities for financial incentives, such as participation in carbon credit programs. These mechanisms provide an economic framework that balances financial returns with long-term environmental conservation, securing a future where economic growth and ecological sustainability coexist harmoniously.

Economic sustainability requires the development to generate long-term economic benefits, support local livelihoods, and remain financially viable without overburdening public resources. The public expects job creation, tourism revenue, and infrastructure improvements that enhance Sedgefield's economy.

<u>Job Creation and Local Economy:</u>

Positive Impact: The development's tourist cottages will attract visitors to the Garden Route, boosting local businesses such as restaurants, shops, and tour operators in Sedgefield (Town Planning Report, Appendix D5, Page 8). Construction and operation (e.g., staff for cottages, maintenance) will create 5-10 direct jobs (e.g., builders, cleaners, managers) and indirect jobs through supply chains (Town Planning Report, Appendix D5, Page 7). Local employment for the 50 m² staff quarters enhances economic inclusion.

Public Concern: Jobs may be low-skill or seasonal, limiting long-term economic benefits. The public may question whether the small-scale project (three cottages) justifies infrastructure costs, such as extending the gravel road from Groenvlei Beach Road (Visual Compliance Statement, Appendix D1, Page 6).

Mitigation: Partner with local training programs to upskill workers for sustainable roles (e.g., eco-tourism guides). Ensure contracts prioritize local suppliers for materials and services. Conduct a cost-benefit analysis by Q3 2025 to confirm the project's economic viability, sharing results with the community to demonstrate value.

Infrastructure and Public Resources:

Positive Impact: The development's off-grid infrastructure (solar power, rainwater tanks, conservancy tanks) minimizes strain on municipal services, aligning with sustainable resource use (Town Planning Report, Appendix D5, Page 11). Upgrading the Public Servitude Road (Bushy Way) could improve access to Groenvlei Beach for all residents (Town Planning Report, Appendix D5, Page 10).

Public Concern: Extending the gravel road and managing construction impacts (e.g., dust, debris) may temporarily disrupt residents and tourists on Groenvlei Beach Road (Visual Compliance Statement, Appendix D1, Page 11). The Preliminary Geotechnical and Geomatic Report (Appendix D2, Page 38) highlights the need for municipal approval, and residents may oppose funding infrastructure upgrades if benefits are unclear.

Mitigation: Fund road upgrades privately to avoid burdening public resources, and implement construction management practices (e.g., dust suppression, debris removal) as recommended (Visual Compliance Statement, Appendix D1, Page 11). Ensure the road remains publicly accessible post-construction to benefit the community.

From a public point of view, the development on Portion 79 can be socially and economically sustainable if it prioritises community engagement, local economic empowerment, and environmental preservation. The eco-tourism focus, minimal visual impact, and low flooding risk (Preliminary Geotechnical and Geomatic Report, Page 18) align with Sedgefield's sustainable tourism goals. However, concerns about beach access, construction impacts, and long-term erosion risks (Page 36) must be addressed through robust mitigation and transparency. Relocating dwellings to BM or HW2, enhancing local employment, and ensuring public access to Groenvlei Beach will maximize public support, making the project a model for sustainable coastal development.

(i) that the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimised and remedied.

Biodiversity, heritage and scenic resources all form part of the rural conservation agenda, both at the landscape and farm level. The WCG approach to Conservation is to formally protect priority conservation areas, establish ecological linkages across the rural landscape, and mainstream a conservation ethic into all rural activities.

The objectives for this category, as per the guidelines, are:

- Protect and conserve important terrestrial, aquatic (rivers, wetlands and estuaries) and marine habitats, as identified through a Systematic Biodiversity Planning or similar conservation planning process.
- Facilitate the formal protection of priority conservation areas (public and private), as well as implement conservation management actions for CBAs and ESAs that are not formally proclaimed nature reserves.
- Towards mitigating against the impacts of climate change, to establish ecological corridors across the rural landscape.
- Protect the scenic qualities of the Western Cape's cultural and natural landscapes.
- Protect the Western Cape's rural 'sense of place' and structures of heritage and archaeological significance and ensure that new development respects cultural landscapes and sites.

The Notice of Intent to develop will be submitted to the Department of Heritage for commentary as part of the Draft Basic Assessment Report process.

(ii) that waste is avoided, or where it cannot be altogether avoided, minimised and re-used or recycled where possible and otherwise disposed of in a responsible manner.

The project will implement the waste hierarchy throughout both the construction and operational phases.

- **Waste Avoidance**: Small 1175 m² footprint and eco-sensitive design (light steel, glass) reduce material use (Town Planning Report, Appendix D5, Page 7).
- **Minimization/Reuse**: Cleared *Acacia cyclops* mulched for landscaping; rainwater tanks conserve water (Terrestrial Biodiversity Assessment; Town Planning Report, Appendix D5, Page 11).
- **Recycling/Disposal**: Construction debris managed, recyclables sorted, and non-recyclables disposed at Knysna's licensed facilities (Visual Compliance Statement, Appendix D1, Page 11).

(iii) that the use and exploitation of non-renewable natural resources is responsible and equitable and takes into account the consequences of the depletion of the resource.

No exploitation of non-renewable natural resources will be permitted during the construction and operational phase.

(iv) that the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardised.

No wastage will occur on-site during the construction phase. Rainwater tanks will be established at each building. Solar energy is to be implemented. The development is proposed to be "off-grid".

(v) that a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions.

A methodical and risk-averse approach is being implemented to evaluate the receiving environment and the environmental rights of individuals. The proposed Site Development Plan (SDP) has been structured to integrate the environmental considerations associated with both the site and the surrounding area.

(vi) that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimised and remedied.

Negative environmental impacts and violations of individuals' environmental rights will be systematically assessed. Following this assessment, appropriate mitigation measures will be developed to prevent these detrimental effects and to foster positive environmental outcomes.

The development on Portion 79 of Farm Ruygte Valley No. 205, Sedgefield, addresses negative environmental impacts and protects people's environmental rights through proactive measures, as outlined in the Town Planning Report, Terrestrial Biodiversity Assessment, Visual Compliance Statement, and Preliminary Geotechnical and Geomatic Report. The project minimises ecological harm, ensures coastal stability, and mitigates visual and social impacts, aligning with the National Environmental Management Act (NEMA) principles to prevent, minimise, and remedy environmental impacts.

Section E

Description of the policy and legislative context within which the development is proposed:

The applicant is required to comply with all the required legislation and policies for the proposed development on Portion 79 of Farm 205 Ruygte Valley Sedgefield. The following table indicates the legislation and guidelines of all spheres of government that are applicable to the application as contemplated in the EIA regulations.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE **Permit/ license/ authorisation/comment / relevant consideration** (e.g. rezoning or consent use, building plan approval)	APPLICABILITY TO THE PROPOSED DEVELOPMENT
ENVIRONMENTAL CONSERVATION ACT (ACT 73 OF 1989)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/~~ **RELEVANT CONSIDERATION**	The Environment Conservation Act makes provision for the protection of areas which have particular environmental importance, which are sensitive, or which are under intense pressure from development. In many regions, our coastal zone needs protection for all these reasons.
NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) AND THE 2014 EIA REGULATIONS AS AMENDED IN 2017	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/~~ **AUTHORIZATION** / ~~COMMENT/ RELEVANT CONSIDERATION~~	In the process of a BAR application.
NATIONAL ENVIRONMENTAL MANAGEMENT: BIODIVERSITY ACT (ACT NO 10 OF 2004)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION~~ / **COMMENT/** ~~RELEVANT CONSIDERATION~~	Cape Nature to provide comments. A vegetation Sensitivity analysis specialist study was undertaken.
NATIONAL ENVIRONMENTAL MANAGEMENT: INTEGRATED COASTAL MANAGEMENT ACT (ACT NO 24 OF 2008)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT~~/ **RELEVANT CONSIDERATION**	This Act is applicable to the proposed development as

	Local Authorities that have been identified as relevant Competent Authorities.		it is within the Coastal Zone.
NATIONAL ENVIRONMENTAL MANAGEMENT: PROTECTED AREAS ACT (ACT 57 OF 2003) REGULATIONS FOR THE PROPER ADMINISTRATION OF THE KNYSNA PROTECTED ENVIRONMENT (R 1175 OF DEC 2009)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/~~ **AUTHORIZATION / COMMENT/** ~~RELEVANT CONSIDERATION~~	The property does not fall within the protected area, nor does it border a protected area.
NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/~~ **RELEVANT CONSIDERATION**	The Waste Hierarchy will be adhered to during the construction and operational phases. The EMPr covers the waste disposal aspect in detail.
NATIONAL ENVIRONMENTAL MANAGEMENT: AIR QUALITY ACT (ACT NO 39 OF 2004)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION~~	N/A
NATIONAL FORESTS ACT (ACT 84 OF 1998)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as Local Authorities that have been identified as relevant Competent Authorities. *DAFF Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	Should a protected tree need to be cut/ destroyed, relevant authorisation will be obtained from the Department of DEFF
FORESTRY LAWS AMENDMENT ACT (ACT 35 OF 2005)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/~~ **RELEVANT CONSIDERATION**	N/A

	DAFF Jurisdiction		
NATIONAL WATER ACT (ACT 36 OF 1998)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. *Dept of Water Affairs Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION~~ **/** COMMENT/ RELEVANT CONSIDERATION	Comment will be required from the DWS as part of the public participation process.
WATER SERVICES ACT (ACT 108 OF 1997)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. *Dept of Water Affairs Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	
SEA SHORE ACT (ACT 21 OF 1935)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION~~	N/A
WESTERN CAPE NATURE CONSERVATION LAWS AMENDMENT ACT (ACT 3 OF 2000)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. *CapeNature Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	Cape Nature to provide comment as part of the public participation process. A Terrestrial Biodiversity Specialist study was undertaken.
CONSERVATION OF AGRICULTURAL RESOURCES ACT (ACT 43 OF 1983)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments, as well as	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	The Department of Agriculture to provide comment as part of the public

	Local Authorities that have been identified as relevant Competent Authorities. *Dept. of Agriculture Jurisdiction*		participation process. An agricultural Compliance Statement was prepared.
NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	**PERMIT** ~~/ LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION~~	An application will be made in terms of section 38(8) of the NHRA.
NATIONAL HEALTH ACT (ACT 61 OF 2003)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. *Dept. of Health Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/~~ **RELEVANT CONSIDERATION**	In terms of this Act, a Health and Safety Officer and protocol must be implemented during the construction phase, this is addressed in the EMPr. The Department of Health to provide comment.
THE SOUTH AFRICAN ROADS AGENCY LIMITED AND NATIONAL ROADS ACT (ACT 7 OF 1998)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. *SANRAL Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT**/ ~~RELEVANT CONSIDERATION~~	The Department to provide comment as part of the public participation process.
Outiniqua Sensitive Coastal Area Extension Report (OSCAER)	Department of Environmental Affairs, Republic of South Africa. All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities.	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/ RELEVANT CONSIDERATION~~	After Environmental Authorisation is obtained, it is required to apply for an OSCAER permit.

POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
EIA guideline and information document series. Guideline on transitional arrangements March 2013	Department of Environmental Affairs, Republic of South Africa. All Provincial Departments that have been identified as Competent Authorities.
EIA guideline and information document series. Guideline on Generic Terms of Reference for EAPS and Project Schedules	Department of Environmental Affairs, Republic of South Africa. The EAP needs to be independent and submit all required information as per the guideline, this is addressed throughout the BAR
EIA guideline and information document series. Guideline on Public Participation	Department of Environmental Affairs, Republic of South Africa. The correct public participation needs to be adhered to and addressed in the BAR.
EIA guideline and information document series. Guideline on Alternatives	Department of Environmental Affairs, Republic of South Africa. Alternatives need to be reasonable and feasible. This has been addressed in the Alternative section of the BAR
EIA guideline and information document series. Guideline on Need and Desirability	Department of Environmental Affairs, Republic of South Africa. Need and desirability are addressed in the BAR
DEA&DP (2010) Guideline on Public Participation, EIA Guideline and Information Document Series. Western Cape Department of Environmental Affairs & Development Planning (DEA&DP)	The correct public participation needs to be adhered to and addressed in the BAR

Section F

Need and Desirability for the proposed development

Need

The need for and the desirability of a proposed development forms a key component of any EIA application. The consideration of proposed developments in the context of the various spatial planning tools and policies applicable to the study area forms an integral part of the present environmental processes.

The "need and desirability" will be determined by considering the broader community's needs and interests as reflected in a credible IDP, SDF and EMF for the area, and as determined by the EIA. It is essential that national policies and strategies support growth in the economy. It is also essential that these policies take cognisance of strategic concerns such as climate change and food security, as well as the sustainability in the supply of natural resources and the status of our ecosystem services.

In other words, to achieve our Constitutional goal of a better quality of life for all now and in future, through equitable access to resources and shared prosperity, it is essential that society improves on the efficiency and responsibility with which we use resources, and improve on the level of integration of social, economic, ecological and governance systems *[DEA (2017), Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa ISBN: 978-0-9802694-4-4]*

In terms of the Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000) ("PAJA") all administrative action must be based on the "relevant considerations". NEMA and the EIA Regulations highlight specific considerations which include specifically having to consider "the need for and desirability of the activity".

The proposed rezoning to Open Space III (Nature Conservation) with a limited eco-tourism component addresses the growing demand for sustainable tourism in Sedgefield, part of the Garden Route Biosphere Reserve. With a focus on eco-tourism and conservation in the region, there is a need for low-impact tourist accommodation that allows visitors to connect with nature while minimizing ecological disturbance.

Currently vacant and undeveloped, the land's economic potential is untapped, as traditional agriculture is unfeasible due to its size and environmental constraints. A nature-based tourism model is deemed most suitable. Moreover, conservation efforts incur significant costs, including managing alien vegetation and wildlife protection. Generating moderate income from three small chalets will provide essential resources for ongoing conservation, ensuring the land remains intact and well-managed. This aligns with Knysna's Spatial Development Framework and Western Cape rural development policies that promote conservation-led tourism, supporting inclusive economic opportunities and job creation in the Sedgefield area.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The proposed development on Portion 79 of Farm Ruygte Valley No. 205, Sedgefield, is needed to meet the growing economic demand for eco-tourism along the Garden Route, where Sedgefield is a key destination, as outlined in the Town Planning Report (Appendix D5, Page 8). The three self-catering cottages cater to low-impact tourists, complementing scenic assets like Gericke's Point and Groenvlei Beach (Visual Compliance Statement, Appendix D1, Page 6), and are projected to generate R500,000–R1 million annually (estimated at R2,000/night per cottage, 50%

occupancy), boosting local revenue. This aligns with the Knysna Spatial Development Framework (SDF) 2020 goal of tourism-driven growth, creating 5–10 direct jobs (construction, hospitality) and indirect jobs (suppliers, tour operators) to address unemployment (Town Planning Report, Appendix D5, Pages 7–8). Additionally, the development supports controlled rural development by complying with Agriculture Zone I zoning through municipal consent, incorporating a residence and staff quarters for sustainable on-site management (Town Planning Report, Appendix D5, Page 6). Off-grid systems (solar, rainwater, conservancy tanks) ensure minimal strain on public infrastructure, while municipal revenue from rates and taxes funds community services, enhancing public welfare without environmental or fiscal burden (Town Planning Report, Appendix D5, Page 11).

Desirability

Desirability factors relate to place. Is the land physically suitable to accommodate the proposed development? Does the proposed development fit in with the surrounding land uses? Is the proposal compatible with credible spatial plans? Is there perhaps a better land-use alternative for the land parcel?

The site is suitable for development, provided mitigation measures such as soil stabilization, slope reinforcement, and stormwater management are implemented. The nearest residence (250m east) and Cola Beach (700m west) will not be visually impacted due to topography, vegetation, and the development's design. The Open Space III zoning aligns with the conservation-focused land use of the area, and the small-scale tourist accommodation will have minimal impact on surrounding properties and infrastructure.

The proposal aligns with broader spatial planning frameworks at municipal, district, and provincial levels. The Provincial SDF identifies the Garden Route as a key tourism area, emphasizing sustainable land use and conservation. The property lies east of Sedgefield's urban edge and is designated for conservation in the Knysna SDF 2020. Rezoning from "Agriculture 1" to "Open Space III" supports this vision by preserving 99.8% of the land while integrating low-impact tourism.

Despite its coastal location, the development is positioned outside the 20-, 50-, and 100-year erosion risk lines per DEA&DP Coastal Management Maps. The proposed land-use change is fully in line with the Knysna SDF, promoting responsible tourism and conservation in accordance with national and provincial priorities.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The proposed development is socially suitable, as its eco-tourism focus enhances Sedgefield's identity as a sustainable destination, fostering community pride (Town Planning Report, Appendix D5, Page 8). Preserving public access to Groenvlei Beach via Bushy Way and Groenvlei Beach Road (Town Planning Report, Appendix D5, Page 10), addresses resident concerns about coastal access. Mitigation measures, including community consultations by Q3 2025 and prioritizing local hiring for 70% of jobs (construction, hospitality), ensure social inclusion (Town Planning Report, Page 7), while dust suppression, daylight-only construction, and low-impact lighting minimize disruptions (Visual Compliance Statement, Appendix D1, Page 11). This strengthens social cohesion through job creation and maintained access, with minimal impact on neighbouring properties, located 250 m east, ensuring harmony with the community (Visual Compliance Statement, Appendix D1, Page 10).

Conclusion

The development on Portion 79 is both needed and desirable. It meets the need for eco-tourism growth, local employment (5–10 jobs), and invasive species management, aligning with the Knysna SDF and NEMA goals. It is desirable due to its minimal environmental impact (targeting degraded CBA2, high VAC), social benefits (public access, local jobs), and economic viability (R500,000–R1 million revenue, off-grid). By prioritizing BM or HW2 locations, implementing robust mitigations (e.g., erosion control, community engagement), and securing municipal approval by

Q3 2025, the project addresses risks and maximizes public value. It is a sustainable, community-aligned addition to Sedgefield's coastal landscape, warranting support provided mitigations are enforced.

Identification of plans, guidelines, spatial tools, municipal development frameworks and instruments that are applicable to the proposed activity

The table below identifies all plans, guidelines, spatial tools and municipal development frameworks that are applicable to the proposed activity:

Is the activity permitted in terms of the property's existing land use rights?
The property is currently zoned "Agricultural I "in terms of the Bitou Zoning Scheme By-Law applicable to the area. This zoning permits agricultural activities as well as a dwelling house (of unlimited size) as a primary right. Portion 79 of Farm 205, Ruygte Valley is currently zoned Agriculture Zone I in terms of the Knysna Zoning Scheme Regulations (1992). To facilitate the protection of the natural landscape as recommended in the Terrestrial Biodiversity Specialist Assessment, it is proposed that the entire property be rezoned "Open Space III" (Nature conservation area). The planned rezoning out of Agriculture to Open Space III would be in line with these conservation efforts. The following development parameters apply to the Open Space III zone: (a) The Municipality may require an environmental management plan to be submitted for its approval. (b) The Municipality must determine the land use restrictions and the development parameters for the property based on the objectives of this zoning, the particular circumstances of the property and, where applicable, in accordance with an approved environmental management plan. (c) One dwelling house is allowed if no dwelling house exists on another portion of the land unit zoned for agricultural purposes or if the full extent of the land unit is zoned Open Space III. (d) When a consent use to provide tourist facilities or tourist accommodation in a "nature conservation area" is approved, it is subject to conditions imposed by the Municipality with regard to layout, landscaping and building design. (e) A site development plan must be submitted to the Municipality for its approval, clearly indicating the position of all structures, services and internal roads. The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.* The Application area is zoned "Agriculture Zone I", and "Agriculture" is a primary land use right in this zoning category. The proposal is to exercise the primary land use rights of the property, (i.e. construction of a primary dwelling. The dwelling unit complies with the definition of 'dwelling unit'[1] as per the Section 8 Zoning Scheme Regulations, 1988.
Will the activity be in line with the Provincial Spatial Development Framework (PSDF)

[1] **'Dwelling unit'** means a self-contained interleading group of rooms with not more than one kitchen, used only for the living accommodation and housing of a single family, together with such outbuildings as are ordinarily used therewith.

The PSDF 2014 has been approved by the Executive Authority, Minister Anton Bredell, Minister of Local Government, Environmental Affairs and Development Planning, and endorsed by the Provincial Cabinet. The Western Cape PSDF sets out to put in place a coherent framework for the Province's urban and rural areas.

The Provincial SDF indicates George as the regional centre for the eastern part of the province, with Knysna and Plettenberg Bay being smaller centres along the Regional Connector Route (N2). It earmarks the area along the Garden Route as a tourism route with leisure activities of provincial significance.

The sustainable use of provincial assets is one of the main aims of the policy. The protection of the non–renewable natural and agricultural resources is achieved through clear settlement edges for towns by defining limits to settlements and through establishing buffers/transitions between urban and rural areas. The urban fringe must ensure that urban expansion is structured and directed away from environmentally sensitive land and farming land; agricultural resources are reserved; environmental resources are protected; appropriate levels of services are feasible to support urban fringe land uses, and land use allocations within the urban fringe are compatible and sustainable.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The Western Cape Provincial SDF was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the province's spatial planning agenda".

The PSDF sets out a policy framework within which the Western Cape Government will carry out its spatial planning responsibilities. Each of the three spatial themes contributes to the achievement of the Western Cape strategic objectives. These policies are categorised into three themes, namely:

- **Resources:** Sustainable use of spatial assets and resources
- **Space Economy:** Opening up opportunities in the Space Economy
- **Settlement:** Developing Integrated and sustainable settlements.

The Western Cape's agenda for spatial transformation and improved efficiencies in the use of natural resources are closely linked. The PSDF states that the paradigm that economic growth implies the on-going depletion of the province's natural capital needs to be broken.

This is the rationale for the PSDF embracing a transition to a Green Economy. The so-called 'decoupling' of economic growth strived for, requires reductions/substitutions and/or replacements in the use of limited resources while avoiding negative environmental impacts. The table below contains a summary of the key transitions promoted in the PSDF:

PSDF THEME	FROM	TO
RESOURCES	Mainly curative interventions	More preventative interventions
	Resource consumptive living	Sustainable living technologies
	Reactive protection of natural, scenic and agricultural resources	Proactive management of resources as social, economic and environmental assets
SPACE-ECONOMY	Fragmented planning and management of economic infrastrucutre	Spatially aligned infrastructure planning, prioritisation and investment
	Limited economic opportunities	Variety of livelihood and income opportunities
	Unbalanced rural and urban space economies	Balanced urban and rural space economies built around green and information technologies
SETTLEMENT	Suburban approaches to settlement	Urban approaches to settlement
	Emphasis on 'greenfields' development and low density sprawl	Emphasis on 'brownfields' development
	Low density sprawl	Increased densities in appropriate locations aligned with resources and space-economy
	Segregated land use activities	Integration of complementary land uses
	Car dependent neighbourhoods and private mobility focus	Public transport orientation and walkable neighbourhoods
	Poor quality public spaces	High quality public spaces
	Fragmented, isolated and inefficient community facilities	Integrated, clustered and well located community facilities
	Focus on private property rights and developer led growth	Balancing private and public property rights and increased public direction on growth
	Exclusionary land markets and top-down delivery	Inclusionary land markets and partnerships with beneficiaries in delivery
	Limited tenure options and standardised housing types	Diverse tenure options and wider range of housing typologies
	Delivering finished houses through large contracts and public finance and with standard levels of service	Progressive housing improvements and incremental development through public, private and community finance with differentiated levels of service

FIGURE 12: KEY TRANSITIONS FOR THE PSDF

The recent shift in legislative and policy frameworks has clearly outlined the roles and responsibilities of provincial and municipal spatial planning and should be integrated towards the overall spatial structuring plan for the province to create and preserve the resources of the province more effectively through sustainable urban environments for future generations. This shift in spatial planning meant that provincial inputs are, in general, limited to provincial-scale planning.

The proposed development complements the SDF's spatial goals that aim to take the Western Cape on a path towards:

(i) Greater productivity, competitiveness and opportunities within the spatial economy.
(ii) More inclusive development and strengthening of the economy in rural areas.
(iii) Strengthening resilience and sustainable development.

However, it is important to note some of the key policies laid down by the PSDF have a bearing on the proposed development.

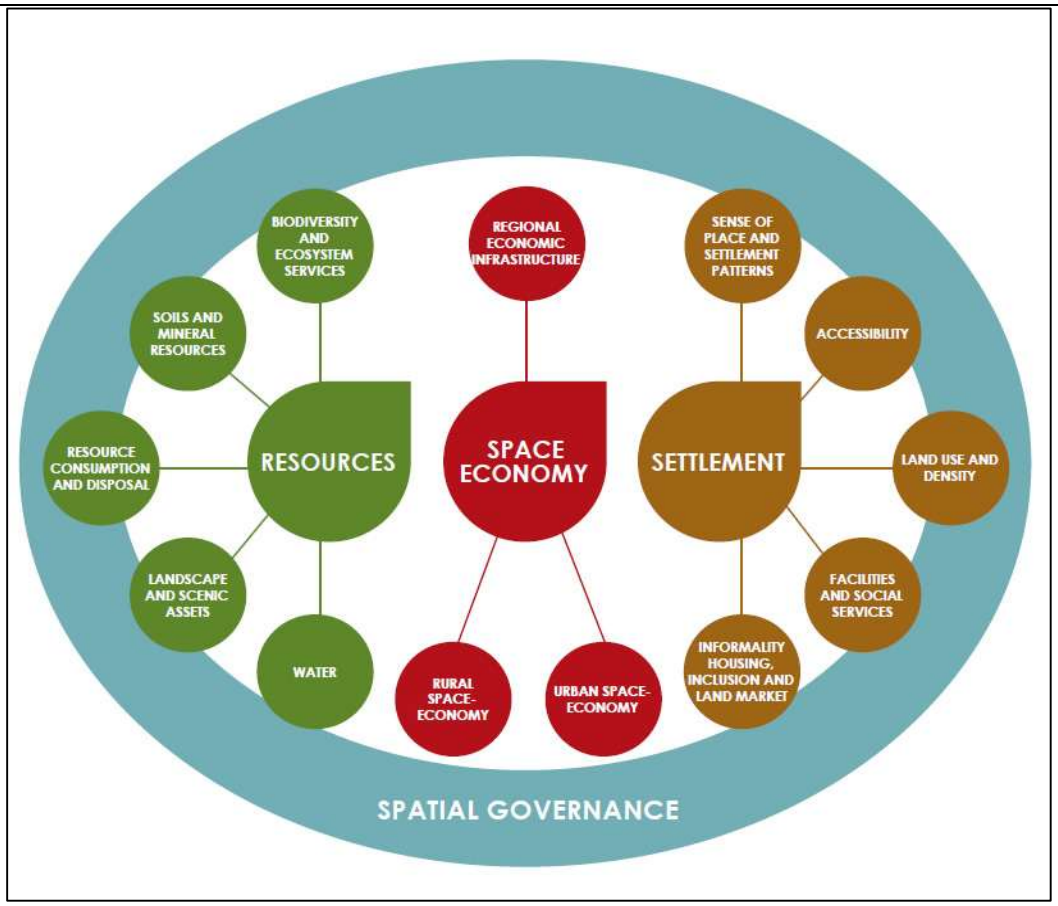


FIGURE 13: POLICIES APPLICABLE TO THE PROPOSED DEVELOPMENT

The property is situated outside of the Urban Edge

The subject property is situated **outside** the urban edge.

The property is located in the Groenvlei Rural area, where the parcels typically measure approximately 5 hectares and are designated with either "Agriculture 1" or "Open Space IV" zoning, as illustrated in the Zoning Map attached to the Town Planning Report as Diagram 3. It is noteworthy that none of the properties are currently utilised for agricultural production; rather, the majority are in a natural state and lack any structures. It is reasonable to anticipate that, over time, certain properties will undergo development to accommodate at least one residential dwelling, which falls within their primary zoning rights. Additionally, some of the properties are included within the boundaries of the Lake Pleasant Private Nature Reserve.

The property is currently zoned “Agricultural I “in terms of the Bitou Zoning Scheme By-Law applicable to the area. This zoning permits agricultural activities as well as a dwelling house (of unlimited size) as a primary right.
Portion 79 of Farm 205, Ruygte Valley is currently zoned Agriculture Zone I in terms of the Knysna Zoning Scheme Regulations (1992).

To facilitate the protection of the natural landscape as recommended in the Terrestrial Biodiversity Specialist Assessment, it is proposed that the entire property be rezoned “Open Space III” (Nature conservation area). The planned rezoning out of Agriculture to Open Space III would be in line with these conservation efforts.

The following development parameters apply to the Open Space III zone:

(a) The Municipality may require an environmental management plan to be submitted for its approval.
(b) The Municipality must determine the land use restrictions and the development parameters for the property based on the objectives of this zoning, the particular circumstances of the property and, where applicable, in accordance with an approved environmental management plan.
(c) One dwelling house is allowed if no dwelling house exists on another portion of the land unit zoned for agriculture purposes or if the full extent of the land unit is zoned Open Space III.
(d) When a consent use to provide tourist facilities or tourist accommodation in a "nature conservation area" is approved, it is subject to conditions imposed by the Municipality with regard to layout, landscaping and building design.
(e) A site development plan must be submitted to the Municipality for its approval, clearly indicating the position of all structures, services and internal roads.

The proposed rezoning to Open Space III (Nature Conservation) with a limited eco-tourism component responds to the increasing demand for sustainable tourism in the Sedgefield area, which forms part of the Garden Route Biosphere Reserve.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The landowner will be exercising their primary land use rights for Agriculture Zone I properties, however, requires an EIA to allow development in a CBA area. The mapping must be "ground-truthed" and motivated during the EIA process. WCPSDF puts a lot of focus on the protection/conservation of cultural and scenic landscapes.

The proposal is in line with the provisions of this spatial document and will not detract from the existing spatial pattern of the area, which is agriculture-zoned properties. The development proposal is consistent with the strategic objectives and policies as set out by the Western Cape Spatial Development Framework. As stated above it is directly in line with Policies R1 & R3.

Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?).

The property is situated to the east of the Urban edge of Sedgefield and is earmarked for conservation purposes. The proposal to rezone this property from "Agriculture 1" to "Open Space III" (Nature Conservation) aligns with the spatial vision of the Knysna SDF 2020.

The Knysna Spatial Development Framework (SDF) of 2020 confirms the importance of tourism as a key driver for the town's economic growth and development. It advocates for the diversification of tourism offerings to include eco-tourism, cultural tourism, and adventure tourism, aiming to attract a broader range of visitors and reduce the town's reliance on seasonal tourism. The SDF also highlights the need for sustainable tourism practices that preserve Knysna's natural and cultural heritage. This includes promoting responsible tourism activities, enhancing public access to natural areas, and ensuring that tourism development aligns with environmental conservation efforts. The proposal to conserve 99.8 % of the land and to create a small but authentic tourism component aligns with this vision of the SDF.

Knysna Spatial Development Framework (2017-2022)

The IDP is the planning instrument that drives the process to address the socio-economic challenges as well as the service delivery and infrastructure backlogs experienced by communities in the municipality's area of jurisdiction.

Knysna Municipality approved the 4th generation IDP during June 2017. According to this IDP, the municipality's vision is to:

- Encourage all members of society to participate in and support the municipal governance structure and to create opportunities for dialogue.
- Conserving and managing natural resources.
- Planning for the growth and development of quality municipal services to support the community.
- Creating an enabling environment to foster the development of our people and enabling them to contribute.
- Supporting and encouraging the development of investment, business, tourism and emerging industries.

Strategic objectives:

The Knysna IDP identified seven Strategic objectives that are aligned with the national strategic focus areas as well as the Provincial Strategic Goals of the Western Cape Government. These objectives applicable to the proposed development are:

STRATEGIC OBJECTIVE	INTERVENTIONS
To ensure the provision of bulk infrastructure and basic service through the upgrading and replacement of ageing.	**Streets and stormwater:** ▪ To improve the conditions of all roads, streets and stormwater drainage in terms of the Pavement Management System (PMS). ▪ Forming partnerships with property owners to assist with the upgrading and maintenance of road infrastructure.
To promote a safe and healthy environment through the protection of our natural resources.	**Environmental Conservation:** ▪ Promote inclusive living spaces.

The subject property is situated within Ward 1 of the Knysna Municipality.

The Knysna SDF classifies this area as primarily rural and agricultural in nature; however, it is important to note that commercial agriculture may not be actively pursued in numerous cases. While very limited municipal infrastructural investment should occur, guidance is required for the management of land use within these settlements.

Land-use Management Guidelines for rural clustering include:

- Their agricultural character must be maintained.
- This applies to the aesthetics, the number of buildings, and the minimum erf sizes.
- A minimum subdivision size of 3ha or greater, depending on the ruling order property size in the node, would apply.
- The primary right would be a dwelling house, such agricultural buildings as are necessarily required for bona fide agricultural activity on the property.
- Options for rural recreational and economic opportunities could be considered, as long as it is in keeping with the rural character
- No municipal infrastructural services are to be delivered in the short to medium term.

Planning Implications:

The IDP is a municipal planning tool to integrate municipal planning and allocate municipal funding to achieve strategic objectives that will contribute to the overall municipal vision. Temporary employment opportunities will be created during the construction phase. It can be concluded that the proposed development is consistent with the strategic objectives and the envisioned outcome for the Knysna Municipal area.

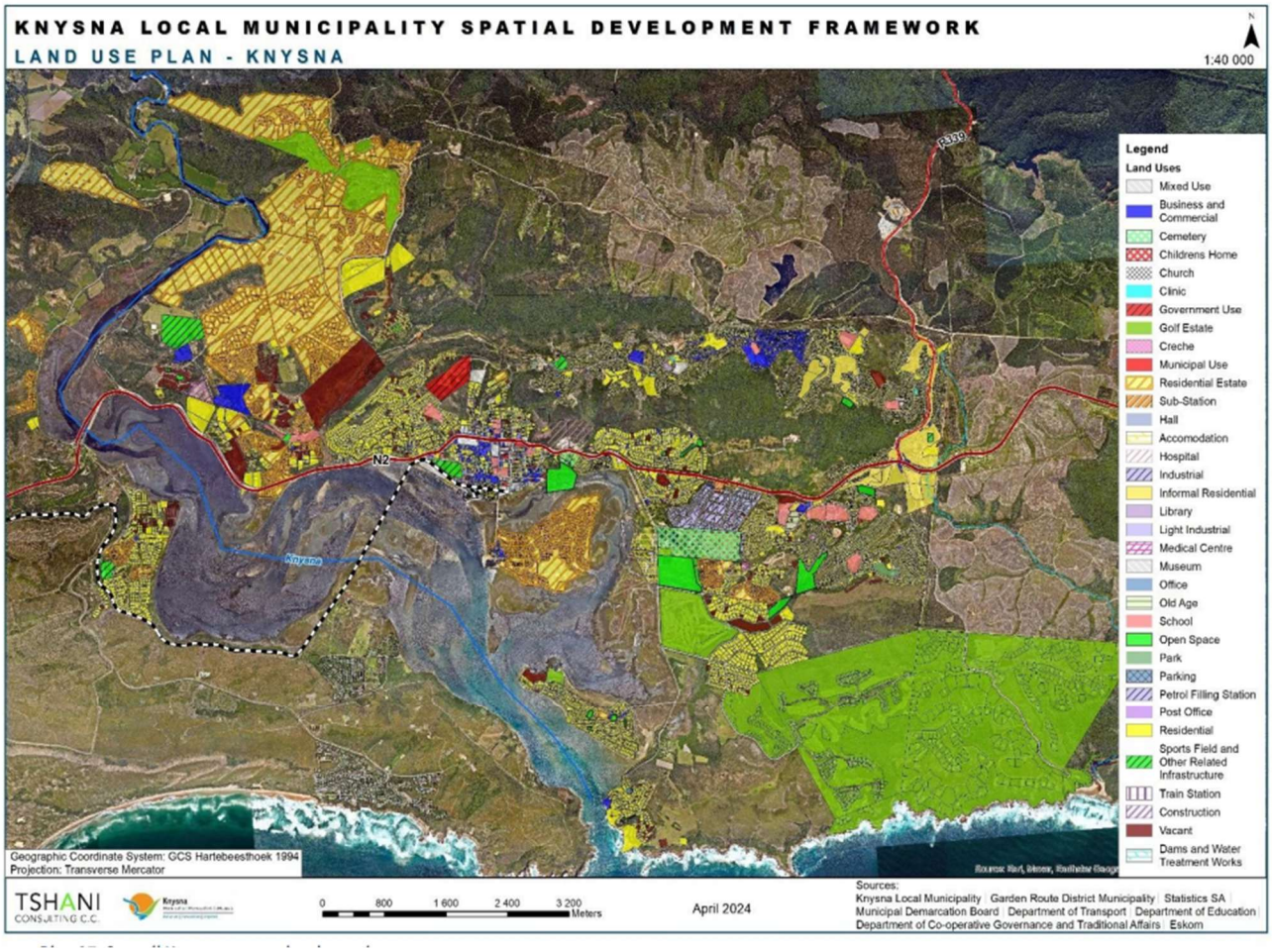


FIGURE 15: KNYSNA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK

Approved Structure Plan of the Municipality

There is no approved structure plan for this specific location.

An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)

The Garden Route EMF states the following on page 23:

Rural development, i.e. development outside the Urban Edge, shall not exceed densities of 1du/10ha and may be considerably lower in landscapes with low visual carrying capacity.

DRAFT WESTERN CAPE RURAL DEVELOPMENT GUIDELINES (2009)

Rural Areas Guidelines 2019

The Rural Areas Guidelines for the Western Cape were published in 2019 by the Western Cape Department of Environmental Affairs and Development Planning (DEA&DP). It provides a framework for sustainable rural development, guiding land use planning while balancing conservation, agriculture, and rural livelihoods.

The Rural Areas Guideline promotes tourism accommodation in rural areas and nature reserves, enhancing access to unique recreational resources. It provides guidance on low-impact, biodiversity-sensitive land uses in degraded Critical Biodiversity Areas (CBA 2), allowing for non-consumptive eco-tourism activities like hiking, bird watching, and clustered visitor accommodation while prohibiting intensive land uses such as mining and large-scale agriculture.

New developments should follow environmentally sensitive construction principles to harmonise with the landscape, focusing on aesthetic qualities to determine the appropriate scale and form. Two visual impact assessments confirmed that the proposal would not negatively affect the area visually. The design will use lightweight materials to blend seamlessly with nature.

Additionally, development proposals must avoid adverse impacts on coastal resources and consider coastal management zones. Although the buildings are within 100m of the high water mark, they are outside the specified erosion risk lines according to the DEA&DP Coastal Management Map.

In this regard, a Geomatic and Geotechnical investigation was done to understand the dune stability and the coastal morphology over time. The study resulted in a technically determined and site-specific development setback line to protect the coastal area and the planned investment. The line is approximately 30m from the boundary of the property. The planned footprints of the building are inland of this line.

FIGURE 11: COASTAL MANAGEMENT LINES

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The Western Cape Provincial Government has developed guidelines to provide guidance to its social partners on land use planning and management outside the urban edge (i.e. in rural areas). Forming part of the roll-out of the Provincial Spatial Development Framework (PSDF), their objectives in introducing rural land use planning and management guidelines are:

- To promote sustainable development in appropriate rural locations throughout the Western Cape and ensure that the poor also share in the growth of the rural economy.
- To safeguard the functionality of the province's life-supporting ecosystem services (i.e. environmental goods and services).
- To maintain the integrity, authenticity and accessibility of the Western Cape's significant farming, ecological, cultural and scenic rural landscapes, and natural resources.
- To provide clarity to the provincial government's social partners on what kind of development is appropriate beyond the urban edge, suitable locations where it could take place, and the desirable form and scale of such development

According to these guidelines, the principles underpinning the Western Cape's rural land use management guidelines are as follows:

- Decisions on rural development applications should be based on the following sustainable land use principles:
    - social inclusion,
    - effective protection and enhancement of the environment,

- prudent use of natural resources, and
- maintaining high and stable levels of economic growth.

- Good quality and ***carefully sited development should be encouraged in existing settlements.***
- ***Accessibility*** should be a ***key consideration*** in all development decisions.
- New building development in the open countryside away from existing settlements should be strictly controlled regarding scale, height, colour, roof profile, etc.
- ***Priority*** should be given ***to the re-use of previously developed*** sites in preference to greenfield sites.
- All ***development in rural*** areas should ***be well developed and inclusive***, in keeping and scale with its location, and sensitive to the character of the rural landscape and local distinctiveness.

Detailed management guidelines are presented for the full spectrum of rural land uses. The provincial approach to managing the various rural land uses is as follows:

Conservation use:	Biodiversity, heritage and scenic resources all form part of the rural conservation agenda, both at landscape and farm scales. The approach is to formally protect priority conservation areas, ***establish ecological linkages across*** the rural landscape, and ***mainstream a conservation ethic into all rural activities.***
Holiday accommodation:	Given the Western Cape's unique rural communities and landscapes, tourism offers exciting prospects to diversify and strengthen the rural economy. Accordingly, the provincial approach is to facilitate the provision of a variety of holiday accommodation across the rural landscape that is in keeping with the local character.
Rural Housing:	Towards integrated rural development and sustainable human settlements in the Western Cape, ***new housing development beyond the urban edge urgently needs to be curtailed***. The provincial approach is to channel pressures for residential development to existing towns, villages and hamlets. The only two exceptions put forward for housing development in the rural landscape are: providing 'on-and-off farm' security of tenure for farm workers; and providing restricted residential rights to incentivise the consolidation of rural properties of high biodiversity value and their incorporation into the conservation estate.
Tourist facilities:	Towards ***diversifying*** the Western Cape's ***rural economic base*** into the ***tourism*** and ***recreation sectors;*** and developing these sectors on a sustainable and equitable basis – the provincial approach is to facilitate appropriate investment in these sectors across the rural landscape.

The proposed development will also aim to conserve, rehabilitate and strengthen the existing biodiversity properties to achieve a higher conservation value which would be beneficial to surrounding property owners.

KNYSNA MUNICIPALITY STANDARD BY-LAW ON MUNICIPAL LAND USE PLANNING, 2016

Knysna Municipality adopted its new Land Use Planning By-law, and it came into effect on 12 February 2016. All land use applications are now being processed and assessed in terms of this by-law. This by-law states that the following aspects will be considered when the decision is made:

- Desirability of the proposed utilisation of land
- The impact of the proposed land development on municipal engineering services

- The integrated development plan, including the municipal spatial development framework
- Provincial spatial development framework
- Policies, principles and the planning and development norms and criteria set by the national and provincial government
- The matters referred to in section 42 of the Spatial Planning and Land Use Management Act
- Principles referred to in Chapter Vl of the Land Use Planning Act

The information below was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

Spatial Planning and Land Use Management Act 2013 (Act no 16 of 2013), SPLUMA and Chapter VI of the Land Use Planning Act, 2014 (Act 3 of 2014) (LUPA).

Section 7 of the Act describes a set of development principles that need to be considered when evaluating any development application. These principles include the following:

Spatial Justice

Spatial justice principles aim to eliminate spatial injustices stemming from discrimination and marginalisation. Inequitable access to housing, education, economic opportunities, and health facilities arises from spatial injustice. The tools used to promote spatial justice are diverse, including Spatial Development Frameworks, Precinct Plans, and Urban Regeneration Plans and Policies. The principle of spatial justice dictates that past spatial and other developmental imbalances must be addressed through improved access to and use of land, primarily through government intervention. SPLUMA underscores the significance of equitable access to resources. The project will enable tourists to access and enjoy this magnificent private property, which would otherwise be reserved exclusively for the owners' enjoyment.

Spatial Sustainability

The proposed rezoning initiative promotes spatial sustainability by transitioning from a zoning designation of Agriculture, which is inadequate for this land, to one that safeguards biodiversity while facilitating a sustainable revenue stream for conservation efforts. The envisioned eco-tourism model represents a low-impact and resource-sensitive land use that contributes to the long-term ecological integrity of the property, thereby mitigating the risks associated with neglect and degradation over time. Moreover, the rezoning to "Open Space III" serves as a protective measure against potential future development pressures, ensuring that the land remains preserved as a natural buffer and is not subjected to vulnerabilities related to urban expansion as Sedgefield continues to grow.

Spatial Efficiency

The proposal efficiently utilises land and resources by ensuring that only a small portion of the 5ha property is developed, leaving the majority in its natural state. The proposed small-scale chalets (approximately 65 m² each) and single dwelling are designed to be minimally intrusive, adhering to principles of green building, low-density development, and careful site placement.

Spatial Resilience and Good Administration

This approach combines meticulous design and planning with a keen awareness of environmental risks and challenges posed by climate change. The positioning of buildings is informed by a thorough geotechnical investigation that accounts for both existing geological conditions and long-term projections, including sea level rise and other climate-related impacts. By proactively integrating these considerations, the development significantly strengthens its long-term resilience, thereby ensuring sustainability and adaptability in response to environmental changes.

Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)

The Guideline on Need and Desirability published by the Department of Environmental Affairs and Development Planning (DEADP) goes to great lengths to explain that the 'Need' for a project relates to its 'timing', where the 'Desirability' related to the 'placing' of the proposed development; i.e. is this the right time and is it the right place for locating the type of land-use/activity being proposed?

Need

The need for and the desirability of a proposed development forms a key component of any EIA application. The consideration of proposed developments in the context of the various spatial planning tools and policies applicable to the study area forms an integral part of the present environmental processes.

The "need and desirability" will be determined by considering the broader community's needs and interests as reflected in a credible IDP, SDF and EMF for the area, and as determined by the EIA. It is essential that national policies and strategies support growth in the economy. It is also essential that these policies take cognisance of strategic concerns such as climate change and food security, as well as the sustainability in the supply of natural resources and the status of our ecosystem services.

In other words, to achieve our Constitutional goal of a better quality of life for all now and in future, through equitable access to resources and shared prosperity, it is essential that society improves on the efficiency and responsibility with which we use resources, and improve on the level of integration of social, economic, ecological and governance systems *[DEA (2017), Guideline on Need and Desirability, Department of Environmental Affairs (DEA), Pretoria, South Africa ISBN: 978-0-9802694-4-4]*

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Currently vacant and undeveloped, the land's economic potential is untapped, as traditional agriculture is unfeasible due to its size and environmental constraints. A nature-based tourism model is deemed most suitable. Moreover, conservation efforts incur significant costs, including managing alien vegetation and wildlife protection. Generating moderate income from three small chalets will provide essential resources for ongoing conservation, ensuring the land remains intact and well-managed. This aligns with Knysna's Spatial Development Framework

and Western Cape rural development policies that promote conservation-led tourism, supporting inclusive economic opportunities and job creation in the Sedgefield area.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The proposed development on Portion 79 of Farm Ruygte Valley No. 205, Sedgefield, is needed to meet the growing economic demand for eco-tourism along the Garden Route, where Sedgefield is a key destination, as outlined in the Town Planning Report (Appendix D5, Page 8). The three self-catering cottages cater to low-impact tourists, complementing scenic assets like Gericke's Point and Groenvlei Beach (Visual Compliance Statement, Appendix D1, Page 6), and are projected to generate R500,000–R1 million annually (estimated at R2,000/night per cottage, 50% occupancy), boosting local revenue. This aligns with the Knysna Spatial Development Framework (SDF) 2020 goal of tourism-driven growth, creating 5–10 direct jobs (construction, hospitality) and indirect jobs (suppliers, tour operators) to address unemployment (Town Planning Report, Appendix D5, Pages 7–8). Additionally, the development supports controlled rural development by complying with Agriculture Zone I zoning through municipal consent, incorporating a residence and staff quarters for sustainable on-site management (Town Planning Report, Appendix D5, Page 6). Off-grid systems (solar, rainwater, conservancy tanks) ensure minimal strain on public infrastructure, while municipal revenue from rates and taxes funds community services, enhancing public welfare without environmental or fiscal burden (Town Planning Report, Appendix D5, Page 11).

Desirability

Desirability factors relate to place. Is the land physically suitable to accommodate the proposed development? Does the proposed development fit in with the surrounding land uses? Is the proposal compatible with credible spatial plans? Is there perhaps a better land-use alternative for the land parcel?

The site is suitable for development, provided mitigation measures such as soil stabilization, slope reinforcement, and stormwater management are implemented. The nearest residence (250m east) and Cola Beach (700m west) will not be visually impacted due to topography, vegetation, and the development's design. The Open Space III zoning aligns with the conservation-focused land use of the area, and the small-scale tourist accommodation will have minimal impact on surrounding properties and infrastructure.

The proposal aligns with broader spatial planning frameworks at municipal, district, and provincial levels. The Provincial SDF identifies the Garden Route as a key tourism area, emphasizing sustainable land use and conservation. The property lies east of Sedgefield's urban edge and is designated for conservation in the Knysna SDF 2020. Rezoning from "Agriculture 1" to "Open Space III" supports this vision by preserving 99.8% of the land while integrating low-impact tourism.

Despite its coastal location, the development is positioned outside the 20-, 50-, and 100-year erosion risk lines per DEA&DP Coastal Management Maps. The proposed land-use change is fully in line with the Knysna SDF, promoting responsible tourism and conservation in accordance with national and provincial priorities.

The above information was obtained from the *Town Planning Report prepared by Planning Space Town and Regional Planners dated March 2025.*

The proposed development is socially suitable, as its eco-tourism focus enhances Sedgefield's identity as a sustainable destination, fostering community pride (Town Planning Report, Appendix D5, Page 8). Preserving public access to Groenvlei Beach via Bushy Way and Groenvlei Beach Road (Town Planning Report, Appendix D5, Page 10), addresses resident concerns about coastal access. Mitigation measures, including community consultations by Q3 2025 and prioritizing local hiring for 70% of jobs (construction, hospitality), ensure social

inclusion (Town Planning Report, Page 7), while dust suppression, daylight-only construction, and low-impact lighting minimize disruptions (Visual Compliance Statement, Appendix D1, Page 11). This strengthens social cohesion through job creation and maintained access, with minimal impact on neighbouring properties, located 250 m east, ensuring harmony with the community (Visual Compliance Statement, Appendix D1, Page 10).

Conclusion

The development on Portion 79 is both needed and desirable. It meets the need for eco-tourism growth, local employment (5–10 jobs), and invasive species management, aligning with the Knysna SDF and NEMA goals. It is desirable due to its minimal environmental impact (targeting degraded CBA2, high VAC), social benefits (public access, local jobs), and economic viability (R500,000–R1 million revenue, off-grid). By prioritizing BM or HW2 locations, implementing robust mitigations (e.g., erosion control, community engagement), and securing municipal approval by Q3 2025, the project addresses risks and maximizes public value. It is a sustainable, community-aligned addition to Sedgefield's coastal landscape, warranting support provided mitigations are enforced.

Planning Evaluation

The boxes above pertaining to need and desirability have been discussed and assessed.

The Applicant plans to develop a primary residence and three cottage accommodations, alongside a vehicle parking facility and a garage/storeroom on the property. Located in Knysna Municipality Ward 1, east of Sedgefield, the land is currently zoned for Agriculture 1. The owners intend to build a modest dwelling of about 200 square meters, which aligns with zoning regulations. To generate income, they will create three small self-catering tourist units of approximately 65 square meters each. Ancillary structures will include staff housing (50 square meters) and a shed for agricultural equipment (80 square meters). A less than three-meter-wide gravel access road is planned along the eastern boundary, leading to a parking area and a constructed boardwalk for access to the dwelling and accommodations.

The proposal is directly aligned with the Strategic Objectives R1 & R3 as set out in the Western Cape Spatial Development Framework and in line with the overall vision for the area. The proposal is in line with the Provincial Rural Development Guidelines Criteria for implementation: Agriculture Rural Accommodation (Primary dwelling), Conservation (Natural veld). The proposal is consistent with the Spatial Policy Statements & Guidelines of the Eden Spatial Development Framework and directly aligned with:

- Guideline 1.1.1. Contain development and manage rural areas through the appropriate application of SPCs
- Guideline 1.5.6. Coastal management

The Integrated Development Plan (IDP) sets out strategic objectives to achieve the desired goal of the Knysna Municipality. The proposal is directly linked with two of the strategic objectives, namely:

- To ensure the provision of bulk infrastructure and basic service through the upgrading and replacement of services.
- To promote a safe and healthy environment through the protection of our natural resources.

The landowners intend to assert their primary land use rights, and from a planning perspective, the proposal is both desirable and compliant with all relevant spatial planning documents. The proposal is expected to yield positive impacts on the local economy.

The proposal is consistent with the relevant spatial planning policies and will not impede any neighbouring landowner from lawfully exercising their existing land use rights. Furthermore, it will not negatively impact the character of the area and consequently, the proposal can be regarded as both desirable and suitable for the designated location.

Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development?

Electricity

There is currently no electrical infrastructure present on the property or in the adjacent road reserve. It is advisable to consider the installation of a solar power facility in this location.

Solar plant

Type and system

The solar plant will be developed as an off-grid installation, utilizing solar energy to supply the load during daylight hours while recharging the batteries at night. Furthermore, grid-tied photovoltaic inverters may be integrated into this micro-grid configuration through AC coupling, should the energy demand surpass the generation capacity.

Plant location

It is advisable to consider the installation of a roof-mounted solar power system on the roofs of both the main residence and the three small self-catering tourist accommodation units, should there be a requirement for increased energy generation capacity.

Plant capacity

The proposed system is designed with a capacity of 15 kWh, while the anticipated peak consumption is estimated to reach 30 kWh per day.

Energy Storage

A sealed Lithium Iron Phosphate battery system is proposed, which is expected to provide a lifespan exceeding 10 years at a depth of discharge of 70%. Additionally, this system offers an expedited charging time, enhancing its operational efficiency.

Area/Street lighting

The road lighting system will utilise low-intensity, low-level bollard luminaires. Each luminaire will be powered by an individual small solar cell and will activate solely upon detecting motion.

ENVIRONMENTAL IMPACT

The internal electrical distribution network will be meticulously designed to integrate harmoniously with the development as well as the surrounding natural environment. All structures, equipment, and switchgear will be constructed in a low-profile manner, adhering to the natural contours of the landscape. The selection of colours and shapes for these elements will be undertaken with careful consideration to ensure they blend seamlessly with the environment. To minimise any additional disturbance to vegetation, services will predominantly be located within road reserves. Additionally, the environmental management plan for the development will be integral to the specifications and requirements guiding the electrical construction activities.

Energy Efficiency and Renewable Energy

The consideration of cost-effective alternative energy sources, such as natural gas and LED lighting, will be undertaken, alongside the implementation of energy-efficient systems as stipulated by the National Building Regulations. The adoption of energy-efficient equipment will also serve to decrease energy demand and consumption, thereby allowing for the potential reduction in the size of the required solar energy system.

The above information was obtained from the BDE Consulting Engineers report dated May 2019.

Water Reticulation

The applicant proposes to supply water for the development by means of the following:

- The water demand will be addressed through the collection of rainwater.

Fire

This development is categorized as low-risk and falls within Group 2: residential areas (residential zone 1). These designated areas will be in accordance with the "Guidelines for Human Settlement Planning and Design."

Sewer Reticulation

At this time, municipal bulk sewer services are not available in this area. The implementation of conservancy tanks is a viable option for managing effluent in this locality.

Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?

This development operates off-grid and, as such, will not affect the infrastructure planning within the municipality.

Is this project part of a national programme to address an issue of national concern or importance?

This is a private development.

Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)

Specific location factors that favour the land development application are important when desirability is assessed. The factors include:

- The proposed development is intended for private ownership and use.
- Proximity to Existing Infrastructure and Access Routes: The site is located near established road infrastructure, including the N2 and the Groenvlei Divisional Road (DR 1594), which allows for relatively easy access without the need for significant new infrastructure development. The existing public servitude road provides legal access to the property, further supporting its development potential.
- Strategic Position Relative to Conservation Areas: The property is adjacent to formally protected private nature reserves and lies within a natural corridor that enhances regional ecological connectivity. This positioning makes the site highly suitable for low-impact conservation-compatible land use such as eco-tourism or nature-based activities.
- Environmental: Suitability: The majority of the site is not within high-risk erosion or flood zones. Careful siting of proposed infrastructure outside the 100-year coastal risk line demonstrates environmental foresight and long-term resilience to climate-related hazards.

- Integration with Spatial Planning Frameworks: The site lies outside the urban edge but within areas earmarked for conservation-oriented land use in the Knysna Spatial Development Framework (2020). The proposed rezoning to "Open Space III" aligns with local, district, and provincial policies that promote sustainable development and protection of natural assets.
- Tourism and Economic Development Potential: The property's location along the Garden Route, a high-traffic tourism corridor, supports the viability of small-scale, eco-sensitive tourism. Its proximity to natural attractions such as Groenvlei Lake, Cola Beach, and Goukamma Nature Reserve strengthens its appeal as a destination for nature-based experiences, contributing to local economic growth.
- Low Visual and Social Impact: The site's topography, dense vegetation, and distance from major residential clusters ensure minimal visual intrusion and limited disruption to neighbouring land uses. The proposed scale of development respects the surrounding landscape and maintains a sense of natural seclusion.

Is the development the best practicable environmental option for this land/site?

Various specialist studies have been done to address what percentage of the property can be developed.

The application area currently does not contribute to agricultural production for crop cultivation or grazing activities. Nonetheless, the preservation of the natural veld of this property, which is recognised as an agricultural activity. Consequently, it can be concluded that this property possesses low agricultural potential, and the establishment of the proposed buildings will not result in the loss of productive agricultural land.

The properties in the immediate vicinity were initially designated for agricultural and conservation purposes. However, over time, agricultural utilisation in the area has declined, leading to the emergence of various alternative land uses. While some agricultural properties remain, they are predominantly employed for rural residential purposes with limited agricultural activities. Despite the diversification of land uses, the area has retained its primarily rural character.

The landowners are seeking to implement their existing land use rights, as stipulated in the Section 8 Zoning Scheme Regulations of 1988, specifically for properties classified as "Agricultural Zone I." The proposal aims to exercise the current land use rights to construct a primary dwelling house. The proposed agricultural activities, as well as the buildings planned for this property, will adhere to the established guidelines for the implementation of agricultural practices, rural accommodation, and conservation within the rural area. This initiative is designed to preserve the agricultural character of the region and is consistent with the principles outlined in the Rural Development guidelines. The proposal is in line with the Provincial Rural Development Guidelines Criteria for implementation: Agriculture Rural Accommodation (Primary dwelling), Conservation (Natural veld).

Although the property is zoned for "Agriculture 1" purposes, it is not the intention of the owners to use the land for Agricultural purposes. The value of the property lies in its natural beauty and the intention is to use the rest of the property for conservation purposes. The development concept is to create a quiet private hideaway within a natural environment. The architecture will be light and environmentally sensitive. Building materials will be steel & timber and glass & natural stone as opposed to brick and concrete. The building footprint will measure 525m² in total, and the planned access road will be about 200m long and 3m wide, ending in a parking area that calculates to about 660m². The total development area will amount to about 1 175m², which accounts for less than 0.02% of the site, leaving 99.98% of the site in a natural state.

Will the benefits of the proposed land use/development outweigh the negative impacts of it?

Yes.

The construction of the primary residential dwelling (Main dwelling) exerts a negligible impact on the surrounding environment, thereby safeguarding the natural beauty of the area and preserving vital ecological corridors.

The proposal includes the rezoning of the property to “Open Space III” (Nature Conservation), which will legally secure and conserve 99.8% of the site. This is a significant gain for biodiversity, as the site lies within a Critical Biodiversity Area (CBA), home to ecologically important coastal forest and thicket habitats.

The inclusion of a small-scale, eco-sensitive tourism component aligns with local and provincial spatial planning strategies, which encourage sustainable tourism that supports conservation goals. It presents an opportunity for economic benefit without compromising ecological integrity.

The development will implement strong mitigation measures, including minimal vegetation clearance, use of natural materials, soil stabilisation techniques, and visual impact reduction strategies. This demonstrates a commitment to environmental responsibility and best practices in site design.

The proposed development is fully aligned with the Knysna Spatial Development Framework (2020), Provincial SDF, and broader conservation priorities. This includes maintaining the urban edge, promoting responsible land use, and protecting natural and agricultural assets.

The location and design of the structures are outside of high-risk erosion and flood zones, considering 100-year projections. This contributes to long-term sustainability and avoids risks associated with climate change and sea-level rise.

In terms of current land use rights, the property owner has the primary right to construct a dwelling house of unlimited size on the land as well as one additional dwelling of 60m², under its current zoning. In contrast, this proposal with its small development footprint is highly conservation-oriented, with a minimal built footprint and a clear emphasis on protecting the site's natural character. The placement of buildings has been carefully considered in consultation with environmental specialists:

- A terrestrial biodiversity study confirmed that the proposed location is the least ecologically sensitive, as it is already affected by alien vegetation, making it preferable to other areas on the site.
- Given the site's proximity (within 100m) to the high-water mark of the ocean and the dynamic coastal processes, a geotechnical survey was conducted to ensure that the selected area is stable and suitable for development.
- A visual impact assessment confirmed that the proposal will have a low visual impact, thanks to existing vegetation, natural topography, and eco-sensitive architectural design.

The agricultural potential of the land is low, and any farming activities would result in significant environmental degradation, including loss of biodiversity, habitat destruction, and increased erosion.

The proposed land-use change and development are fully aligned with the Knysna Spatial Development Framework, which encourages environmentally responsible land-use practices and National and Provincial conservation priorities.

In conclusion, this proposed land-use change and development is a forward-thinking, environmentally responsible initiative that protects natural ecosystems, fosters sustainable tourism, and aligns with current conservation and planning policies. Agricultural use is neither feasible nor appropriate for this site, and conservation-focused development presents a far more beneficial, sustainable alternative. Approval of this application will allow the owners to reside on their property and secure the long-term ecological health of the site while contributing positively to the regional economy.

Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?
No. The applicant possesses the legal right to construct a residential dwelling on the property.
Will any person's rights be negatively affected by the proposed activity/ies?
The proposal allows surrounding landowners to retain their existing land use rights. The introduction of a residential dwelling will enhance surveillance in the rural area, resulting in increased safety and security within the area.
What will the benefits be to society in general and to the local communities?
Employment opportunities will be generated for local communities throughout the construction phase.
Any other need and desirability considerations related to the proposed activity?
Need Need, as defined by DEADP refers to the timing of the proposal, as such the question 'Do we need this development now?' In answering this question, the planning and land use policy of the area must be examined. Therefore, consistency with the existing approved Spatial Development Framework (SDF), the current Integrated Development Plan (IDP) and other municipal planning policies are important in the consideration of need. Further considerations of need include the need of the community/area of the activity & land use – is the development "a societal priority". Need for a project also relates to the service capacity and consistency with infrastructure planning. The need for accommodation is considered a basic need. There exists a distinct necessity for the proposal, which is relevant not only to the landowner but also to the wider public. **Desirability** The desirability of a proposed development also relies heavily on the consistency with policy documentation but has a distinctly spatial focus. The guideline on Need and Desirability specifically poses the question *"Would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF as agreed to by the relevant authorities?"* NEMA also links the desirability of development to the concept of the *"best practicable environmental option"*; this refers to the option that provides the most benefit and *causes the least damage to the environment, at a cost acceptable to society, in the long term as well as in the short term*. The consideration of alternatives is therefore closely related to this concept. The subject property is currently zoned "Agriculture Zone I" in terms of the Section 8 Zoning Scheme Regulations (1988). The landowners intend to exercise their existing land use rights by utilising the property for agricultural activities and by constructing a primary dwelling house, as permitted by the specified scheme. The entire application area is earmarked as a Critical Biodiversity Area, and therefore the application must be made to obtain Environmental authorisation. The proposal was specifically designed for the best practicable environmental solution with the least disturbance.

The proposal is in line with the applicable policy documentation (Western Cape Provincial SDF, Western Cape Rural Development Guidelines, Eden SDF, Knysna SDF and the Knysna IDP) meaning that it is in line with the spatial proposal and vision for the area whilst complying to the development guidelines for the current proposal. Therefore, the approval of this application would not compromise the integrity of the applicable policy documents agreed to by the relevant authorities.

It can, therefore, be concluded that the proposal can be regarded as desirable.

The above boxes for need and desirability can be ticked. The proposed development will not have a significant impact as it is in line with all planning legislation and consistent with the applicable spatial planning policies.

Please describe how the general objectives of Integrated Environmental Management, as set out in section 23 of NEMA have been taken into account.

The general objective of integrated environmental management has been taken into account as follows:

(a) promote the integration of the principles of environmental management set out in section 2 into the making of all decisions which may have a significant effect on the environment.

(b) identify, predict and evaluate the actual and potential impact on the environment, socio-economic conditions and cultural heritage, the risks and consequences and alternatives and options for mitigation of activities, with a view to minimising negative impacts, maximising benefits, and promoting compliance with the principles of environmental management set out in section 2.

(c) ensure that the effects of activities on the environment receive adequate consideration before actions are taken in connection with them.

(d) ensure adequate and appropriate opportunity for public participation in decisions that may affect the environment.

(e) ensure the consideration of environmental attributes in management and decision-making, which may have a significant effect on the environment; and

(f) Identify and employ the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2.

Section G

Motivation for the preferred site, activity and technology alternative

In accordance with the principles and requirements set out in the National Environmental Management Act (NEMA) and the Environmental Impact Assessment (EIA) Regulations, all reasonable and feasible alternatives must be considered and assessed in the environmental authorisation process. This includes the consideration of site, activity, design, layout, and the No-Go alternative, to ensure the selection of an option that results in the least environmental harm while still achieving the project objectives.

"Alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to –

(a) The property on which, or location where, it is proposed to undertake the activity	There is only one site.
(b) The type of activity to be undertaken	**The preferred alternative**: The development proposal entails the following: (ii) The construction of one (x1) primary dwelling house to be situated towards the south of the property, three cottages, a vehicle parking area, and a garage/storeroom. (ii) The construction of a new access road leading to the dwelling area. The building footprint will measure 525m² in total, and the planned access road will be about 200m long and 3m wide, ending in a parking area that calculates to about 660m². The total development area will amount to about 1 175m², which accounts for less than 0.02% of the site, leaving 99.98% of the site in a natural state. **Alternative 2** The proposed project will comprise one primary residence with a footprint of 400 square meters, in addition to three cottages, each with an area of 80 square meters. A boardwalk will connect all four units. Furthermore, the project will provide six parking bays allocated for the use of the units. There will also be an 80 square meter shed, along with a 50 square meter cottage designated as staff quarters.
(c) The design or layout of the activity	**The preferred alternative**: The development proposal entails the following: (i) The construction of one (x1) primary dwelling house to be situated towards the south of the property, three cottages, a vehicle parking area, and a garage/storeroom. (ii) The construction of a new access road leading to the dwelling area. The building footprint will measure 525m² in total, and the planned access road will be about 200m long and 3m wide, ending in a parking area that calculates to about 660m². The total development area will amount to about 1 175m², which accounts for less than 0.02% of the site, leaving 99.98% of the site in a natural state. **Alternative 2** The proposed project will comprise one primary residence with a footprint of 400 square meters, in addition to three cottages, each with an area of 80

	square meters. A boardwalk will connect all four units. Furthermore, the project will provide six parking bays allocated for the use of the units. There will also be an 80 square meter shed, along with a 50 square meter cottage designated as staff quarters.
(d) The Technology to be used in the activity	The entire proposed development will be off-grid. The solar plant will be developed as an off-grid installation, utilizing solar energy to supply the load during daylight hours while recharging the batteries at night. Furthermore, grid-tied photovoltaic inverters may be integrated into this micro-grid configuration through AC coupling, should the energy demand surpass the generation capacity. A sealed Lithium Iron Phosphate battery system is proposed, which is expected to provide a lifespan exceeding 10 years at a depth of discharge of 70%. Additionally, this system offers an expedited charging time, enhancing its operational efficiency.
(e) The operation aspect of the activity	The applicant intends to exercise the right to construct a residential dwelling on the property. **No Go Option** – The site will remain as is and the agricultural viability of the property is limited, not suited for cultivation or intensive farming.
(f) The option of not implementing the activity	This option must always be assessed and is addressed below.

(I) Details of the Alternatives Considered:

Details of the alternatives considered

1. Site Alternative

The proposed site was selected due to its location within a previously disturbed area, accessibility via an existing public servitude road, and its limited agricultural potential. No alternative sites were considered, as the applicant owns the property and intends to lawfully exercise the development rights while aligning the land use with the property's ecological characteristics. The property is already fragmented by sensitive areas and is not viable for other high-impact land uses.

2. Activity Alternative

The primary activity proposed is the development of a small-scale, environmentally sensitive tourism accommodation component, together with the conservation of the majority of the site. No high-impact commercial or industrial activities were considered, given the site's environmental sensitivities and the surrounding land uses. This proposed activity is aligned with the land's conservation value, supporting the objectives of sustainable development as per NEMA.

3. Layout and Design Alternatives

Different layout options were considered to avoid sensitive ecological zones such as the Critical Biodiversity Area (CBA) and steep slopes. The selected layout ensures that development occurs in the least sensitive portion of the property, outside of erosion risk zones, and with minimal vegetation clearance. The design also prioritises low visual and ecological impact through the use of natural materials and forms that blend into the landscape.

In line with NEMA's sustainable development principles, including the need to avoid, minimise, and remedy environmental harm, the proposed development represents a responsible and balanced land use option. It supports conservation efforts, limits ecological disturbance, and provides for socio-economic benefit in a manner that is consistent with the regulatory framework and the objectives of integrated environmental management.

The preferred Alternative 1

The landowners intend to reside on their property and seek to construct a dwelling house approximately 200 square meters in size on the site. The construction of a dwelling house constitutes a primary right. In addition to their residential plans, it is their aspiration to develop three small self-catering tourist accommodation units, each measuring approximately 65 square meters, to supplement their income. Ancillary structures will include staff housing of approximately 50 square meters, as well as a shed of 80 square meters for the storage of farm implements necessary for the maintenance of the land. A gravel access road, not exceeding 3 meters in width, is proposed along the eastern boundary, leading to a designated parking area. From this parking area, access to the house and accommodation units will be provided via a boardwalk.

The residential structures and units are strategically positioned in clusters on the southern side of the property, atop elevated terrain overlooking the ocean to optimize scenic views. Although the property is designated for "Agriculture Zone I, the owners do not intend to utilise the land for agricultural activities. The intrinsic value of the property is found in its natural beauty, and the owners aim to dedicate the remainder of the land to conservation efforts. The overarching development concept is to establish a tranquil and private retreat within a natural setting.

The architectural design will prioritise lightness and environmental sensitivity. The selected building materials will include steel, timber, glass, and natural stone, in contrast to traditional brick and concrete. The total footprint of the building is projected to measure 525 square meters. Additionally, the proposed access road will extend approximately 200 meters in length and 3 meters in width, culminating in a parking area of approximately 660 square meters. Consequently, the overall development area is estimated to be around 1,175 square meters, which represents less than 0.02% of the total site. This development will leave 99.98% of the site in its natural state.

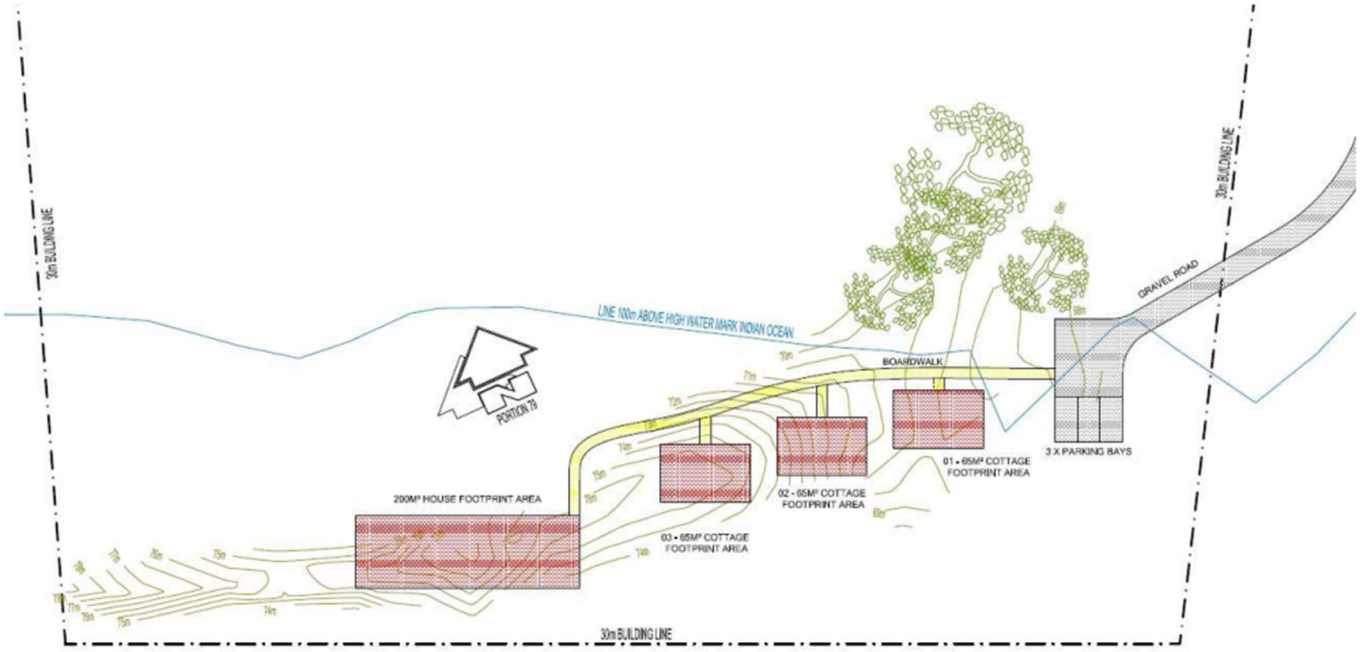


FIGURE 12: PREFERRED SDP

FIGURE 13: EXAMPLE OF BUILDING MATERIAL AND STRUCTURE

Electricity

There is currently no electrical infrastructure present on the property or in the adjacent road reserve. It is advisable to consider the installation of a solar power facility in this location.

Solar plant

Type and system

The solar plant will be developed as an off-grid installation, utilizing solar energy to supply the load during daylight hours while recharging the batteries at night. Furthermore, grid-tied photovoltaic inverters may be integrated into this micro-grid configuration through AC coupling, should the energy demand surpass the generation capacity.

Plant location

It is advisable to consider the installation of a roof-mounted solar power system on the roofs of both the main residence and the three small self-catering tourist accommodation units, should there be a requirement for increased energy generation capacity.

Plant capacity

The proposed system is designed with a capacity of 15 kWh, while the anticipated peak consumption is estimated to reach 30 kWh per day.

Energy Storage

A sealed Lithium Iron Phosphate battery system is proposed, which is expected to provide a lifespan exceeding 10 years at a depth of discharge of 70%. Additionally, this system offers an expedited charging time, enhancing its operational efficiency.

Area/Street lighting

The road lighting system will utilise low-intensity, low-level bollard luminaires. Each luminaire will be powered by an individual small solar cell and will activate solely upon detecting motion.

Alternative 2

The proposed project will comprise one primary residence with a footprint of 400 square meters, in addition to three cottages, each with an area of 80 square meters. A boardwalk will connect all four units. Furthermore, the project will provide six parking bays allocated for the use of the units. There will also be an 80 square meter shed, along with a 50 square meter cottage designated as staff quarters.

FIGURE 14: ALTERNATIVE 2 SDP

The No-Go Alternative

The No-Go Option involves maintaining the site in its current undeveloped condition, prohibiting any construction or formal development without a rezoning process or the implementation of an alternative land use. In this scenario, the property would remain vacant, with no residential dwelling established.

While this option would preserve the existing natural state of the site, it does not align with the landowner's right to develop the property in accordance with existing land use rights. The property is privately owned, and the applicant intends to exercise their right to construct a residential dwelling, a right that is consistent with broader planning frameworks and historical use allowances in the area.

Moreover, the no-go option would result in a missed opportunity for job creation and economic growth. The proposed development will provide employment opportunities during both the construction and operational phases, supporting local businesses, contractors, and service providers or the potential for low-impact tourism in line with conservation objectives (in cases where a small tourism component is proposed). The current proposal includes a land use change to Open Space III for nature conservation purposes on the majority of the site (over 99%), allowing for the protection of the critical biodiversity area and the coastal forest, while accommodating a small, low-impact residential footprint.

To reserve the land for potential agricultural purposes, a closer examination reveals that the agricultural viability of the property is limited and does not present a meaningful opportunity for productive use. The site is relatively small in scale (approximately 5.21 ha) and fragmented by ecological sensitivities, including a Critical Biodiversity Area (CBA)

and steep, erosion-prone slopes. These constraints significantly reduce the portion of the land that could theoretically be utilised for any viable agricultural activity. The property also lacks key agricultural infrastructure such as irrigation systems, water sources suitable for farming, and access roads that can accommodate agricultural vehicles or operations.

The site is located within a coastal, dune-rich environment and is characterised by sandy soils with high organic content in certain areas. These soil conditions are highly erodible, poorly structured for agricultural productivity, and not suited for cultivation or intensive farming. Furthermore, the natural vegetation on the site is dominated by coastal forest and Fynbos, both of which are indicators of low agricultural potential and are typically protected under environmental legislation due to their biodiversity value.

To retain the property under its current agricultural zoning (Agriculture Zone I) without allowing for rezoning or appropriate alternative land use would not promote agricultural production, rural economic development, or sustainable land management. On the contrary, it would prevent a more suitable and environmentally responsible land use from being realised, one that aligns with the site's actual capacity, conservation significance, and broader spatial planning goals.

Therefore, while the No-Go Option maintains the status quo, it may not be the most desirable outcome in terms of integrated environmental management, land use efficiency, or the realisation of private landowner rights. The proposed development, through careful planning, environmental sensitivity, and legal compliance, offers a more balanced approach that harmonises development needs with conservation priorities.

As per the Agricultural Compliance Statement, the no-go alternative considers impacts that will occur to the agricultural environment in the absence of the proposed development. There are no agricultural impacts of the no-go alternative, but this is not significantly different from the negligible impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

Section H

1. Details of the public participation process undertaken in terms of Regulation 41 of the regulations, including copies and supporting documents and inputs.

Section 41 in Chapter 6 of Regulation 982 details the public participation process that needs to be adhered to as part of an environmental process. Compliance of the Public Participation Process as per the Legislated Requirements is indicated in the table below:

Regulation with regard to conducting a Public Participation Process	Description of adherence to the Legislated Requirements
1) If the proponent is not the owner or person in control of the land on which the activity is to be undertaken, the proponent must, before applying for environmental authorisation in respect of such an activity, obtain written	The proponent (applicant) is the landowner and therefore consent is not required.

consent of the landowner or person in control of the land to undertake such activity on that land	
2) The person conducting a public participation process must take into account any relevant guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties on an application or proposed application which is subject to public participation by -	
(a) Fixing a notice board at a place conspicuous to and accessible by the public at the boundary, on the fence or along the corridor of – (i) The site where the activity to which the application or proposed application relates or is to be undertaken. (ii) Any alternative site.	(i) A site notice was placed on site. (ii) There is no alternative site. **See Appendix E**
(b) Giving written notice, in any of the manners provided for in section 47D of the Act, to – (i) The occupiers of the site and, if the proponent or applicant is not the owner or person in control of the site where the activity is to be undertaken and to any alternative site where the activity is to be undertaken. (ii) Owners, persons in control of, and occupiers of land adjacent to the site where the activity is or is to be undertaken and any alternative site where the activity is to be undertaken. (iii) The municipal councillors of the ward in which the site and alternative site are situated and any organisation of ratepayers that represent the community. (iv) The Municipality which has jurisdiction in the area. (v) Any organ of state having jurisdiction in respect of any activity; and (vi) Any other party as required by the competent authority.	(i) The applicant is the owner of the site and is in control of the site. The site is vacant and there is only one site. (ii) The owners of the land adjacent to the site will be notified via email. There is only one site. (iii) The ward Councillor (Knysna Municipality) will be notified. The ratepayer's association has been notified (iv) Knysna Municipality will be notified (v) Please refer to Appendix E showing a list of organs of state notified. (vi) Please refer to Appendix E showing a list of all organisations, NGO's and the public that have been notified.
(c) Placing an advertisement in – (i) One Local Newspaper; or (ii) Any official Gazette that is published specifically for the purpose of providing public notices of applications or other	(i) CX Newspaper, a local free newspaper will be used to be advertised. Please refer to a copy of the advert in **Appendix E.**

submissions made in terms of these Regulations;	
(d) Placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond its boundaries of the metropolitan or district municipality in which it is or will be undertaken: Provided that this paragraph need not to be complied with if an advertisement has been placed in an official gazette referred to in paragraph (c)(ii); and	This is not applicable to the proposed development activity as there is no impact (i.e. air emissions) that extends beyond the boundaries of the district municipality.
(e) Using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desirous of but unable to participate in the process due to – (i) Illiteracy (ii) Disability; or (iii) Any other disadvantages	Should the need arise, *Eco Route Environmental Consultancy* will identify the correct manner with the assistance of the competent authority to engage with such an individual.
3) A notice, notice board or advertisement referred to in sub-regulation (2) must – (a) Give details of the application or proposed application which is subjected to public participation; and (b) State – (i) Whether basic assessment or S&EIR procedures are being applied to the application; (ii) The nature and location of the activity to which the application relates; (iii) Where further information on the application or proposed application can be obtained; and (iv) The manner in which and the person to whom representations in respect of the application or proposed application may be made.	Refer to **Appendix E**.
4) A notice board referred to in sub regulation (2) must – (a) Be of a size of at least 60cm by 42cm; and (b) Display the required information in lettering and in a format as may be determined by the competent authority	Refer to **Appendix E.**
5) Where public participation is conducted in terms of this regulation for an application or proposed application, sub-regulation (2)(a), (b), (c) and (d)	Refer to **Appendix E.**

need not be complied with again during the additional public participation process contemplated in regulations 19(1)(b) or 23(1)(b) or the public participation process contemplated in regulations 21(2)(d), on condition that – (a) Such a process has been preceded by a public participation process which included compliance with sub-regulation (2)(a), (b), (c) and (d); and (b) Written notices are given to registered I&AP's regarding where the – (i) Revised basic assessment report or, EMPr or closure plan, as contemplated in regulation 19(1)(b); (ii) Revised environmental impact assessment report or EMPr as contemplated in regulation 23(1)(b); or (iii) Environmental impact assessment report and EMPr as contemplated in regulation 21(2)(d); (iv) May be obtained, the manner in which and the person to whom representations on these reports or plans may be made and the date on which such representations are due.	
6) When complying with this regulation, the person conducting the public participation process must ensure that – (a) Information containing all relevant facts in respect of the application or proposed application is made available to potential interested and affected parties; and (b) Participation by potential or registered interested and affected parties is facilitated in such a manner that all registered interested and affected parties are provided with a reasonable opportunity to comment on the application or proposed application.	Refer to **Appendix E.** The Draft BAR will be made available on the website of Eco Rout Environmental Consultants for the relevant organs of state. Kindly refer to Appendix E for verification of the delivery method. A hard copy will be placed in the Knysna Library for the review of interested and affected parties (I&APs), and an electronic version is accessible at www.ecoroute.co.za.
7) Where an environmental authorisation is required in terms of these Regulations and an authorisation, permit or licence is required in terms of a specific environmental management	N/A

	Act, the public participation processes contemplated in this Chapter may be combined with any public participation processes prescribed in terms of a specific environmental management Act, on condition that all relevant authorities agree to such a combination of processes.	

Registration of Key Stakeholders

The key stakeholders identified will be given an opportunity to comment on the consultation Basic Assessment Report. A list of key stakeholders for this process is included in the table below. This will be updated in the Draft BAR:

STATE DEPARTMENTS			
Name	**Contact Person**	**Postal Address**	**HC/WEBSITE LINK/L**
Department of Agriculture Western Cape	Mr Cor van der Walt	P/Bag X1 Elsenburg 7607	WEBSITE LINK
Department of Agriculture - National		P/Bag X120 Pretoria 0001	WEBSITE LINK
Department of Agriculture, Forestry & Fisheries	Mr Jeffery Sass	P/Bag X12 Knysna 6570	WEBSITE LINK
Department of Economic Development & Tourism-Western Cape	Mr Mark Lakay	P.O. Box 979 Cape Town 8000	WEBSITE LINK
Department of Environmental Affairs & Development Planning	Mr Danie Swanepoel Jessica Christie	P/Bag X6509 George. 6530	WEBSITE LINK
Department of Provincial Health	Manie Abrahams	P/Bag X6592 George 6530	WEBSITE LINK
Department of Rural Develop. & Land Reform	Glen Smith	P.O. Box 872 George 6530	WEBSITE LINK
District Roads Engineer	H. Ottervanger	Private Bag X12 George 6530	WEBSITE LINK
Department of Transport & Public Works	J. Prodehl	P/Bag X617 Oudshoorn 6620	WEBSITE LINK
Department of Water Affairs	John Roberts	P/Bag X16 Sanlamhof	WEBSITE LINK

		7532	
South African National Roads Agency	Colleen Runkel	P/Bag X19 Bellville 7535	WEBSITE LINK
Gouritz WMA: Environmental Officer	Caroline Tlowana	Private Bag X16 Sanlamhof Bellville 7532	WEBSITE LINK
ORGANS OF STATE			
Name	**Contact Person**	**Postal Address**	**HC/WEBSITE LINK/L**
Cape Nature – Western Cape	Colin Fordham	P/Bag 6546, George. 6530	HD/WEBSITE LINK
Cape Nature - Bitou	Henk Niewoudt	P/Bag X1003 Plettenberg Bay 6600	WEBSITE LINK
Eskom Western Cape – Land & Rights	Rochelle McPherson	P.O. Box 222 Brackenfell 7561	WEBSITE LINK
Heritage Western Cape	C. van Wijk	P/Bag X9067 Cape Town. 8000	WEBSITE LINK
SANParks	Maretha Alant	P.O. Box 3542 Knysna 6570	WEBSITE LINK
NGO's			
Name	**Contact Person**	**Postal Address**	**HC/WEBSITE LINK/L**
Knysna Ratepayers Association	Mr. Ian Uys	P.O. Box 2475, Knysna. 6570	WEBSITE LINK
Knysna Catchment Management Forum	Johan de Klerk	P.O.Box Knysna 6570	WEBSITE LINK
Ward 1 Councillor Knysna Municipality	Mr R. Dawson	P.O. Box 21, Knysna. 6570	WEBSITE LINK
MUNICIPALITIES			
Name	**Contact Person**	**Postal Address**	**HC/WEBSITE LINK/L**
Knysna Municipality – Environmental Management	Pam Booth	P.O. Box 21 Knysna 6570	WEBSITE LINK
Knysna Municipality – Town Planning	Mr H. Smit	P.O. Box 21 Knysna 6570	WEBSITE LINK
PUBLIC			

Erf Number	Contact Person	Postal Address	HC/WEBSITE LINK/L
TBC			

Availability of the Draft Basic Assessment Report

Registered I&AP's including all identified I&AP's will be notified of the availability of the report on die Eco Route Environmental Consultancy website for review. The registered I&AP's including the notice placed in the newspaper, advertised that the digital copy can be obtained at www.ecoroute.co.za.

The Consultation Basic Assessment report will be made available for a 30-day commenting period. Proof of notifications and availability of the report will be included in the final BAR.

Comments and Response Report on the Consultation BAR

A Summary of the issues raised by interested and affected parties, and an indication of the manner in which the issues were incorporated, or the reasons for not including them are described below:

Comments Received From	Response from appointed Specialist
To be Completed after the 30day comment period.	

2. Site Description and Environmental Attributes

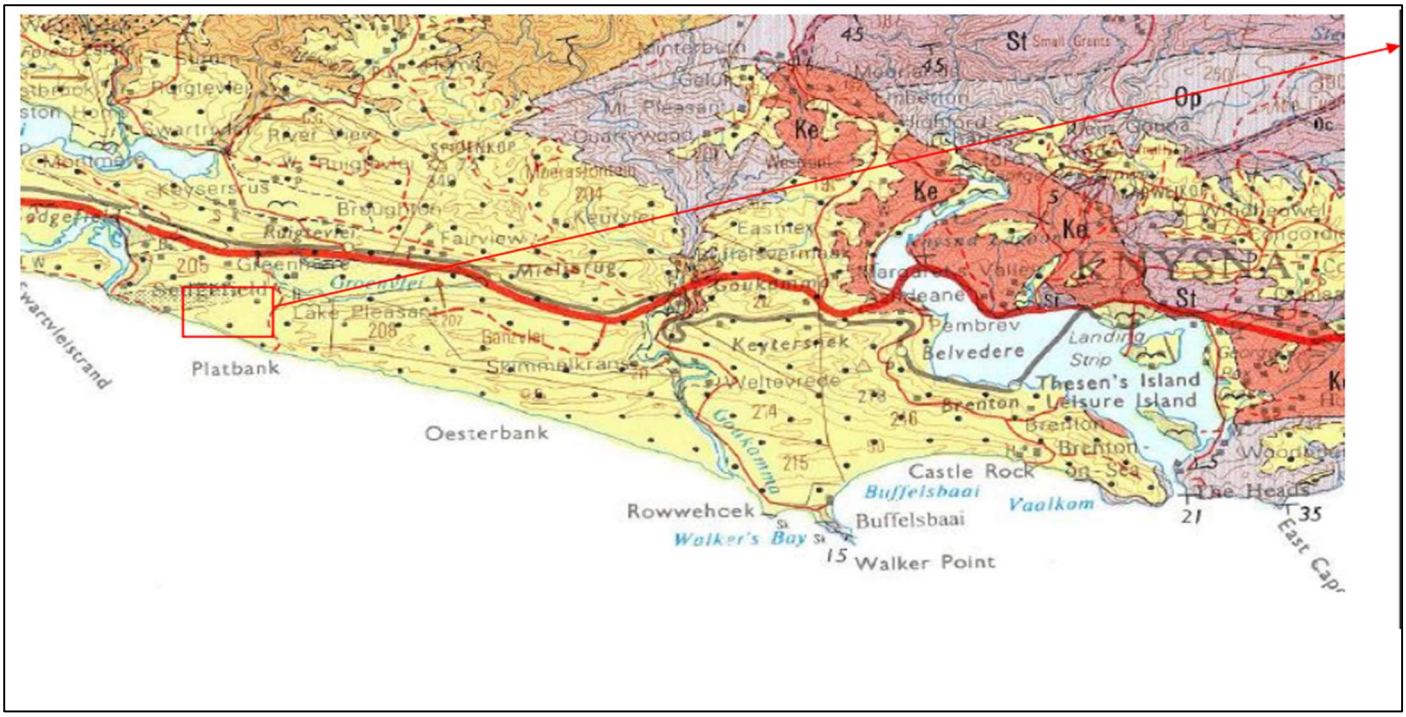
Geographical and Physical Aspects

Preliminary Geomatic and Geotechnical Investigation

Rock Hounds (Pty) Ltd was appointed to undertake the Preliminary Geomatic Geotechnical investigation which was undertaken in May 2024. The purpose of the study was to determine dune stability and morphology over time. Parcel 79 of Farm 205 Ruygte Valley is situated within the Knysna Municipal Area and constitutes one of the farm portions of Groenvlei, located to the east of Sedgefield. This property encompasses approximately 5.21 hectares and shares its southern boundary with coastal public land. It directly adjoins Portion 78 of Farm Ruygte Valley No. 205, which has been designated as a private nature reserve.

Topographical Features

The property (approximately in red block) is located within the Cape Supergroup rocks, on thick sand (light yellow Bredasdorp formation). Kirkwood formation conglomerates (Ke dark orange) might be present in thin layers under the sand. Peninsula sandstones (Light pink Op) underly the sand and conglomerates at depths of typically approximately 70-90m. Steep topographical features are present due to the formation of high wind-blown recent sand dunes and semi consolidated fossil sand dune.



REGIONAL GEOLOGICAL MAP 1:250 000 MAP (COUNCIL FOR GEOSCIENCE)

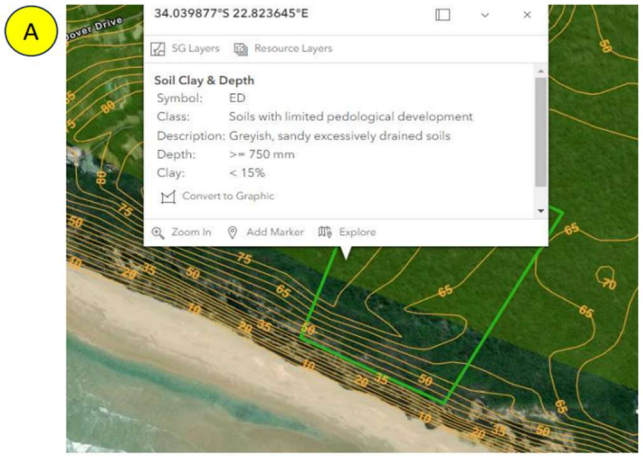
The designated area is categorized as low-sloped, characterized by the presence of tall trees from the 65-meter contour, with slope angles ranging from 0 to 21 degrees. Conversely, there are significant slope gradients originating from the BM area and extending towards the lookout point and the coastline, where the terrain is predominantly covered in coastal shrubs. This segment spans from the 75-meter contour down to sea level, exhibiting slope angles between 26 and 70 degrees over a distance of 50 meters. The stretch from the lookout to the coastal zone is identified as a high-risk area due to the pronounced steepness of the slopes.

POSITIONS OF MEASUREMENTS (GOOGLE EARTH PRO, 3D TERRAIN VIEW): POSITIONS OF INTEREST PE- WESTERN POINT ON PATH & SURVEY POINT (75M ABOVE SEA LEVEL); LOOKOUT – PATH OVERLOOKING SEA (76M ABOVE SEA LEVEL); D7 – POSITION OF DEEP FRACTURE ON SCAN (79M ABOVE SEA LEVEL); CROSS – SPLIT IN PATH (77M ABOVE SEA LEVEL); BM – SURVEY POINT (72M ABOVE SEA LEVEL); HW2 – SURVEY POINT & TALL TREES (70M ABOVE SEA LEVEL)

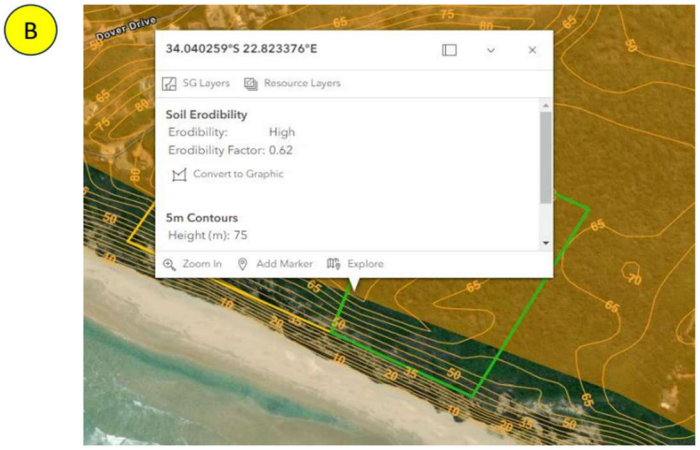
The region is characterised by coastal sand dunes, which are underlain by fossilized dunes. The area features a layer of soft and semi-consolidated materials that overspans a peninsula sandstone formation, which exhibits an east-west orientation and dips at an angle of 45 degrees to the south, at depths between 60 and 80 meters. Observations from the geophysical survey indicate a notable transition in the sandy overburden, shifting from a depth of 15 meters to 25 meters. Furthermore, a structurally weak point has been identified at a depth of 120 meters.

Soil

The soil profile at the Lookout Point test pit is primarily composed of silty loam, sandy loam, and sand at varying depths. One of the test pits exhibits both silty loam and sandy loam. Both sites feature organic-rich top layers; however, the organic layer is notably deeper at one location, indicating a more developed and older soil profile with in-situ development. The topsoil in this region is characterized by a loose texture, rendering it highly susceptible to erosion. The combination of a steep slope and high erodibility values serves as a significant indicator of potential soil movement. The moisture content is within expected parameters and is typical for coastal regions characterised by high organic layers.



A Field observations: Sandy soil with high organic matter was present to 150 cm depth on both test pit sites. Minor Clays are present.



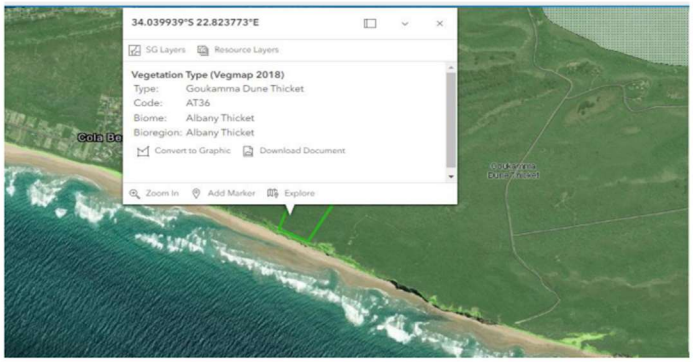
B Field observations: Soil is highly erodible in this area and loosely packed.

A) Soil clay and depth (CFM) 1: 1 000 000: Soil thickness is average more than 750mm deep with little accumulation of clay materials and is sandy and excessively drained. B) Soil erodibility (CFM) 1: 1 000 000: The soil in this area is highly erodible. The 0.62 factor indicator points to a high probability of a moveable soil horizon in this area, especially in conjunction with the steep slopes from the Lookout Point towards the coastal zone.

Soils at the site had no pebbles and were course to medium grained predominantly organic rich to sandy from the top to the bottom layers. Grainsize changed gradually from course organic material to medium grained sand layers down to 1,5m depth. Soil colour ranged from dark brown to grey brown. Soil type is predominantly Organic material to 90cm, to Silty loam with 20-40% silt in the top layers to Sandy Loam at 60-150cm depth. Clay is not predominant. Moisture ranges from25% in the top layers, gradually changing to 5% from the 15 to 135cm, with a slight moisture increase at 150cm.

Vegetation

A well-established coastal forest is present, extending from the 65-meter contour and gradually tapering towards the 30-meter coastal zone, where it transitions to shrubbery. This observation is corroborated by historical satellite imagery. Soil samples have revealed the presence of roots at depths of 60 centimetres and greater, indicative of robust vegetation that contributes to the stabilization of the dune. Furthermore, from 2005 to 2024, there has been consistent vegetation growth from the 25-meter contour inland, which demonstrates the long-term stability of the dune system.



Well established coastal forest (Albany thicket),

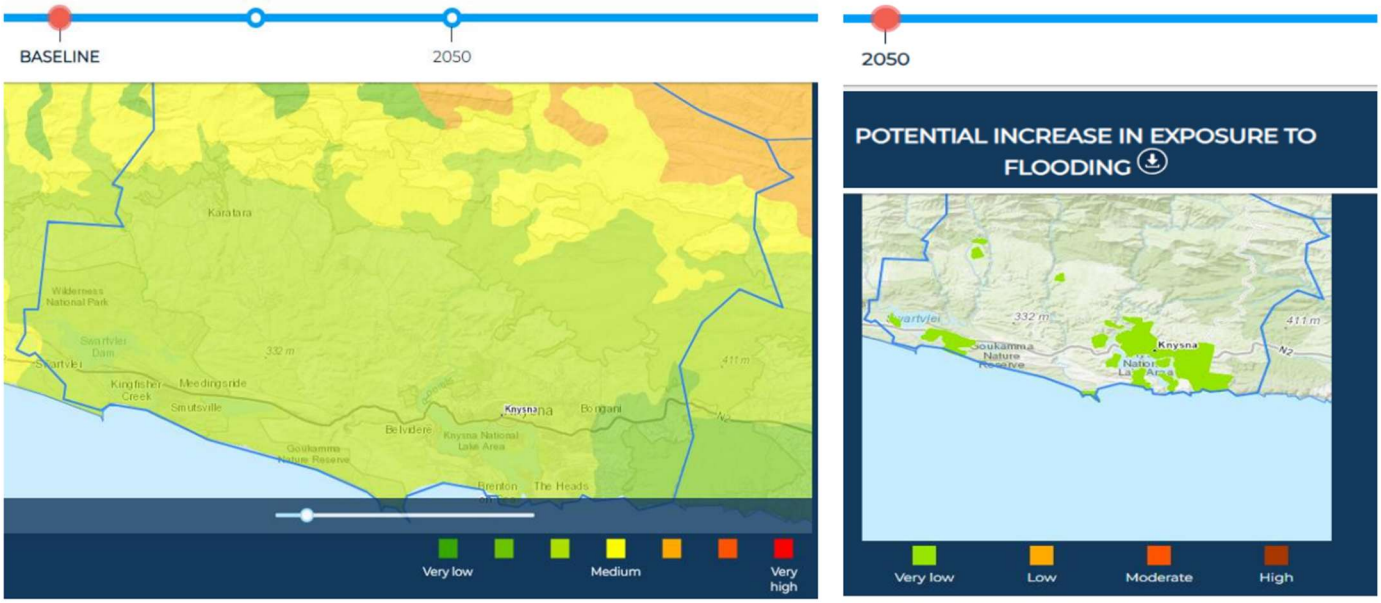
2024 satellite image: Well established coastal forest (Albany thicket), gradually tapering from the 65m contour towards the 30m coastal zone to shrubs

VEGETATION TYPE (CFM)

The designated area has been classified as a Critical Biodiversity Area (CBA:1 for maintenance and CBA:2 for restoration), which includes essential features related to terrestrial biodiversity and forest ecosystems. This ecosystem encompasses the Goukamma Dune Thicket, which retains its classification as being of Least Concern (LC). The property is situated on low-sloping terrain behind the front dune edge, exhibiting a gentle incline that ranges from 0 to 21 degrees toward the east. Notably, the slope experiences a significant transformation as it approaches the coast, attaining gradients between 26 and 70 degrees over a horizontal distance of 70 meters.

Coastal Flooding

A modest increase in seasonal rainfall is anticipated, rising from 196 mm to 202 mm over the next century, while a decline in average rainfall is projected. By the year 2050, the region is expected to experience four fewer days of extreme rainfall events. Currently, the risk of coastal flooding at the property is low, and this is expected to remain very low by 2050. Additionally, average wind speeds in the area are recorded at 5.75 m/s.

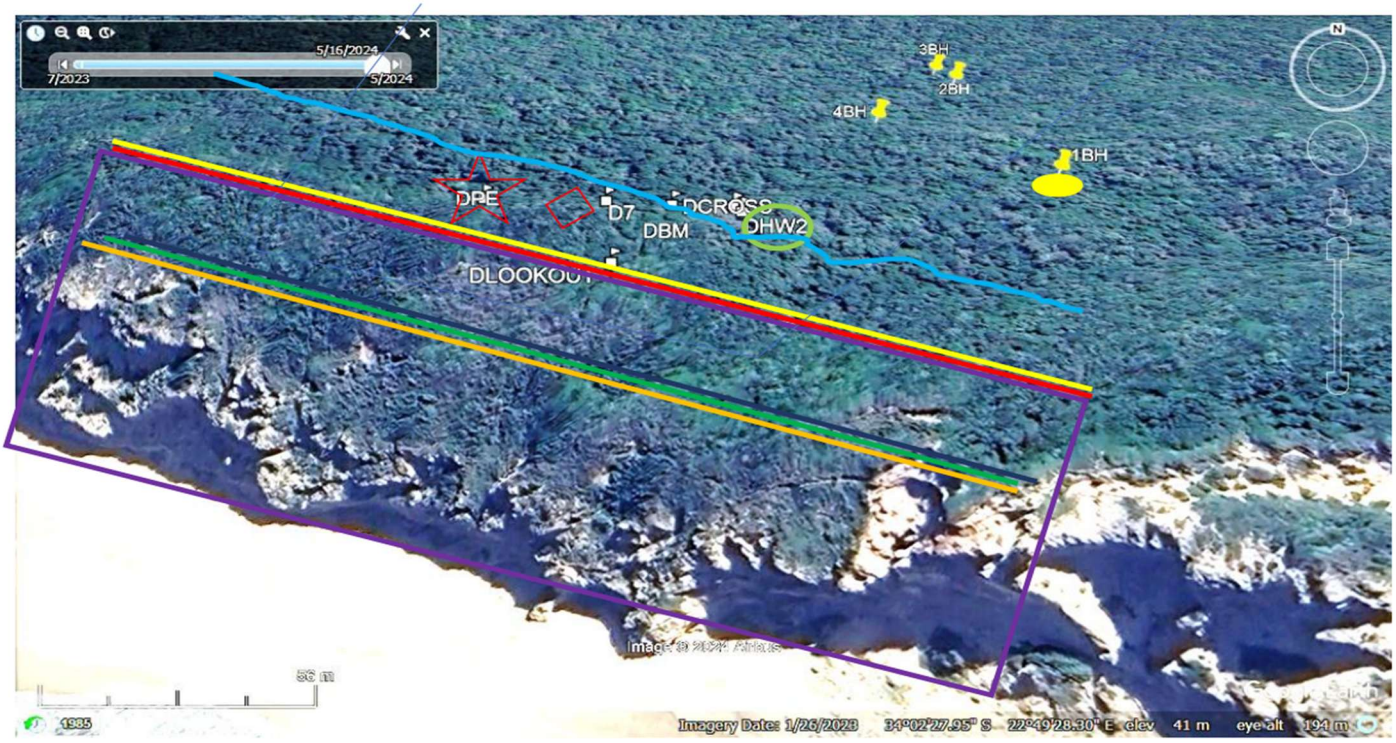


COASTAL FLOODING (CSIR): BASELINE (CURRENT) AND PROJECTED (2050) EXPOSURE TO FLOODING INDICATE THAT THE PROPERTY IS LOCATED CURRENTLY IN A LOW RISK AND IN 2050 IN A VERY LOW RISK AREA FOR COASTAL FLOODING.

The 100-year low-risk projection indicates that the coastal zone will coincide with the 40-meter contour, which serves as the property boundary. In contrast, the high-risk projection suggests that the coastal zone will reach Lookout Point, located 50 meters from the current coastal line.

Exclusion Zones for the Proposed Erecting of Structures Terrain View

1. Yellow line: High risk 100 years flood line, as per high-risk projection to the year 2100
2. Red block: Current Structurally weak zone, as per geophysical survey data.
3. Purple block: Current high-risk zone due to steep slope values
4. Orange line – low risk projection for coastal flooding and sea level rise for the next 100 years corresponding to the current property border.
5. Green line indicates calculated 100-year coastal zone movement inland, as per measurements of the historical satellite images.
6. Note: The border (dark blue line), low risk projection 100 year coastal flooding (orange line), and the measured 100 year coastal zone movement (green) overlaps. The building line (red) and the high risk projection 100 year coastal flooding (yellow line) overlaps.



SUMMARY IMAGE OF EXCLUSION ZONES FOR PROPOSED ERECTING OF STRUCTURES TERRAIN VIEW: 3D FEATURES ENABLED

Observation Summary

Geologically: A structurally weak area is located on position D7. Do not place weight-bearing structures on this position, or design structures around it. Position PE is far enough, but be aware not to place excessive weight bearing pillars on this position when designing foundations for the dwelling

Foundations: Lookout, BM path split and PE sites have soft, but consistent highly erodible soil profiles. Sites HW2 in the tall trees have weak areas at 160 and 360mm depth due to high organic matter content. All sites consist of soft material that needs special foundation, and compaction designs to carry weight for the proposed dwellings. The area is low risk for soil movement due to the low slope from BM to HW2. However, the zone south of the lookout is high risk due to high slope changes.

Climatic conditions is projected to be low risk for rainfall, temperature, wind and vegetation cover is well established indicating dune stability.

2100 flooding high risk projections indicate that the 100-year coastal flood line may be level with the lookout point coordinates. Satellite image measurements from 2005 to 2024 indicate that the coastal zone might move inland 30m over 100 years (based on 6m inland movement every 20 years), this is in line with the low-risk coastal flooding projections, in line with the 40m contour line, or on the current property border. Conclusions:

The dune morphology is stable north of the property's coastal border, as indicated by well established vegetation and thick organic layers in the soil. Thick vegetation protects the dune from wind erosion. Cyclic wave erosion is present at the high tide mark in the coastal zone and it is projected to move 30m inland over 100 years.

Foundation design has to allow for soft, uncompressed highly erodible sandy material at all sites, allow for a compacted zone of 1,5m around the foundations of any outside walls, and has to be designed and signed off by an ECSA registered structural engineer.

The proposed dwellings at location PE is not in the current erosion zone, nor in the projected low or high risk 100-year coastal flooding zones, nor in the measured projected 100-year zone and not located on position D7. It is located 15m north (inland) of the 100-year high risk projection zone.

The border line, low risk projection 100-year coastal flooding zone, and the measured 100-year coastal zone movement overlap. The 30m building line and the high-risk projection 100-year coastal flooding overlaps.

The 100m line above the high-water mark is located north of location PE. Locations BM and HW2 are north of the 100m line above the high-water mark.

Existing dwellings in the adjacent developed areas of Sedgefield have been built between the 100-year low and high-risk projection lines, and south of the 100m high water mark.

Should the local authority change building regulations and move the 30m building line to the 100m line above the high water mark, the municipal authority has to first give permission for the proposed dwelling at the PE location, irrespective of the above findings and observations, Then the BM location is the next best option for a dwelling as it is located on the 100m line above the high water mark and above all the other risk projection lines.

Conclusion

The geological assessment of the site highlights a structurally weak area at position D7, which should be avoided for weight-bearing structures, while position PE is suitable with caution regarding excessive foundation loads. The soil profile at Lookout, BM path split, and PE sites consists of soft, highly erodible material, necessitating specialized foundation and compaction designs to ensure structural integrity. The HW2 site within the tall trees presents weak zones at 160mm and 360mm depths due to high organic content, requiring further reinforcement. Although most of the area is classified as low risk for soil movement, the zone south of the Lookout Point is high risk due to significant slope changes.

Climatic projections indicate a low risk for rainfall, temperature, and wind impacts, with well-established vegetation contributing to dune stability. Long-term coastal flood risk projections suggest that by 2100, the high-risk flood line may reach the Lookout Point coordinates, with a 30m inland movement of the coastal zone expected over a century. However, the site north of the coastal border remains stable, as indicated by dense vegetation and thick organic soil layers, which protect the dune from wind erosion.

Given these conditions, foundation designs must accommodate soft, highly erodible sandy material and include a compacted zone of at least 1.5m around any external walls. All structural plans must be designed and approved by an ECSA-registered structural engineer to ensure compliance with safety and stability requirements. The proposed dwellings at location PE are positioned outside the current and projected erosion and flood risk zones, maintaining a 15m buffer inland from the 100-year high-risk projection zone.

The borderline, low-risk 100-year coastal flood zone and measured 100-year coastal movement projections align, reinforcing the need for careful planning. While the 30m building line overlaps with the high-risk projection zone, the 100m setback above the high-water mark remains a crucial reference point, with locations BM and HW2 positioned beyond it. Existing dwellings in the adjacent developed areas of Sedgefield have been constructed between the low and high-risk 100-year projection lines, south of the 100m high-water mark, setting a precedent for controlled and responsible development within the region.

Overall, while the site presents some geological and coastal constraints, careful planning, strategic foundation design, and adherence to engineering best practices can ensure a sustainable and structurally sound development.

Agricultural Compliance Statement and Site Sensitivity Verification

The Agricultural Compliance Statement and Sensitivity Verification was compiled by Soil ZA in January 2025 as part of the environmental and land-use assessment for the proposed development. This report serves to verify the current cropping status and agricultural land use across the site, ensuring compliance with national and regional agricultural policies and environmental regulations. Additionally, it provides a comprehensive assessment of agricultural conditions, including soil composition, land capability, and long-term agricultural potential.

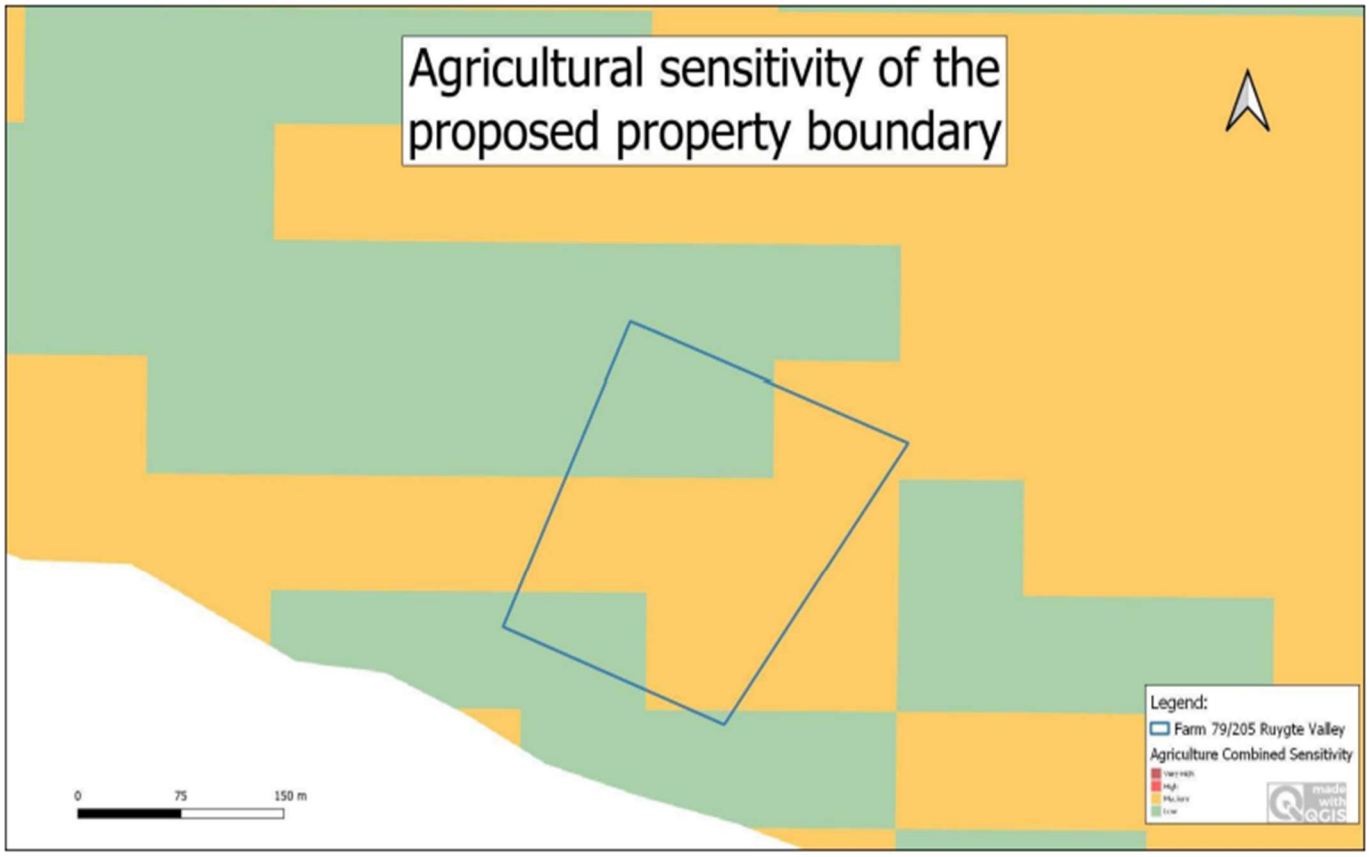
The proposed project is for tourist accommodation on portion 79 of farm 205 Ruygte Valley. The project will consist of one house with a footprint of 400m², three cottages at 80m² each, a boardwalk connecting the four units, 6 parking bays for the four units, an 80m² shed, and a 50m2 cottage as staff quarters. The proposed project is located west of the town of Knysna.

The project is likely to require agricultural approval (or at least comment from Department of Agriculture) as part of the required approval in terms of applicable municipal land use legislation, as well as in terms of the Subdivision of Agricultural Land Act (Act 70 of 1970 - SALA), because it is on land currently zoned for agriculture.

A specialist agricultural assessment is required to include a verification of the agricultural sensitivity of the development site as per the sensitivity categories used by the web-based environmental screening tool of the Department of Forestry, Fisheries and the Environment (DFFE). The screening tool's classification of sensitivity is merely an initial indication of what the sensitivity of a piece of land might be. What the screening tool attempts to indicate is whether the land is suitable for crop production (high and very high sensitivity) or unsuitable for crop production (low and medium sensitivity). To do this, the screening tool uses two independent criteria, from two independent data sets, which are indicators of suitability for crop production but are limited in that the first is outdated and the second is fairly course, modelled data which is not accurate at site scale. The two criteria are:

1. Whether the land is classified as cropland or not on the field crop boundary data set (Crop Estimates Consortium, 2019). All classified cropland is, by definition, either high or very high sensitivity.
2. Its land capability rating as per the Department of Agriculture's updated and refined, country-wide land capability mapping (DAFF, 2017). Land capability is defined as the combination of soil, climate, and terrain suitability factors for supporting rain-fed agricultural production. The direct relationship between land capability rating, agricultural sensitivity, and rain-fed cropping suitability.

It is important to note that agricultural sensitivity is not necessarily correlated with the significance of an agricultural impact and is therefore often of very limited value for assessing agricultural impact. What is of importance to an agricultural assessment, rather than the site sensitivity verification, is its assessment of the impact significance.



THE ASSESSED PROPERTY (BLUE OUTLINE) OVERLAID ON AGRICULTURAL SENSITIVITY, AS GIVEN BY THE SCREENING TOOL (GREEN = LOW; YELLOW = MEDIUM; RED = HIGH; DARK RED = VERY HIGH). DUE TO A SCREENING TOOL ERROR, A LAND CAPABILITY OF 8 IS NOT SHOWN AS HIGH SENSITIVITY. THE SCREENING TOOL'S HIGH SENSITIVITY IS DISPUTED BY THIS ASSESSMENT.

The assessment verifies that the site is not within crop boundaries and therefore confirms the less-than-high sensitivity rating by the screening tool that is based on the cropping status component of sensitivity. Crop production in the area is confined to land types that have higher water and nutrient holding capacity. This assessment therefore rates the assessed area as having a maximum land capability of 6 and therefore as being of medium agricultural sensitivity in terms of the land capability component of sensitivity.

In conclusion, this assessment confirms the low, medium sensitivity rating of the site by the screening tool because of the site's assessed agricultural production potential and current agricultural land use. It however disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6.

Baseline Description of the Agro-Ecosystem

The site is not within a Protected Agricultural Area (PAA) (DALRRD, 2020). A PAA is a demarcated area in which the climate, terrain, and soil are generally conducive for agricultural production and which, historically, or in a regional context, has made important contributions to the production of the various crops that are grown across South Africa. Within PAAs, the protection of viable, arable land is considered a priority for the protection of food security in South Africa.

The entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

	Parameter	Value
Climate	Köppen-Geiger climate description (Beck *et al*, 2018)	Temperate, no dry season, hot summer
	Mean Annual Rainfall (mm) (Schulze, 2009)	632
	Reference Crop Evaporation Annual Total (mm) (Schulze, 2009)	764
	Climate capability classification (out of 9) (DAFF, 2017)	6 (moderate-high)
Terrain	Terrain type	Coastal dunes
	Terrain morphological unit	Varied
	Slope gradients (%)	0 to 12
	Altitude (m)	75
	Terrain capability classification (out of 9) (DAFF, 2017)	3 (low) to 5 (moderate)
Soil	Geology (DAFF, 2002)	Fixed dunes and dune rock.
	Land type (DAFF, 2002)	Hb12
	Description of the soils	Deep, light textured soils, grey soils.
	Dominant soil forms	Fernwood, Mispah
	Soil capability classification (out of 9) (DAFF, 2017)	6 (moderate-high)
	Soil limitations	Unlimited depth, Low water & nutrient holding capacity.
Land use	Agricultural land use in the surrounding area	None
	Agricultural land use on the site	None
General	Long-term grazing capacity (ha/LSU) (DAFF, 2018)	25
	Land capability classification (out of 15) (DAFF, 2017)	4 (low-very low) to 8 (moderate)
	Within Protected Agricultural Area (DALRRD, 2020)	No

PARAMETERS THAT CONTROL AND/OR DESCRIBE THE AGRICULTURAL PRODUCTION POTENTIAL OF THE SITE.

The cropping potential of the site is limited by its soil constraints, predominantly that soils are deep, very sandy with low water and nutrient holding capacity. Because of these constraints, the site is completely unsuitable for viable rainfed crop production. It is in an area that is not utlised for agricultural production at all.

ASSESSMENT OF THE AGRICULTURAL IMPACT

Impact identification and assessment

It should be noted that an Agricultural Compliance Statement is not required to formally rate agricultural impacts by way of impact assessment tables.

An agricultural impact is a change to the future agricultural production potential of land. In most developments, including the one being assessed here, this is primarily caused by the exclusion of agriculture from the footprint of the development. The significance of an agricultural impact is a direct function of the following three factors:

1. The size of the footprint of land from which agriculture will be excluded (or the footprint that will have its potential decreased)
2. The baseline production potential (particularly cropping potential) of that land
3. The length of time for which agriculture will be excluded (or for which potential will be decreased).

The most significant loss of agricultural land possible, for any development anywhere in the country, is of high-yielding cropland, and the least significant possible is of low carrying capacity grazing land.

Cropping potential is highlighted in factor 2, above, because the threshold, above which it is a priority to conserve land for agricultural production, is determined by the scarcity of arable crop production land in South Africa (approximately only 13% of the country's surface area) and the relative abundance of the rest of agricultural land across the country that is only good enough to be used for grazing. If land can support viable and sustainable crop production, then it is considered to be above the threshold and is a priority for being conserved as agricultural production land. If land is unable to support viable and sustainable crop production, then it is considered to be below the threshold and of much lower priority for being conserved.

In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland. The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable.

Cumulative impact assessment

Specialist assessments for environmental authorisation must consider cumulative impacts, which include the combined effects of past, present, and foreseeable future activities on the environment. The key agricultural concern is the regional loss of future production potential. However, due to its negligible agricultural impact, the proposed development will not significantly contribute to this loss. The cumulative agricultural impact is assessed as low and acceptable, with no unacceptable negative effects on the area's agricultural capability. From this perspective, the development is recommended for approval.

Assessment of alternatives

Specialist assessments for environmental authorisation are required to include a comparative assessment of alternatives, including the no-go alternative. Because there is no viable cropland within the assessed site, the exact positions of all proposed infrastructure within it will make absolutely no difference to agricultural impacts. Any alternative layouts within the same assessed site will have an equal agricultural impact and are assessed as equally acceptable.

The no-go alternative considers impacts that will occur to the agricultural environment in the absence of the proposed development. There are no agricultural impacts of the no-go alternative, but this is not significantly different from the negligible impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

MITIGATION

The most important and effective mitigation of agricultural impacts for any development is avoidance of viable croplands. This development has already applied this mitigation by selecting a site on which there are not viable croplands. No mitigation measures are required for the protection of agricultural production potential on the site because the development poses negligible degradation risk to agricultural resources.

The cumulative impact of a development is the impact that development will have when its impact is added to the incremental impacts of other past, present, or reasonably foreseeable future activities that will affect the same environment. The potential cumulative agricultural impact of importance is a regional loss of future agricultural production potential.

Due to its negligible agricultural impact, the assessed development will not contribute to the cumulative impact. The cumulative agricultural impact of the proposed development is therefore assessed here as being of low significance and therefore as acceptable. The development will not have an unacceptable negative impact on the agricultural production capability of the area, and it is therefore recommended, from a cumulative agricultural impact perspective, that the development be approved.

ADDITIONAL ASPECTS REQUIRED IN AN AGRICULTURAL ASSESSMENT

Micro-siting

The agricultural protocol requires confirmation that all reasonable measures have been taken through micro-siting to minimise fragmentation and disturbance of agricultural activities. Because of the uniformly low agricultural potential of the environment, with no cropping, micro-siting will make no material difference to agricultural impacts and disturbance.

Confirmation of linear activity exclusion

If linear infrastructure has been given exclusion from complying with certain requirements of the 15 agricultural protocols because of its linear nature, the protocol requires confirmation that the land impacted by that linear infrastructure can be returned to the current state within two years of completion of the construction phase. No such exclusion applies to this project.

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to negligible loss of future agricultural production potential. This assessment confirms the low, medium sensitivity rating of the site by the screening tool because of the site's assessed agricultural production potential and current agricultural land use.

It, however, disputes the classified land capability of >6 and rates the entire assessed area as having a maximum land capability of 6.

The cropping potential of the site is limited by its soil constraints, predominantly that soils are very sandy with low water and nutrient holding capacity. Because of these constraints, the site is completely unsuitable for viable rainfed crop production.

It is in an area that is not utlised for agricultural production at all. An agricultural impact is a change to the future agricultural production potential of land. This is primarily caused by the exclusion of agriculture from the footprint of the development. In this case, the entire development footprint is considered to be below the threshold for needing to be conserved as agricultural production land because of the limitations that make it unsuitable as viable cropland.

The proposed development on this land will result in negligible loss of future agricultural production potential in terms of national food security. The overall negative agricultural impact of the development (loss of future agricultural production potential) is assessed here as being of low significance and as acceptable. From an agricultural impact point of view, it is recommended that the proposed development be approved.

The conclusion of this assessment on the acceptability of the proposed development and the recommendation for its approval is not subject to any conditions.

Biological Components

VEGETATION

Terrestrial Biodiversity Specialist Assessment

BioCensus (Pty) Ltd was appointed to undertake the Terrestrial Biodiversity Specialist Assessment in March 2025.

The site is located above the coastal cliffs to the east of Cola Beach, Sedgefield in the Garden Route (Figure 1). It is accessed from the Groenvlei Beach road, which is a gravel road that runs past the western side of Groenvlei to the beach on the western edge of Goukamma Nature Reserve.

The site is in an area of untransformed coastal thicket between Goukamma Nature Reserve and Cola Beach in Sedgefield. The strip of land is privately owned and has been divided into several small holdings, some of which overlook the sea. One of these sea-facing sites has already been partially developed, and there is strong pressure to develop the area.

Most of the areas to the north and north-east of the site are in a natural state. This natural area between Sedgefield and Goukamma Nature Reserve provides an important natural buffer to the vegetation in Goukamma Nature Reserve.

The scope of this report is the entire property, part of which is being considered for development, which is 5.21 ha.

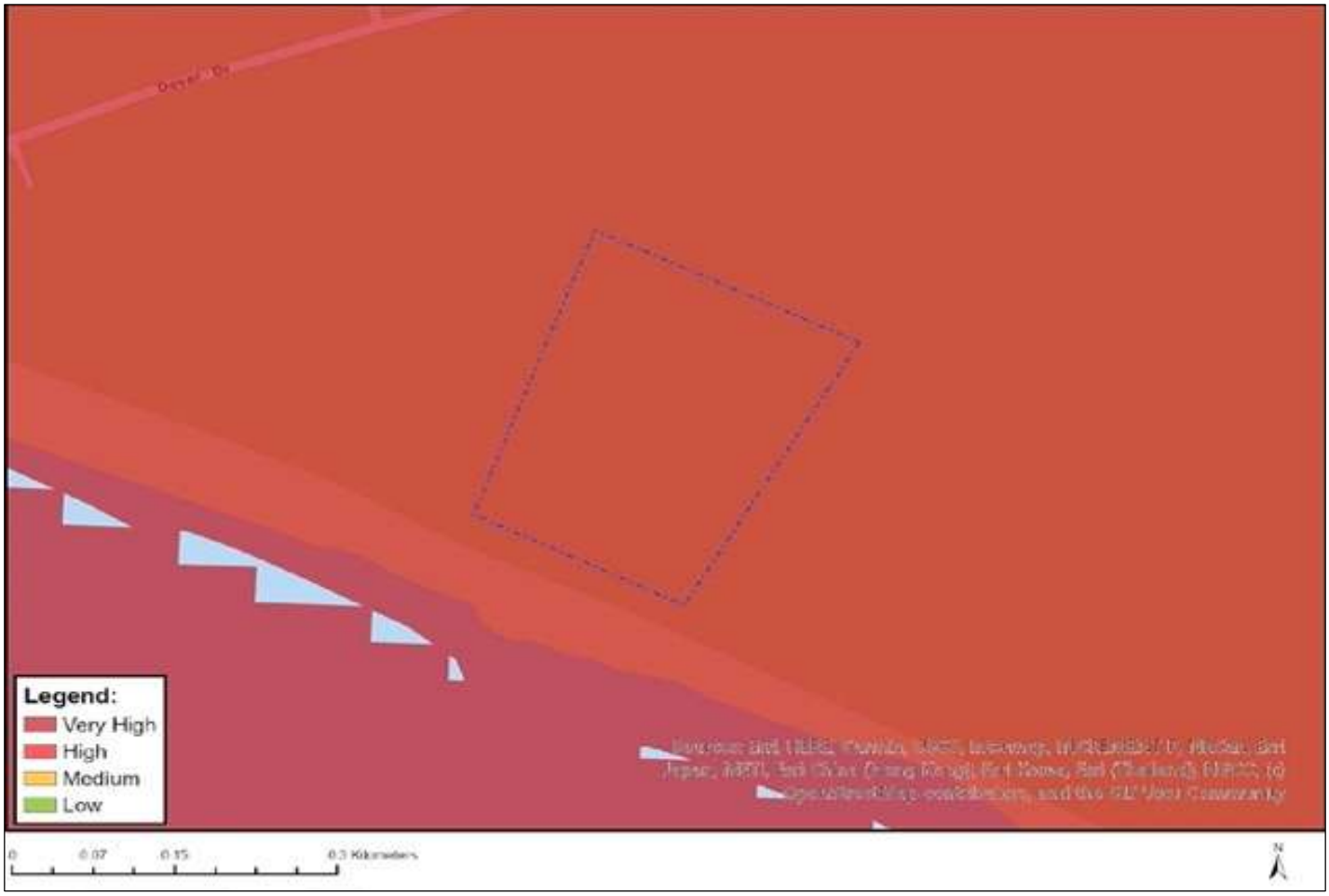
Figure 1: Location of the site near Sedgefield.

LOCATION OF THE SITE NEAR SEDGEFIELD.

Terrestrial Biodiversity Theme Sensitivities

A sensitivity screening report from the DEA Online Screening Tool was requested in the application category: Transformation of land | Indigenous vegetation. The DEA Screening Tool report for the area indicates the following sensitivities:

Sensitivity	Feature(s)
Very High	Lake Pleasant Private Nature Reserve Section No.5
Very High	Wilderness National Lake Area
Very High	CBA 2: Forest
Very High	CBA 2: Terrestrial
Very High	CBA 1: Forest
Very High	CBA 1: Terrestrial
Very High	FEPA Subcatchment
Very High	National Protected Area Expansion Strategy (NPAES)



TERRESTRIAL BIODIVERSITY THEME SENSITIVITY FOR THE SITE AND SURROUNDING AREAS.

Survey timing

The study commenced as a desktop-study followed by site-specific field studies on 4 October 2024. The site is within the Fynbos Biome with an all-year rainfall season with a slight dip in early winter.

DESKTOP DESCRIPTION OF SITE

Regional vegetation patterns

The property is within one mapped regional terrestrial vegetation type, namely Goukamma Strandveld (Figure 6). The vegetation map also shows Cape Seashore Vegetation, which occurs at the base of the cliffs and not above the cliffs where the proposed development is situated. Any natural vegetation on site would therefore fall within Goukamma Strandveld.

Goukamma Strandveld

Distribution

This vegetation type occurs in the Western Cape Province in Sedgefield Bay, wedged between the Knysna Heads to the east and Wilderness to the west covering 39 km^2.

Vegetation & Landscape Features

Parabolic dunes occur along the coastal margin, with inland ridges supporting Knysna Sand Fynbos. Mesic Dune Thicket patches are common in the Goukamma Strandveld, and in fire-protected and locally wet areas, they grow into forests. Altitude ranging between 1 – 196 metres (median 49 m).

Geology & Soils

FIGURE 2: REGIONAL VEGETATION TYPES OF THE SITE AND SURROUNDING AREAS.

Geology & Soils

The vegetation is overlaying the Klein Brak Formation rocks cemented beach deposits, Waenhuiskrans aeolianite sand on oxidised, neutral sands. The Klein Brak Formation rocks, which are primarily quartz-rich, shelly sandstones, border the dune cordon between Arniston and De Hoop Nature Reserve.

Climate

Like that of the St Francis Strandveld but with a lower annual rainfall 500–700 $mmyr^{-1}$. Warm temperate, subhumid to semi-arid and sub-Mediterranean. The temperature regime is equable: mean midsummer temperatures are 20−22 °C, and midwinter temperatures 16−18 °C.

Other descriptions of vegetation patterns in the area

The vegetation of the Wilderness Lakes area has been complex to map and describe. The vegetation of the coastal dunes was initially included in the national vegetation map as being within a single broad unit called Southern Cape Dune Fynbos, which occurred from Wilderness to Oyster Bay in the Eastern Cape. The national vegetation map initially mapped this area as falling within Goukamma Dune Thicket, but this unit was recently split into Goukamma Dune Thicket and Goukamma Strandveld. There are now primarily three regional terrestrial vegetation units currently described for the Wilderness Lakes area, namely Goukamma Dune Thicket, Goukamma Strandveld and Knysna Sand Fynbos. Some valleys with Southern Afrotemperate Forest also intrude into the area from the north and there is also a small patch of vegetation near Sedgefield named Southern Cape Dune Fynbos.

Goukamma Strandveld is mapped as a unit that stretches along the coastline and slightly inland from Wilderness to Knysna. This area encompasses high variation in topography, moisture regime and substrate conditions. For example, the vegetation of this area was described in a project done for the Garden Route Initiative (Vlok et al. 2008) and, within the Wilderness Lakes area, the following habitat types are mapped (with equivalent VegMap units shown):

Habitat	Variant	Equivalent VegMap vegetation type
Dune Sandplain Fynbos	Hoogekraal Sandplain Fynbos	Knysna Sand Fynbos
Dune Sandplain Fynbos	Sedgefield Sandplain Fynbos	Goukamma Strandveld
Dune Sandplain Mosaic Thicket	Sedgefield Thicket Fynbos	Goukamma Strandveld
Dune Thicket Mosaic Forest	Sedgefield Thicket Fynbos	Goukamma Dune Thicket / Goukamma Strandveld
Dune Thicket Mosaic Forest	Wilderness Forest Thicket	Goukamma Strandveld
Dune Thicket Mosaic Littoral Vegetation	Kleinkrantz Littoral-Thicket	Goukamma Strandveld
Drift Sands	Kleinkrantz Drift Sands	Goukamma Strandveld
Coastal Dune Milkwood & Ekebergia	Groenvlei Coastal Forest	Goukamma Dune Thicket / Goukamma Strandveld
Primary Dune	Hartenbos Primary Dune	Cape Seashore Vegetation
Coastal Solid	Sedgefield Coastal Grassland	Southern Cape Dune Fynbos

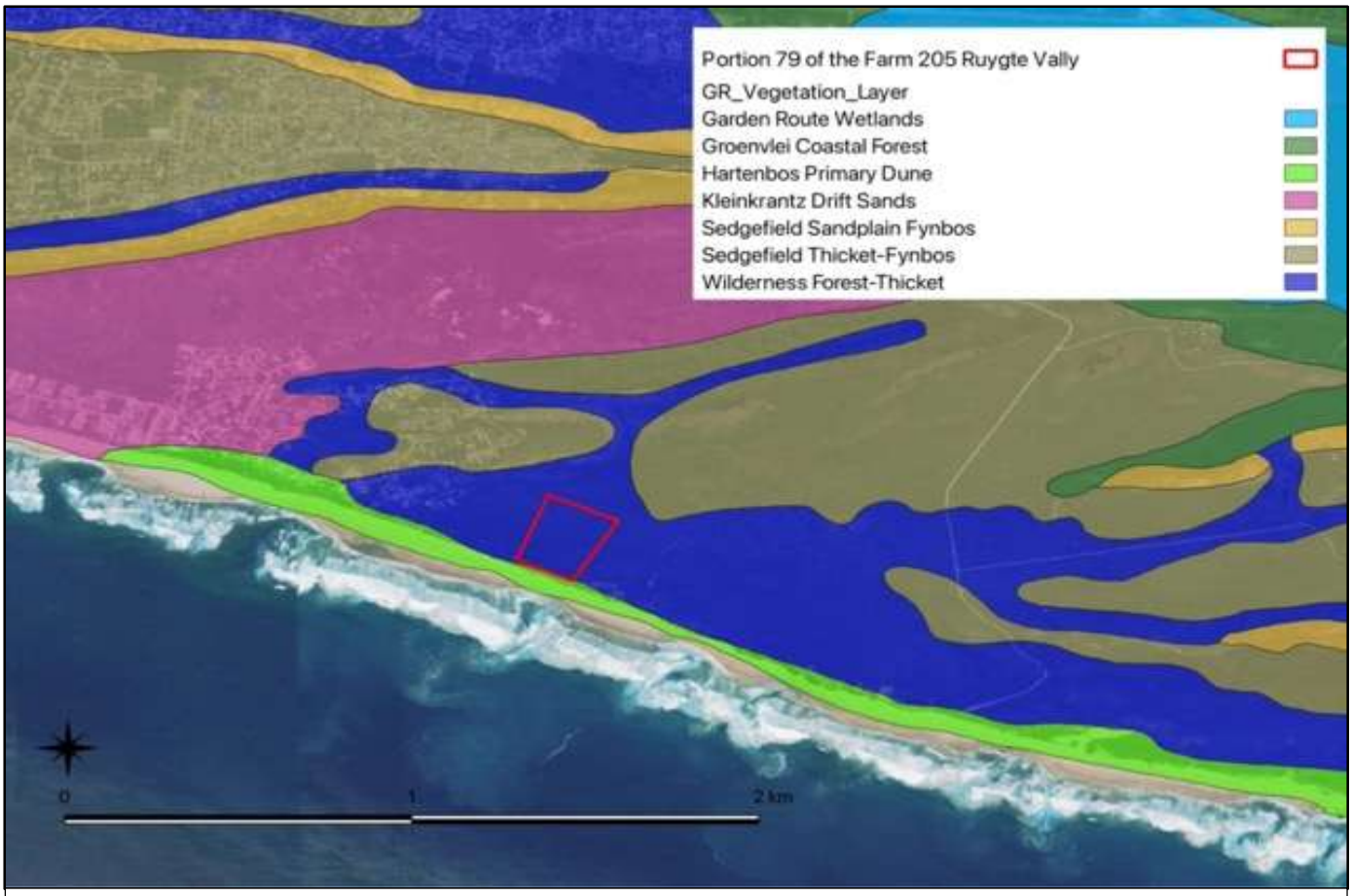


FIGURE 3: VEGETATION TYPES ACCORDING TO THE GARDEN ROUTE INITIATIVE VEGETATION MAP.

It is clear from the Garden Route Initiative description that what is currently mapped as Goukamma Strandveld encompasses variation that includes fynbos, thicket, littoral vegetation, forest and grassland.

Studies at Goukamma Nature Reserve (van der Merwe 1976, Hoare 1994) identified several vegetation communities within areas mapped as Goukamma Dune Thicket. On sea-facing cliffs and headlands that are included within the mapped region called Goukamma Dune Thicket are additional communities that have been described (Hoare 1993, Hoare *et al*. 2000).

According to the vegetation map of the Garden Route Initiative (Vlok et al. 2008) the vegetation on site is mapped as Wilderness Forest Thicket and Hartenbos Primary Dune. There is also some Sedgefield Thicket-Fynbos nearby, but not on site. Vlok et al. indicate proportional areas for different units, which shows that Wilderness Forest Thicket consists of only 28.5 hectares in total.

Cowling et al. (2023) described the vegetation of the Holocene coastal dunes of the Cape south coast and distinguished the unit now called Goukamma Strandveld (Figure 8). This has been separated from Goukamma Dune Thicket in VegMap2024. Goukamma Strandveld comprises 41% of the original extent of Goukamma Dune Thicket, and excludes all areas inland that occur on older Pleistocene sediments. Cowling et al. (2023) emphasize that Holocene sands are physically and chemically different from Pleistocene sands. The vegetation of the southern Cape coast is highly responsive to these differences, with alkaline Holocene sand supporting a floristically distinct vegetation with a different structure to, and sharing few species with the Sand Fynbos of the older sediments (Cowling, 1990).

FIGURE 4: GOUKAMMA STRANDVELD (COWLING ET AL. 2023).

The vegetation unit described by Cowling et al. (2023), Goukamma Strandveld, includes numerous patches of Goukamma Mesic Dune Thicket that occurs in sites with high levels of soil moisture. (Cowling et al. 2023) describe Mesic Dune Thicket vegetation as dominated by species with multi-stemmed, laterally spreading architecture (e.g., *Sideroxylon inerme* and *Pterocelastrus tricuspidatus*), but single-stemmed, vertically-growing species are indicative, for example *Zanthoxylum capense*, *Apodytes dimidiata*, *Celtis africana*, *Clausena anisata*, *Afrocanthium mundianum* and *Acokanthera oppositifolia*. Canopy height is approximately 4–6 m. Mesic Dune Thicket usually has a well-developed herbaceous understorey comprising of species such as *Brachiaria chusqueoides*, *Hypoestes aristata*, *Amaranthus thunbergii*, *Droguetia iners* and *Stipa dregeana*. The liana and vine floras are rich with the most common and widespread species being *Asparagus scandens*, *Capparis sepiaria*, *Dioscorea mundii*, *Secamone alpini*, *Behnia reticulata* and *Kedrostis nana*. This description is typical of the vegetation found on site.

Conservation status of broad vegetation types

Rouget et al. (2006) classified South African vegetation types according to their ecosystem status, a measure based on the extent of remaining untransformed area of a vegetation type in relation to its biodiversity target (% area). An updated status assessment, based on the latest classification of South Africa's vegetation (Dayaram et al., 2019) and implementing the IUCN Red List of Ecosystems V. 1.1 protocol (Keith et al., 2013), classified most Cape south coast dune vegetation as "Least Concern". However, the delimitation of vegetation units on coastal dunes of the Cape south coast is not accurate and therefore there are inherent errors in the threat status assessments of these ecosystems.

Given the continuing threat of coastal development and encroachment by invasive plants, Cowling et al. (2023) propose that all remnant South Coast Strandveld vegetation be protected.

The conservation status for Goukamma Dune Thicket in accordance with the Revised National List of Ecosystems (Government Notice No 2747 of 18 November 2022) published under the National Environmental Management: Biodiversity Act (Act No. 10, 2004), is given below. Note that there is no assessment for Goukamma Strandveld, therefore the status of the vegetation unit from which Goukamma Strandveld was eparated is provided here.

Vegetation Type	**Conservation status**
	Revised National Ecosystem List (NEM:BA) (2022)
Goukamma Dune Thicket	Not listed - Least concern

It is therefore verified that the site DOES NOT occur within a Listed Ecosystem, as listed in the Revised National List of Ecosystems that are Threatened and need of protection (GN2747 of 2022) and therefore has LOW sensitivity with respect to this attribute.

Biodiversity conservation plans

The Western Cape Biodiversity Spatial Plan (WCBSP) classifies the habitats of the province according to conservation value in decreasing value, as follows:

1. Protected Areas (PA);
2. Critical Biodiversity Areas 1 (CBA1);
3. Critical Biodiversity Areas 2 (CBA2);
4. Ecological Support Area 1 (ESA1);
5. Ecological Support Area 2 (ESA2);

The WCBSP map for Knysna (Figure 9) shows that most of the site is within a CBA1 area, with a band of CBA2 along the southern part of the site. There are also two ESA2 areas on site. There are several protected areas in nearby areas, including the neighbouring property to the east (which is already partly developed!). The more inland areas that are protected are Lake Pleasant Nature Reserve.

The WCBSP map includes a layer that provides reasons for including areas within specific conservation categories. For the area within the site, the following reasons are given:

1. Ecological processes.
2. Indigenous forest type.
3. Threatened SA Vegetation type - Southern Cape Dune Fynbos (VU) - note that the vegetation map has been updated and this unit no longer exists.
4. Water resource protection - Swartvlei.
5. Coastal resource protection.

This verifies the output from the Online Screening Tool in concept and spatial placement and confirms that the majority of the site has VERY HIGH sensitivity from a Terrestrial Biodiversity perspective. A specialist assessment is therefore required.

FIGURE 5: WESTERN CAPE BIODIVERSITY SPATIAL PLAN OF THE SITE AND SURROUNDING AREAS.

Natural Forest on site

According to the National Forests Act 84 of 1998, various natural forest types have been declared as national forests under section 7(3)(a) of the Act. A list of forest types declared as National Forest Types was published in GN 1388 dated 30 October 1998, amended in Notice 167 of 2017. Included in this list of National Forest Types is Western Cape Milkwood Forests (VEGMAP CODE FOz VI3).

The description for this forest type (Western Cape Milkwood Forest) states that it occurs in the Western Cape Province, near the coast from the Groenvlei forest (Goukamma Nature Reserve), the Standford-Hermanus area, to parts on the eastern and western side of the Cape Peninsula (von Maltitz et al. 2003). The site falls within this geographical range.

The official forest type is described as being generally a low forest with trees with large stems and widely spreading crowns. The stands are often dominated by *Sideroxylon inerme*, and/or *Celtis africana* and/or *Apodytes dimidiata*. The understorey is either open or a shrub layer with diverse species, including soft shrubs of the Acanthaceae (von Maltitz et al. 2003). It occurs mainly on aeolian sand, as well as on limestone.

At the time of publishing this description (von Maltitz et al. 2003) there was insufficient distribution data to calculate area or conservation status. However, an unpublished map from the The Garden Route Biodiversity Sector Plan for the George, Knysna and Bitou Municipalities (Vromans et al. 2010) shows that the site is within an area mapped as "Dune Thicket Mosaic Forest: Wilderness Forest-Thicket variant". The short description for this unit (Vlok et al. 2008, pp. 43) provides a species list that is typical of that found on the current site (see next section of this report). This same unpublished document also describes the thicket at Goukamma Nature Reserve (see description above for Groenvlei

forest) as being Groenvlei Coastal Forest, although Wilderness Forest-Thicket also occurs at Goukamma Nature Reserve.

Although it is therefore not clear whether or not the thicket on site falls under Western Cape Milkwood Forest (protected under the National Forests Act), it is dominated by the Milkwood, *Sideroxylon inerme*, that is protected under the same Act.

Results of field surveys

The vegetation on site is an almost closed canopy of milkwood-dominated mesic thicket or low forest. It matches the description by Cowling et al. (2023) for Goukamma Mesic Dune Thicket. Closer to the edge of the sea-facing cliff, this changes to a low, wind-cropped vegetation, dominated by the alien, *Acacia cyclops*, along with milkwoods (*Sideroxylon inerme*). This wind-cropped thicket has been found all along the coastal cliffs to Glentana (Hoare et al. 2000) and is characteristically short (less than 1 m tall but dominated by typical thicket species.

A list of plant species found on site is provided in Appendix 1.

There are existing pathways through the forest / thicket. The original pathway / roadway is visible on the 1973 aerial photograph, but the footpaths onto the site may be more recent.

The entire site is in a natural state. Due to the fact that it occurs within either CBA1 or CBA2 areas, this means that the entire site has Very High sensitivity with respect to the Terrestrial Biodiversity Theme. According to PROTOCOL FOR THE SPECIALIST ASSESSMENT AND MINIMUM REPORT CONTENT REQUIREMENTS FOR ENVIRONMENTAL IMPACTS ON TERRESTRIAL BIODIVERSITY, the following is stated:

"1.5. If any part of the proposed development footprint falls within an area of “very high” sensitivity, the assessment and reporting requirements prescribed for the “very high” sensitivity apply to the entire footprint, excluding linear activities for which impacts on terrestrial biodiversity are temporary and the land in the opinion of the terrestrial biodiversity specialist, based on the mitigation and remedial measures, can be returned to the current state within two years of the completion of the construction phase, in which case a compliance statement applies.

IMPACT ASSESSMENT

Proposed development

The proposal is to build a series of units along the top of the cliff, with an access road running back towards the existing access road. The proposed layout is shown in Figure 12, which also shows the existing development on the neighbouring property. This is useful because it gives an indication of the likely level of impact.

The units are mostly within the steeper slope area overlooking the coast. This is preferable in the sense that it is heavily invaded by rooikrans (*Acacia cyclops*) and is therefore somewhat degraded from a biodiversity perspective, but it introduces a strong erosion and general pollution risk to downslope areas from the proposed development. It is also preferable in the sense that it has a smaller footprint area within the forest, which is the most sensitive vegetation on site. Finally, it is preferable because it is mostly within CBA2 areas, which is better than being within CBA1 areas.

Forest is vulnerable to development because the vegetation health is dependent on the integrity of the canopy - any break in the canopy introduces edge effects, including modification of micro-environmental conditions and an environment suitable for invasive species.

Figure 6: Proposed layout superimposed on braod habitat map.

Potential impacts

In terms of the Terrestrial Biodiversity Theme, any sensitivities (from a terrestrial perspective) would be linked primarily to the existence of indigenous forests, and CBA1 and CBA2 areas on site. The site is also within the buffer of the Wilderness National Lake Area and the Lake Pleasant Private Nature Reserve and also includes areas highlighted for future protection in the National Protected Area Expansion Strategy (NPAES). The habitat on site is supportive of all of these sensitivities and is in an ecologically functional state. The site therefore has VERY HIGH sensitivity with respect to the Terrestrial Biodiversity Theme.

Impacts assessed here are as follows:

1. IMPACTS ON FOREST.
2. IMPACTS ON PROTECTED TREES.
3. IMPACTS ON EXISTING AND FUTURE CONSERVATION PLANNING OPTIONS.
4. IMPACTS ON DOWNSLOPE CLIFF THICKET.

Impacts on forests

The forest on site is part of relatively narrow bands of coastal forest that match the description of Western Cape Milkwood Forest, protected under the National Forests Act 84 of 1998. The forests are part of a natural vegetated area to the east of Cola Beach that is currently almost fully intact, with strong linkages to forests within Goukamma Nature Reserve. Development on site will have localised impacts that will introduce edge effects in a line from the coast inland, as well as along the top of the coastal cliff. It would be the beginning of what is likely to be a series of small developments that will extend Coal Beach eastwards. Each development on its own has relatively minor impacts,

but the cumulative effect will be fragmentation of the forest in this row of properties. Although protected in Goukamma Nature Reserve, the affected area of forest here is the largest intact patch of coastal forest within the Holocene Dune system of the Wilderness Lakes area.

BIODIVERSITY VALUE / SENSITIVITY CRITERIA	DESCRIPTION	SCORE
Irreplaceability (I)	The affected areas are within an CBA1 & 2.	4
Threshold (T)	Potential impacts would be related to construction damage on vegetation, as well as edge effects (trampling, erosion, runoff, pollution, spread of alien invasive species). The impact affects a small proportion of the overall biodiversity resource - the proposed footprint is relatively small relative to the overall remaining area of the vegetation.	3
Condition (C)	The potentially affected vegetation the site is in good condition.	4
Reversibility (R)	Impacts are IRREVERSIBLE..	5
IMPACT MAGNITUDE CRITERIA		
Extent (E)	The impact will occur in within the site boundary (CBA).	1
Duration (D)	Loss of vegetation on site, if it occurs, is assessed as being permanent (for the structures proposed), although localised.	5
Magnitude (M)	Although localised, impacts on vegetation will result in processes continuing but in a modified way. The potential impact is therefore scored as being of MEDIUM intensity.	3
Probability of Occurrence (P)	PROBABLE	5
Significance (S) $S = [(R + I + T + C)/4 \times (E + D + M)/3\ ]/5$	[(4+3+4+5)/4 x (1+5+3)/3]/5 = [4.00 x 3.00]/5 = 12.00/5 = 2.40 MODERATE negative significance	

Possible mitigation measures

Possible mitigation measures that can be applied are as follows:

1. Obtain a permit from the relevant Department for impacts on a protected forest area.
2. Areas outside of the development footprint must be protected under some form of formal conservation agreement. It has been proposed that the entire property be rezoned “Open Space III” (Nature conservation area). This proposal is supported and will mitigate against future vegetation loss.
3. Strictly adhere to footprint areas.
4. No entry beyond construction footprint by construction personnel.
5. No pathways to the beach to be constructed - only public access routes to be used.
6. An approved Alien Invasive Management Plan must be implemented.
7. Use existing access roads for construction and operation.

It is noted that the current footprint area has undergone several iterations and is currently as small as possible and located in the most appropriate position to minimise loss of habitat. These measures are commended and assist in reducing the potential significance of impacts. It is also noted that there is an existing right to construct a primary dwelling on site and that there are also concession rights that may apply to the site. In this regard, the efforts to minimise the proposed footprint are commended and supported.

Impacts on protected trees

The forest on site is dominated by milkwoods, *Sideroxylon inerme*, which are protected under the National Forests Act 84 of 1998. Any impacts on protected trees will require a permit from the relevant Department.

BIODIVERSITY VALUE / SENSITIVITY CRITERIA	DESCRIPTION	SCORE
Irreplaceability (I)	The milkwoods on site are protected under the National Forests Act, but are relativbely common and widespread.	1
Threshold (T)	The milkwoods on site are relativbely common and widespread	1
Condition (C)	The trees on site are in good condition.	5
Reversibility (R)	Impacts are BARELYREVERSIBLE..	4
IMPACT MAGNITUDE CRITERIA		
Extent (E)	The impact will occur in within the site boundary	1
Duration (D)	Loss of trees on site, if it occurs, is assessed as being permanent (for the structures proposed), although localised.	5
Magnitude (M)	Although localised, impacts on trees will result in processes continuing but in a modified way. The potential impact is therefore scored as being of MEDIUM intensity.	3
Probability of Occurrence (P)	PROBABLE	5
Significance (S) $S = [(R + I + T + C)/4 \times (E + D + M)/3\ ]/5$	[(1+1+5+4)/4 x (1+5+3)/3]/5 = [2.75 x 3.00]/5 = 8.25/5 = 1.65 LOW negative significance	

Possible mitigation measures

Possible mitigation measures that can be applied are as follows:

1. Shift access roads to avoid as many trees as possible. This may require curving the road instead of having it straight, as is currently indicated.
2. Obtain permits for any protected trees that will be affected.

Impacts on existing & future conservation planning

The site is within CBA1 and CBA2 areas, which are ideal areas to include in future conservation areas due to already being identified as being high value biodiversity areas. The site is also within the buffer of the Wilderness National Lake Area and the Lake Pleasant Private Nature Reserve, and also includes areas highlighted for future protection in the National Protected Area Expansion Strategy (NPAES).

BIODIVERSITY VALUE / SENSITIVITY CRITERIA	DESCRIPTION	SCORE
Irreplaceability (I)	The affected areas are within an CBA1 & 2..	4
Threshold (T)	Loss of habitat within identified high-value biodiversity areas means that alternative sites are required to meet biodiversity targets and to protect ecosystem processes within protected area buffer zones.	3
Condition (C)	The vegetation on site is in good condition.	4

Reversibility (R)	Impacts are IRREVERSIBLE..	5
IMPACT MAGNITUDE CRITERIA		
Extent (E)	The impact will occur in within the site boundary but affects regional level conservation planning	4
Duration (D)	Loss of vegetation on site, if it occurs, is assessed as being permanent (for the structures proposed), although localised.	5
Magnitude (M)	Although localised, impacts on vegetation will result in processes continuing but in a modified way. The potential impact is scored as being of LOW intensity.	2
Probability of Occurrence (P)	PROBABLE	5
Significance (S) $S = [(R + I + T + C)/4 \times (E + D + M)/3\ ]/5$	[(4+3+4+5)/4 x (4+5+2)/3]/5 = [4.00 x 3.67]/5 = 14.67/5 = 2.93 MEDIUM negative significance	

Possible mitigation measures

Possible mitigation measures that can be applied are as follows:

1. Areas outside of the development footprint must be protected under some form of formal conservation agreement. It has been proposed that the entire property be rezoned "Open Space III" (Nature conservation area). This proposal is supported and will mitigate against future vegetation loss.

It is noted that the current footprint area has undergone several iterations and is currently as small as possible and located in the most appropriate position to minimise loss of habitat. These measures are commended and assist in reducing the potential significance of impacts. It is also noted that there is an existing right to construct a primary dwelling on site and that there are also concession rights that may apply to the site. In this regard, the efforts to minimise the proposed footprint are commended and supported.

Impacts on downslope cliff areas

The site is on the summit of the coastal cliffs. High-tide often reaches the foot of the cliffs. The scree slopes below the development area are covered in wind-cropped dwarf thicket. Although heavily invaded, this vegetation is sensitive and has a relatively narrow distribution between Glentana and Knysna. The coastal cliffs are mostly Pleistocene age consolidated beach sand and are easily erodable once the vegetation cover has been lost (as can be seen near Gericke Point).

BIODIVERSITY VALUE / SENSITIVITY CRITERIA	DESCRIPTION	SCORE
Irreplaceability (I)	The wind-cropped thicket with the specific composition and structure as found on site is limited to the area between Glentana and Knysna.	2
Threshold (T)	It is estimated that about 10-20% of this ecosystem on this coastline has been degraded.	4
Condition (C)	The potentially affected vegetation the site is in poor condition (heavily invaded).	2
Reversibility (R)	Impacts are probably IRREVERSIBLE - once this vegetation is lost it is unlikely to re-establish.	5
IMPACT MAGNITUDE CRITERIA		

Extent (E)	The impact will occur in within the site boundary but will affect downslope and adjacent areas.	2
Duration (D)	Loss of vegetation on site, if it occurs, is assessed as being permanent (for the structures proposed), although localised.	5
Magnitude (M)	Although localised, impacts on vegetation will result in processes continuing but in a modified way. The potential impact is therefore scored as being of MEDIUM intensity.	3
Probability of Occurrence (P)	PROBABLE	5
Significance (S) $S = [(R + I + T + C)/4 \times (E + D + M)/3\ ]/5$	[(2+4+2+5)/4 x (2+5+3)/3]/5 = [3.25 x 3.33]/5 = 10.83/5 = 2.17 MODERATE negative significance	

Possible mitigation measures

Possible mitigation measures that can be applied are as follows:

1. Strictly adhere to footprint areas.
2. Management of all activities that could result in downslope effects must be strictly managed, both during construction and operation. This includes water-flow, diffuse pollutants, material slip, etc.
3. No entry beyond construction footprint by construction personnel, especially in downslope areas.
4. No pathways to the beach to be constructed - only public access routes to be used, such as at Groenvlei Beach.
5. An approved Alien Invasive Management Plan must be implemented. Note that removal of aliens without simultaneous rehabilitation will result in slope failure and permanent loss of vegetation characteristic of this ecosystem.

Summary of potential impacts

The assessment here considered several possible impacts associated with the proposed development. These are as follows:

There are low coastal forests on site that are part of a connected area of forests linked to Goukamma Nature Reserve. Even small impacts on these forests can cause local ecosystem damage, as well as wider fragmentation effects. Due to the relatively long life-span of the trees, impacts may only become evident decades into the future. The footprint area of the proposed project is relatively small, but the significance has been assessed here as being MODERATE. negative These forests fit the description of Western Cape Milkwood Forest, protected under the National Forests Act 84 of 1998.

The dominant tree species on site is the milkwood (*Sideroxylon inerme*). This tree species is protected under the National Forests Act 84 of 1998. Any trees to be damaged by the proposed project will require a permit. As an impact, loss of these trees was assessed as having LOW negative significance.

The site is close to Goukamma Nature Reserve and the Lake Pleasant Private Nature Reserve. It is also within CBA1 and CBA2 areas, which are defined on the value of the biodiversity, therefore they are seen as being important areas for the conservation of biodiversity. Unsurprisingly, the area has been earmarked for future conservation. Development of the site therefore compromises these conservation objectives, an impact which was assessed as having MODERATE negative significance.

The proposed development is at the summit of the coastal cliffs. There is therefore a strong risk from the project towards any ecosystems directly below the proposed buildings. The vegetation on these slopes is in poor condition due to alien invasion, but it is currently stable. Destabilisation of the slope due to loss of vegetation will lead to

collapsing, as can currently be seen close to Gericke Point. Possible impacts related to this from the proposed development were assessed as having MODERATE negative significance.

These impacts will be permanent, are difficult to mitigate, and are probably irreversible.

Conclusion

Desktop information, field data collection and analysis of aerial imagery provides the following verifications of patterns for the Terrestrial Biodiversity Theme:

1. The site is within one regional vegetation type, Goukamma Strandveld, which is not listed. in any threat category. However, the mapping and description of this vegetation unit has been criticised for not reflecting the high diversity of vegetation, habitats and species that it contains. A recent assessment of coastal dune ecosystems (Cowling et al. 2023) suggests that this vegetation type needs re-assessment and that the coastal components should be a high priority for protection.
2. The proposed development is almost entirely within areas of natural habitat that have high biodiversity value. The site is within CBA1 and CBA2 areas, is an indigenous forest protected under the National Forests Act 84 of 1998, is adjacent to protected areas and therefore falls within the buffer zones of these, and has been earmarked as being desirable for future conservation.
3. The vegetation on site is dominated by the protected tree species, *Sideroxylon inerme*.
4. The proposed development is on the lip of the coastal cliffs that run along this coast. These cliffs are comprised of recent (Holocene era) sand deposits and are therefore unstable without established vegetation.
5. An impact assessment considered four impacts of which three were assessed as being of concern, namely:
    a. Impacts on forests: MODERATE negative significance.
    b. Impacts on protected trees: LOW negative significance.
    c. Impacts on existing and future conservation planning: MODERATE negative significance.
    d. Impacts on downslope cliff areas: MODERATE negative significance.
6. It is noted that the current footprint area has undergone several iterations and is currently as small as possible and located in the most appropriate position to minimise loss of habitat. These measures are commended and assist in reducing the potential significance of impacts. It is also noted that there is an existing right to construct a primary dwelling on site and that there are also concession rights that may apply to the site. In this regard, the efforts to minimise the proposed footprint are commended and supported.

TERRESTRIAL BIODIVERSITY STATEMENT:

1. The entire site is in a natural state and also falls within CBA1 and CBA2 areas, as well as being an indigenous natural forest. All parts of the site therefore have VERY HIGH sensitivity with respect to the Terrestrial Biodiversity Theme. According to the "Protocols", a Specialist Assessment is therefore required.
2. An impact assessment assessed that potential impacts associated with the proposed development could have MODERATE and LOW negative significance, primarily because of the high conservation value of the forest habitats on site and the value that this areas has for current and future conservation. Although relatively small in extent, the proposed development will form part of a cumulative trend that will lead to posible disruption of ecological processes.
3. The property is zoned for Agriculture, which carries rights with respect to dwellings that can be constructed. Given the existing rights, the small proposed footprint and intent to protect remaining undeveloped parts of the site from any other loss of vegetation, the proposal provides a compromise that is supportive of conservation. This makes the proposed development as compatible as possible with conservation planning

and biodiversity protection while exercising existing rights. On condition the risks to coastal forest ecosystems are well managed, the proposed project can be approved.

4. This statement is subject to any conditions contained in the final approved EMPr, including the requirement for permits under the National Forests Act.

RECOMMENDATIONS

The following measures are recommended:

1. An Alien Invasive Management Plan must be compiled for the project, as well as an Ecological Management Plan.
2. Any clearance must be only for the direct footprint of the proposed structure and other required infrastructure or space, including any fire-management requirements. Remaining areas must be kept in a natural state - no gardens are to be created.
3. Any construction disturbances not required for infrastructure must be allowed to convert back to thicket. If this requires active intervention, then it must be formalised in a management plan.
4. Obtain the required permit from the Department of Forestry for loss of forest vegetation on site that constitutes a National Forest, under section 7(3)(a) of the National Forests Act, Act 84 of 1998.
5. Commit remaining undeveloped areas to formal conservation. It has been proposed that the entire property be rezoned "*Open Space III*" (Nature conservation area). This proposal is supported and will mitigate against future vegetation loss.

Sensitivity Maps

FIGURE 14: SANBI ORIGINAL ECOSYSTEM STATUS INDICATING GOUKAMMA DUNE THICKET

FIGURE 15: SANBI REMAINING ECOSYSTEM STATUS STILL INCLUDING GOUKAMMA DUNE THICKET

FIGURE 16: WESTERN CAPE BIODIVERSITY SPATIAL PLAN (2017) PROTECTED AREAS (CBA 1 AND CBA 2)

FIGURE 17: INDICATION THAT THE ENTIRE PROPOSED DEVELOPMENT WILL FALL WITHIN THE 100-METER HIGH-WATER MARK

Visual Compliance Statement

Outline Landscape Architects has been commissioned to prepare a Visual Compliance Statement for the proposed development located on Portion 79 of the Farm Ruygte Valley no. 205, situated between Knysna and Sedgefield, along the Garden Route in the Western Cape Province. This Visual Compliance Statement will examine the potential impacts of the physical characteristics of the proposed development, specifically concerning its form, scale, and bulk, and will assess their potential influence within the local landscape and receptor context.

The scope of work, from the conceptual design, includes:

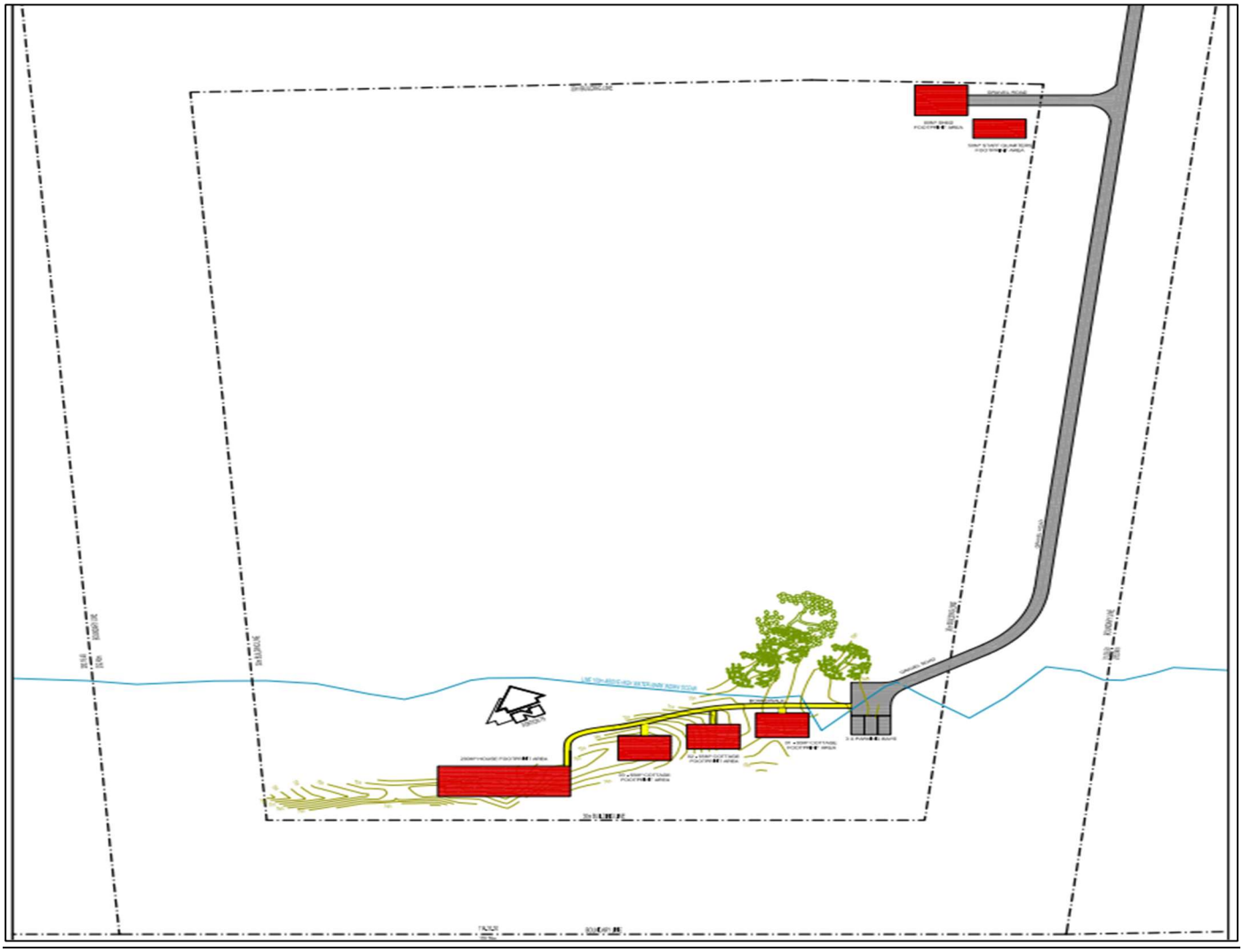
- Construction of a residential home of 200m2 in a footprint area.
- Construction of 3 free-standing cottages of 65m2 in footprint area.
- A raised boardwalk connecting the cottages and house with the parking area.
- Construction of a shed of 80m2 in the footprint area.
- Construction of a staff quarter building of 50m2 in footprint area
- A gravel road, approximately 3m in width and parking for 3 vehicles.

This Visual Compliance Statement will address the following objectives:

- Determination of the extent of the study area.
- Description of the proposed project and the receiving environment.
- Identification of the elements of particular visual value and -quality that could be affected by the proposed project.
- Identification of landscape- and visual receptors in the study area that may be affected by the proposed project and their sensitivity.
- Indication of potential landscape- and visual impacts.

LOCALITY PLAN

The study area is located to the west of Knysna and to the south-east of Sedgefield and is approximately 700m in direct distance to the east of Cola Beach. The site is within the Garden Route District Municipality and the Knysna Local Municipality. The site is located south of Lake Pleasant Resort and Groenvlei Lake, on an unspoilt site above the beach.



CONCEPTUAL DESIGN PLAN OF THE PROPOSED DEVELOPMENT

ARCHITECTURAL CONCEPT IDEAS FOR THE PROPOSED BUILDING DESIGNS

Landscape Character

The study area consists primarily of coastal towns and natural fynbos and agricultural landscapes in the inland. Sedgefield is a seaside village along the Garden Route. The prominent thoroughfare road is the N2 connecting Cape Town to Gqeberha. The study area consists of pockets of un-spoilt natural landscape and long stretches of beaches. The background of the site is the Outeniqua Mountain range. The proposed development will be situated on top of a stabilized coastal dune that allows for beautiful vistas over the ocean and towards Gericke's Point. The property is located on low sloping areas behind the front dune edge. The site rises to about 70m above sea level. The area falls within the Fynbos biome. The coastal vegetation consists mainly of coastal shrubs, dune vegetation and small trees. The majority of the site consists of dense, shrubby, thicket vegetation, with large trees close to the highest point of the site.

Visual Observations

The site visit provided essential insights into the visual dynamics of the proposed development onto the landscape. The site is accessed from Groenvlei Road off the N2. The road passes the Groenvlei Lake and the Lake Pleasant Holiday Resort. A smaller gravel road diverges from the Groenvlei Road, which is a concealed one-way dirt road leading to another residential development on the neighbouring site. A new road will have to extended and constructed to the proposed development. The development is proposed on the highest point of the site and is on a cliff approximately 70m above the beach. From the site visit, it was established that the site is not visible from the N2 and Lake Pleasant Resort due to the higher topography and dense vegetation of the site. The development will also not be visible to viewers on the beach due to the highly elevated and eroded cliffs.

Visual Absorption Capacity (VAC): Visual Absorption Capacity (VAC) signifies the ability of the landscape to accept additional human intervention without serious loss of character and visual quality or value. VAC is founded on the characteristics of the physical environment such as:

- Degree of visual screening: A degree of visual screening is provided by landforms, vegetation cover and/or structures such as buildings. For example, a high degree of visual screening is present in an area that is mountainous and is covered with a forest compared to an undulating and mundane landscape covered in grass.
- Terrain variability: Terrain variability reflects the magnitude of topographic elevation and diversity in slope variation. A highly variable terrain will be recognised as one with great elevation differences and a diversity of slope variation creating talus slopes, cliffs and valleys. An undulating landscape with a monotonous and repetitive landform will be an example of a low terrain variability.
- Land cover: Land cover refers to the perceivable surface of the landscape and the diversity of patterns, colours and textures that are presented by the particular land cover (i.e. urbanised, cultivated, forested, etc.)

A basic rating system is used to evaluate the three VAC parameters. The values are relative and relate to the type of project that is proposed and how it may be absorbed into the landscape. A three-value range is used; three (3) being the highest potential to absorb an element in the landscape and one (1) being the lowest potential. The values are counted together and categorised in a high, medium or low VAC rating.

The topography of the study area and the moderate height of the vegetation provide a high VAC.

Visual Intrusion: Visual Intrusion is the nature of an object on the visual quality of the environment resulting in its compatibility (absorbed into the landscape elements) or discord (contrasts of the landscape elements) with the landscape and surrounding land uses.

The proposed development is planned to have a very sensitive design approach. The total site is approximately 5 hectares, and the footprint of the buildings encompasses only an area of 525m2. Smaller, separate buildings are planned, instead of one large, voluminous building. This allows for the breaking of a solid mass and allows for vegetated areas between buildings, providing screening of the development. The building materials are envisioned to be natural materials, with a combination of light steel and glass structures, to easily blend into the natural environment.

Identified Impacts

During the site assessment for the proposed development, a few issues were identified that could potentially impact the visual harmony of the environment:

Natural Vegetation

The area is characterised by dense natural vegetation typical of the Fynbos biome which offers visual screening. Existing vegetation should be minimally removed and will be a large mitigating factor to lessen the visual impact of the proposed development. The preservation of as much as possible existing vegetation is important to enhance the site's natural aesthetic appeal.

Topography

The topography of the area is varied, and sloping landscapes surround the site. The elevated topography of the site allows for optimal views over the ocean, but structures should be designed to fit into the landscape to minimise the visual intrusion of the new buildings. Utilising the natural depressions and contours of the land to minimise visibility during construction activities are important and will facilitate quicker recovery, post-construction, that will help reduce the visual footprint of the development.

Existing Infrastructure

There is little existing infrastructure directly surrounding the site; therefore, the area is relatively unspoilt. This emphasises the need for strategic placement and thoughtful design to integrate seamlessly with the existing environment. Special consideration is also required during construction activities so that they do not disrupt the current usage patterns and visual aesthetics of the environment. By proactively addressing each identified challenge, the project can be tailored to respect the local landscape, ensuring that visual impacts are minimised.

Visual Influence

The zone of potential visual influence determines the extent of visibility and impact of the proposed development. Due to distance, topography, and dense vegetation, the development's visual impact is expected to be minimal.

The nearest residence is 250m east, occupied by a neighbour with similar interests. Cola Beach (700m west) is shielded by vegetation and terrain, preventing visual impact. Motorists on the N2 (2km north) and Groenvlei Road (1km away) will not have direct views of the site due to the winding nature of the road and existing viewpoints.

Groenvlei Beach, located 70m below the site, primarily attracts locals and fishermen. The eroded cliffs and overhangs obstruct direct views of the development, and beachgoers are naturally focused on the ocean and shoreline, further minimising visual impact.

Existing Visual Context: A thorough review of the area's existing visual context, which comprises natural landscapes and intermittent infrastructural features, has confirmed the project's capacity to harmonise with the regional aesthetic. The strategic environmentally sensitive design of the development will minimise physical visibility, thereby enhancing visual integration and reducing potential disruptions.

Visibility and Exposure: Strategic visual integration involves employing construction strategies that mimic the natural environment and using landscaping to enhance visual buffering. These mitigation measures will ensure harmonious integration of the proposed development into the environment.

Expected Visual Impacts

Negative impacts that may arise from the proposed development include:

Alteration of Landscape Character: Although the design should seamlessly be integrated into the landscape, the temporary construction activities and removal of some vegetation could alter the visual character of the natural views.

Dust and Construction Impact: As with most construction projects, activities are expected to generate dust and debris, which could temporarily affect the local visual environment.

Nighttime Lighting: The use of lighting for security and operational purposes may introduce light pollution. This could impact wildlife and diminish the local community's enjoyment of naturally dark night skies. The selection of lighting solutions that will keep light pollution to a minimum should be taken into consideration during the design phase.

To mitigate the visual impacts identified, the detail design should have mitigation measure in place to reduce visual impacts. These include sensitive site placement of the buildings, natural materials and colours to be used for buildings. A rehabilitation strategy should be put in place where plants that have to be removed due to construction activities, can be salvaged and kept in a nursery. These plants can then be replanted once construction is completed.

Construction management practices should be implemented for effective dust suppression techniques and restricting operations to daylight hours to reduce disturbances. Controlled lighting is carefully designed to minimise light pollution, ensuring minimal disruption to the natural nighttime environment.

All temporary structures and debris should be promptly removed after construction to restore the site's visual integrity, maintaining the visual aesthetic of the landscape.

Conclusion

It can be concluded that the proposed development can be authorised provided it is integrated effectively within the environment with minimal visual intrusions. The use of the land's inherent VAC enhances the project's ability to minimise visual impacts substantially. The visual impact of the project is minimal, given its scope and nature, and must be continually managed through best practice methods throughout the project's lifecycle.

The report has assessed the existing visual conditions and the project's compatibility with the landscape. The potential visual impacts, while inherently minimal due to the project's environmentally sensitive approach, can be effectively mitigated through careful planning, strategic placement, and conscientious ongoing management.

The proposed development is situated in a visually sensitive environment, surrounded by natural vegetation, varied topography, and minimal existing infrastructure. A well-planned design and construction approach will ensure that the development integrates harmoniously with its surroundings while minimizing visual impacts.

By preserving natural vegetation, incorporating strategic site placement, and using earth-toned materials, the visual footprint of the development can be significantly reduced. The site's elevated position offers panoramic ocean views, but careful design must ensure that structures blend into the landscape rather than dominate it. The use of natural land depressions and existing vegetation as visual buffers will further reduce visibility from key viewpoints.

The impact on local receptors, including nearby residents, motorists, and beach visitors, is expected to be minimal due to the shielding effects of dense vegetation, topography, and distance. Construction-related impacts, such as dust, temporary landscape changes, and nighttime lighting, must be carefully managed through dust suppression, controlled lighting, and site rehabilitation efforts.

To maintain the visual integrity of the area, mitigation measures should include the sensitive placement of buildings, the use of natural materials and colours, and a rehabilitation strategy to restore vegetation post-construction. Temporary structures and debris should be promptly removed, ensuring that the final development enhances rather than detracts from the visual appeal of the landscape.

With these mitigation strategies in place, the development is expected to be visually sustainable, aligning with the natural character of the region while minimizing disruption to the local environment and community.

Heritage

Sections 38(1)(c)(i) and 38(1)(a) of the National Heritage Resources Act (Act 25 of 1999, NHRA) come into effect, necessitating the submission of a Notification of Intent to Develop (NID) application to Heritage Western Cape (HWC). The NID will be submitted to HWC.

Social Economic Value of the Activity

What is the expected capital value of the activity on completion?	± R 8 00 000.00	
What is the expected yearly income that will be generated by or as a result of the activity?	None	
Will the activity contribute to service infrastructure?	~~YES~~	NO
Is the activity a public amenity?	~~YES~~	NO
How many new employment opportunities will be created in the development and construction phase of the activity/ies?	± 20	

What is the expected value of the employment opportunities during the development and construction phase?	± R150 000.00
What percentage of this will accrue to previously disadvantaged individuals?	100%
How many permanent new employment opportunities will be created during the operational phase of the activity?	3 - 5
What is the expected current value of the employment opportunities during the first 10 years?	± R1 800 000
What percentage of this will accrue to previously disadvantaged individuals?	100%

The vision of the Knysna Municipality as stated in the IDP (2012-2017) (p. 16) is to develop an economy that creates more jobs. In order to achieve this vision, economic growth is required that will transform the economy and provide decent work to the residents of Knysna. ***As can be seen above an additional 20-30 job opportunities will be created during the construction and operational phase of the proposed development.***

The IDP therefore acknowledges that significant action is required to regenerate the economy of the municipal area, address the increasing levels of unemployment and declining skills levels. In order to achieve the long-term vision, a requirement exists to understand the economy and context of different sectors that generate economic income and employment.

The Knysna economy ranks as the third largest within the Eden District, with a Gross Geographical Product amounting to R2.3 billion in 2011, as reported by StatsSA (2013). The foremost contributing sectors include Finance and Business Services, along with Wholesale, Retail, Trade, and Accommodation.

From 2011 to 2018, the construction sector in the greater Knysna municipal area demonstrated subdued growth, with a GDP-R growth rate of -3.4% year-on-year in 2018, representing the lowest performance observed since the global recession. However, the recovery efforts following the devastating Knysna fire are projected to generate a short- to medium-term boost for the construction sector. This anticipated uplift is already evident in the approval of 588 residential building plans in 2018, which exceeds the total number of business plans approved in 2016 (179) by an impressive 228.5%.

The largest sectors of the Knysna economy are Wholesale and Retail Trade, which includes catering and accommodation.

3. Methodology for Assessment of Impacts

There are mainly three categories of environmental impacts:

Direct Impacts: These impacts are caused by the development itself, for example, the clearing of vegetation for a development.

Indirect Impacts: These impacts are usually linked closely with the project and may have more profound results than the direct impacts, for example the degradation of surface water due to soil erosion emanating from the site where vegetation clearance has taken place.

Cumulative Impacts: These impacts can be defined as the ability of natural and social environments to incorporate cumulative stresses placed on them and the likelihood of negative synergistic effects. Cumulative impacts also arise when existing future development rights set a precedent in an area. The process of cumulative impacts may arise from any of the following four events**:**

- A single larger event
- Multiple interrelated events
- Sudden or catastrophic events
- Incremental change

Environmental Impacts

Ecosystem and Biodiversity

Impact: The development targets the degraded CBA2 area invaded by *Acacia cyclops*, minimising the impact on sensitive CBA1 Milkwood Forest (Terrestrial Biodiversity Assessment, Appendix D4). Clearing invasives and rehabilitating Goukamma Strandveld via the Alien Invasive Management Plan improves local biodiversity. However, vegetation removal (1175 m²) and construction activities (e.g., road, boardwalk) could fragment habitats, adding to existing pressures from nearby developments (e.g., 250 m east residence; Visual Compliance Statement, Appendix D1, Page 10). Future coastal developments could exacerbate habitat loss if not similarly constrained to degraded areas.

Cumulative Effect: Short-term habitat disturbance is offset by long-term ecological restoration, but incremental vegetation loss from multiple projects could reduce biodiversity resilience, particularly if CBA1 areas are targeted elsewhere. The Terrestrial Biodiversity Assessment suggests a net positive impact if rehabilitation is sustained.

Mitigation: Implement and monitor the Alien Invasive Management Plan**,** salvaging native plants for replanting (Visual Compliance Statement, Appendix D1, Page 11). Limit future developments to degraded zones and enforce municipal biodiversity offsets.

Coastal Stability and Erosion

Impact: The Preliminary Geotechnical and Geomatic Report (Appendix D2, Pages 27, 36) notes cyclic dune erosion (4–6 m retreat, 2005–2024) and a projected 30 m inland shift by 2100. The development's footprint, especially if at PE (within 100 m HWM), adds minor stress to erodible soils, compounded by existing coastal structures (e.g., Sedgefield dwellings between low- and high-risk flood lines; Page 38). Future developments could intensify dune instability if poorly sited.

Cumulative Effect: Incremental soil disturbance from multiple projects could accelerate erosion, particularly under climate-driven sea-level rise (1–2.5 m by 2100; Appendix D2Page 29). Prioritizing BM or HW2 (on/north of 100 m HWM) reduces this risk (Appendix D2, Page 38).

Mitigation: Use ECSA-certified foundations with 1.5 m compacted zones and retain stabilizing vegetation (roots to 60 cm; Page 38). Enforce stricter coastal setbacks (e.g., 100 m HWM) for future projects to limit cumulative erosion.

Coastal Flooding

Impact: The site is low-risk for flooding now and very low-risk by 2050, with high-risk 100-year projections reaching **Lookout** by 2100 (Preliminary Geotechnical and Geomatic Report, Appendix D2, Pages 18, 33). The development's small footprint and elevated placement (above 40 m contour) add negligible flood risk, but cumulative coastal developments could increase runoff or alter drainage patterns.

Cumulative Effect: Incremental changes to coastal hydrology from multiple projects could heighten flooding risks by 2100, particularly if setbacks are not enforced. The development's off-grid systems (rainwater tanks) mitigate runoff (Town Planning Report, Appendix D5, Page 11).

Mitigation: Prioritize BM or HW2 and use flood-resistant designs (Appendix D2, Page 38). Develop a regional coastal management plan to regulate future projects.

Social Impacts

Community Cohesion and Access**:**

Impact: The eco-tourism focus strengthens Sedgefield's sustainable identity, fostering pride (Town Planning Report, Appendix D5, Page 8). Public access to Groenvlei Beach via Bushy Way and Groenvlei Beach Road is preserved (Town Planning Report, Page 10), but construction (e.g., road upgrades) may cause temporary disruptions, adding to existing pressures from tourism growth (e.g., Lake Pleasant Resort; Visual Compliance Statement, Appendix D1, Page 6). Future developments could strain access if not similarly managed.

Cumulative Effect: Incremental tourism growth enhances community pride but risks overcrowding or perceived privatization of coastal access, potentially eroding social cohesion if benefits (e.g., jobs) are unevenly distributed.

Mitigation: Conduct community consultations by Q3 2025 and prioritize local hiring (70% of jobs; Town Planning Report, Appendix D5, Page 7). Ensure future projects maintain public access and engage residents.

Aesthetic and Lifestyle Impacts**:**

Impact: The development's high Visual Absorption Capacity (VAC) ensures no visibility from N2, Groenvlei Beach, or Cola Beach (Visual Compliance Statement, Appendix D1, Page 10). Construction impacts (dust, noise) are temporary, but cumulative tourism developments could alter Sedgefield's tranquil character, particularly for the neighbouring residence (250 m east; Page 10).

Cumulative Effect: Incremental aesthetic changes from multiple projects could diminish Sedgefield's unspoilt appeal, affecting residents' quality of life and tourism value if not tightly regulated.

Mitigation: Use dust suppression, daylight-only construction, and low-impact lighting (Visual Compliance Statement, Appendix D1, Page 11). Enforce visual impact assessments for future developments.

Economic Impacts

Tourism and Job Creation

Impact: The cottages generate R500,000–R1 million annually and create 5–10 direct jobs (construction, hospitality), boosting local businesses (Town Planning Report, Appendix D5, Pages 7–8). This adds to existing tourism revenue (e.g., Lake Pleasant Resort) but risks competition if similar facilities proliferate.

Cumulative Effect: Incremental tourism growth strengthens Sedgefield's economy but could strain infrastructure or lead to market saturation, reducing long-term viability if not diversified.

Mitigation: Market cottages as niche eco-tourism to avoid competition (Town Planning Report, Appendix D5, Page 8). Develop a regional tourism strategy to balance growth.

Infrastructure and Public Resources

Impact: Off-grid systems and private road funding minimize public resource strain (Town Planning Report, Appendix D5, Page 11). However, cumulative developments could stress municipal services (e.g., waste, roads) if not similarly self-sufficient.

Cumulative Effect: Incremental infrastructure demands could burden Knysna Municipality, diverting funds from community services if future projects rely on public utilities.

Mitigation: Require off-grid systems for future developments and fund infrastructure privately (Town Planning Report, Appendix D5, Page 10).

Conclusion

The cumulative impacts of the Portion 79 development are manageable with robust mitigation. Environmentally, it improves biodiversity through invasive species management but risks incremental erosion and habitat loss if future projects are poorly sited; prioritizing BM or HW2, using certified foundations, and enforcing setbacks mitigate this (Preliminary Geotechnical and Geomatic Report, Page 38). Socially, it fosters pride and jobs but risks access or aesthetic concerns; consultations and access preservation address these (Town Planning Report, Page 10). Economically, it boosts tourism but risks saturation; niche marketing and regional planning ensure viability (Town Planning Report, Appendix D5, Page 8). With strict oversight and alignment with the forthcoming Western Cape PSDF, the development contributes positively to Sedgefield's sustainable growth.

Definition of key terminology:

Nature of the Impact – A description of positive or negative impacts of the project on the affected environment. This description should include who or what would be affected and how.

Extent – the impact could:

- Be site-specific
- Be limited to the site and its immediate surroundings
- Have an impact on the region
- Have an impact on a national scale
- Have an impact across international borders

Duration – It is important to indicate whether or not the lifetime of the impact will be:

- Short term (e.g. during construction)
- Medium term (e.g. during part or all of the operational phase)
- Long term (e.g. beyond the operational phase, but not permanently)
- Permanent (where the impact is for all intents and purposes irreversible. An irreversible negative impact may also result in irreplaceable loss of natural capital or biodiversity if it were to result in extinction or loss of species or ecosystem); or

Intensity or Magnitude - The size of the impact (if positive) or its severity (if negative):

- Low, where biodiversity is negligibly affected or where the impact is so low that remedial action is not required.

- Medium, where biodiversity pattern, process and/or ecosystem services are altered, but not severely affected, and the impact can be remedied successfully; and
- High, where, pattern, process and/or ecosystem services would substantially be affected. If a negative impact, could lead to irreplaceable loss of biodiversity and/or unacceptable consequences for human wellbeing.

Probability –Should describe the likelihood of the impact occurring indicated as:

- Improbable, where the possibility of the impact is very low either because of design or historic experience
- Probable, where there is a distinct possibility that the impact will occur.
- Highly probable, where it is most likely that the impact will occur, or
- Definite, where the impact will occur regardless of any prevention measures.

Significance – The significance of impacts can be determined through a synthesis of the assessment criteria. Significance can be described as:

- Low, where it would have a negligible effect on biodiversity, and on the decision.
- Medium, where it would have a moderate effect on biodiversity, and should influence the decision.
- High, where it would have, or there would be a high risk of a large effect on biodiversity. These impacts should have a major influence on the decision.
- Very high, where it would have, or there would be a high risk of, an irreversible negative impact on biodiversity and irreplaceable loss of natural capital or a major positive effect. Impacts of very high significance should be a central factor in decision-making.

Confidence – The level of confidence in predicting the impact can be described as:

- Low, where there is little confidence in the prediction, due to inherent uncertainty about the likely specialists. However, co-operation between these specialists and the biodiversity specialist is recommended, as biodiversity values are often overlooked by specialists in these other disciplines.
- Medium, where there is a moderate level of confidence in the prediction; or
- High, where the impact can be predicted with a high level of confidence.

4. The impacts and risks identified for the preferred alternative

The preferred Alternative 1

The landowners intend to reside on their property and seek to construct a dwelling house approximately 200 square meters in size on the site. The construction of a dwelling house constitutes a primary right. In addition to their residential plans, it is their aspiration to develop three small self-catering tourist accommodation units, each measuring approximately 65 square meters, to supplement their income. Ancillary structures will include staff housing of approximately 50 square meters, as well as a shed of 80 square meters for the storage of farm implements necessary for the maintenance of the land. A gravel access road, not exceeding 3 meters in width, is proposed along the eastern boundary, leading to a designated parking area. From this parking area, access to the house and accommodation units will be provided via a boardwalk.

The residential structures and units are strategically positioned in clusters on the southern side of the property, atop elevated terrain overlooking the ocean to optimize scenic views. Although the property is designated for "Agriculture zone I, the owners do not intend to utilise the land for agricultural activities. The intrinsic value of the property is found

in its natural beauty, and the owners aim to dedicate the remainder of the land to conservation efforts. The overarching development concept is to establish a tranquil and private retreat within a natural setting.

The architectural design will prioritise lightness and environmental sensitivity. The selected building materials will include steel, timber, glass, and natural stone, in contrast to traditional brick and concrete. The total footprint of the building is projected to measure 525 square meters. Additionally, the proposed access road will extend approximately 200 meters in length and 3 meters in width, culminating in a parking area of approximately 660 square meters. Consequently, the overall development area is estimated to be around 1,175 square meters, which represents less than 0.02% of the total site. This development will leave 99.98% of the site in its natural state.

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

As per the identified triggered Activities in NEMA, the following impacts need to be assessed:

Listed Activity described in GN R. 325, 324, 327	Activity description	Identified Impacts
GN R. 327 Activity 17	Development— (vi) in the sea; (vii) in an estuary; (viii) within the littoral active zone; (ix) in front of a development setback; or (x) if no development setback exists, within a **distance of 100 metres inland** of **the high-water mark** of the sea or an estuary, whichever is the greater; in respect of— (a) fixed or floating jetties and slipways; (b) tidal pools; (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) **infrastructure or structures with a development footprint of 50 square metres or more** — but excluding— (ee) the development of infrastructure and structures within existing ports or harbours that will not	The current indicated area for the proposed development falls within the 100-meter high-water mark.

	increase the development footprint of the port or harbour; (ff) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;	
GN R.327 activity 19A:	The infilling or depositing of any material of more than 5 cubic metres into, or the **dredging, excavation, removal or moving of** soil, sand, shells, shell grit, pebbles or rock of more than **5 cubic metres** from— (iv) the seashore; (v) the littoral active zone, an estuary or a distance of **100 metres inland** of the **high-water mark** of the sea or an estuary, whichever distance is the greater; or (vi) the sea; — but excluding where such infilling, depositing, dredging, excavation, removal or moving— (e) will occur behind a development setback; (f) is for maintenance purposes undertaken in accordance with a maintenance management plan; (g) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (h) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	Excavation of building the primary property within 100-meter of the high-water mark will require excavation more than 5 cubic meter.
GN R.327 activity 27:	The **clearance of an area of 1 hectares or more**, but less than 20	Construction of both the primary dwelling and an access road may

	hectares of **indigenous vegetation**, except where such clearance of indigenous vegetation is required for— The undertaking of a linear activity, or maintenance purposes undertaken in accordance with a maintenance management plan.	require the removal of indigenous Goukamma Dune Thicket more than 1 Ha.
GN R.324 activity 4:	The development of a road wider than 4 metres with a reserve less than 13,5 metres. **Western Cape:** iv. Areas zoned for use as public open space or equivalent zoning. v. **Areas outside urban areas**. (cc) Areas containing indigenous vegetation. (dd) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or vi. Inside urban areas: Areas zoned for conservation use, or Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.	Portion 79 of Farm 205 is located outside the urban area; therefore, the development of an access road that exceeds this threshold will trigger this listed activity and require environmental authorisation.

The Environmental Impacts associated with the construction of the primary residential home, the 3 free-standing cottages, the raised boardwalk, the shed, the staff quarter building and the gravel road.

<u>Environmental Impacts:</u>

- Surface water run-off/groundwater/soil, air quality
- 100m High water Mark and Dune Stability
- Impacts on the Critical Biodiversity Area
- Socio-economic impacts
- Noise disturbance
- Aesthetic impacts
- Safety on site
- Waste
- Cultural-historical impacts

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Planning, Design and Construction Phase

Potential impacts on geographical and physical aspects:	**Surface water run-off/groundwater/soil, air quality**
Nature of impact:	Construction activities (e.g., clearing 1175 m², grading for road/boardwalk) may increase surface run-off, erode sandy soils (>750 mm deep, <15% clay), and contaminate groundwater via spills (e.g., fuel). The Preliminary Geotechnical and Geomatic Report (Pages 7–10) notes highly erodible soils, with weak zones at HW2 (160 mm, 360 mm depths). Removal of *Acacia cyclops* and temporary vegetation loss may exacerbate run-off and erosion (Terrestrial Biodiversity Assessment). Compaction of soil for the internal road and the main dwelling house. Groundwater may be impacted on during construction if substances, such as fuels and oils associated with the usage of machinery and equipment, are allowed to leak onto soil and potentially leach into the groundwater. <u>Soil</u> Mixing cement directly on the ground could also result in contamination. Contaminated soil will have to be rehabilitated or disposed of, depending on the level and nature of the contamination. Soil erosion and topsoil loss are not expected during construction as activities will be limited to the development footprint. <u>Air pollution</u> Dust will be generated during the construction activities, particularly during excavations. During the construction phase of the associated infrastructure dust will be generated. The effect on air quality is expected to be minor and localised, as well as of short-term duration as the construction phase is temporary. The contribution of exhaust fumes from the associated construction equipment and vehicles will be negligible.
Extent and duration of impact:	Local, Short-Term: Neighbouring properties during the construction phase.

Probability of occurrence:	High
Degree to which the impact can be mitigated:	High - This impact can be mitigated.
Degree to which the impact may cause irreplaceable loss of resources:	Low - Soil erosion is reversible with rehabilitation, and groundwater is deep, reducing contamination risk. Vegetation loss in degraded CBA2 is offset by replanting. Air quality impacts are temporary and reversible, with no loss of resources.
Cumulative impact prior to mitigation:	Moderate: Incremental erosion and run-off from Portion 79, combined with existing coastal developments (e.g., Sedgefield dwellings; could alter local hydrology and soil stability, especially with cyclic erosion (4–6 m, 2005–2024). Future projects may exacerbate this if unregulated. Temporary dust and emissions add to existing tourism-related air quality impacts (e.g., Lake Pleasant Resort but are localized and short-term. Future developments could increase dust if not mitigated. Potential contamination of stormwater run-off, soil, and groundwater, dust generation and soil erosion.
Significance rating of impact prior to mitigation **(Low, Medium, Medium-High, High, or Very-High)**	Medium
Degree to which the impact can be mitigated:	High
Proposed mitigation:	Effective erosion control, spill prevention, and vegetation management can significantly reduce impacts Dust suppression and emission controls can minimize air quality impacts. • Erosion Control: Use silt fences, temporary cover crops, and retain vegetation (roots to 60 cm) to stabilize soils (Preliminary Geotechnical and Geomatic Report, Page 38). • Run-Off Management: Install swales and sediment traps to divert run-off (Town Planning Report, Page 11). • Spill Prevention: Store fuel in bunded areas, use spill kits, and train workers (Terrestrial Biodiversity Assessment). • Vegetation: Salvage natives for replanting, clear *Acacia cyclops* per Alien Invasive Management Plan (Visual Compliance Statement, Page 11; Terrestrial Biodiversity Assessment).

	• Monitoring: Regular site inspections during construction (Q3–Q4 2025; Town Planning Report, Page 6). As per the Geotechnical Report: 1. Structural Foundation and Stability Measures • Avoid weight-bearing structures at position D7, as it has been identified as structurally weak. • Specialized foundation designs must be implemented for sites with soft, highly erodible soil (Lookout, BM path split, and PE) to prevent settlement and ensure long-term stability. • Compacted foundation zones of at least 1.5m around external walls should be established to enhance soil stability and reduce erosion risk. • Reinforcement at HW2 is required due to weak soil zones at 160mm and 360mm depths, where additional stabilization (such as deep compaction or geogrid reinforcement) should be incorporated. • All structural plans must be reviewed and approved by an ECSA-registered structural engineer to ensure compliance with engineering safety standards. 2. Erosion and Soil Movement Mitigation • Implement soil stabilization techniques, such as geotextiles, retaining walls, or soil-binding vegetation, to counteract erosion, especially in the high-risk zone south of Lookout Point. • Grading and slope management should be prioritized to minimize excessive soil displacement and reduce the risk of landslides. • Minimize ground disturbance during construction and phase excavation activities to reduce exposure of erodible soil to wind and water forces. • Erosion control barriers, such as silt fences or terracing, should be installed in vulnerable areas to limit sediment displacement. 3. Coastal and Flood Risk Management • Development should remain outside the 100-year high-risk flood protection zone, maintaining a 15m buffer inland from projected flood boundaries. • Elevated foundation designs should be considered for structures in areas susceptible to long-term coastal movement and erosion risk. • Stormwater management systems must be designed to prevent waterlogging and excessive runoff, which could exacerbate erosion.

	• Long-term monitoring of coastal retreat and adaptive planning should be implemented to address future shifts in the coastal boundary. 4. Climate-Resilient Infrastructure • Wind-resistant and weatherproof materials should be used to account for long-term climatic variations. • Sustainable drainage solutions, such as permeable surfaces, should be incorporated to reduce surface runoff and prevent soil saturation. • Dune stabilization measures, including vegetation reinforcement and dune rehabilitation programs, should be applied to safeguard against wind-driven erosion. 5. Construction Best Practices • Limit heavy machinery operations in sensitive areas to prevent unnecessary soil compaction and degradation. • Monitor construction activities regularly to ensure compliance with erosion control and soil stabilization protocols. • Implement revegetation strategies post-construction, using indigenous plant species to restore disturbed areas and strengthen soil structure. • Strict compliance with setback regulations (30m building line, 100m high-water mark) should be enforced to align with regional coastal development precedents. Rainwater tanks will be placed around the main dwelling to collect rainwater for reuse from roofs. Stockpiles of excavated materials or spoils during the construction phase should be strategically positioned to mitigate wind erosion and avoid adverse impacts on drainage lines. Dust suppression measures should be implemented in accordance with specific site conditions. Vehicles transporting materials prone to being displaced by wind must be securely covered. Ingress and egress points onto public roads must be cleared of any dust or mud. To minimise emissions resulting from exhaust fumes, regular maintenance of vehicles and equipment is essential to ensure optimal working conditions. • Blanket clearing of the site. • It is proposed that steel or concrete piling be utilised for the building structures, thereby limiting the exposure of bare soils and wind-blown dust. • Erosion protection measures must be implemented in disturbed areas.

	• Topsoil and soil stockpiles should be covered, wetted or otherwise stabilised to prevent wind erosion and dust generation. • A water cart must be employed on windy days to wet soils that would be prone to wind erosion to limit dust generation. • Disturbed areas should be rehabilitated in parallel with construction completion. • Compile and implement an Environmental Management Programme; and audit reporting by an ECO during construction. • During construction: New roads need to be made using the same / similar materials and methods as the neighbouring road. • Dust Suppression: Apply water sprays and cover stockpiles during clearing/grading (Visual Compliance Statement, Page 11). • Emission Control: Use low-emission machinery and limit idling (Visual Compliance Statement, Page 11). • Construction Timing: Daylight-only operations to reduce dust spread (Visual Compliance Statement, Page 11). • Monitoring: Daily air quality checks during construction (Q3–Q4 2025; Town Planning Report, Page 6). <u>Construction activities</u> Storage of potential pollutants such as fuel, oil, cement, etc. should be confined to a sealed surface with a bund wall to prevent soil contamination from accidental leaks and spills. Only the volume of fuel required for the day should be stored. The use of potentially polluting substances should be strictly controlled and handled in designated areas under the supervision of competent and trained personnel as stipulated in the EMPr. No vehicle or equipment will be serviced on-site. Appropriately sized drip trays must always be used in emergency situations. Approved absorbent material must be kept on-site in sufficient quantities to deal with small spills. Absorbent material and contaminated soil should be disposed of at a registered hazardous waste site. No cement mixing is to occur directly on the ground and any cement or hydrocarbon spills should be cleared away immediately. The generation of dust during the construction phase is expected to be minimal. Stockpiles of fine construction materials should be positioned such that they are not exposed to wind erosion or drainage lines. Dust suppression

	should be implemented according to the prevailing site-specific conditions. Construction vehicles transporting construction materials must be suitably covered to prevent materials from being blown off. Vehicles and machinery will be kept in good working order to avoid excess emissions. All development activities must remain within the demarcated construction area. Chemical toilets should be provided for construction workers if the on-site ablution facilities are not adequate (1 toilet per 30 workers). Their use should be enforced. Chemical toilets will be serviced by an appropriate service provider, provided with toilet paper and cleaned regularly. Servicing will include emptying without spills and appropriate disposal by the service provider. It is essential to maintain an onsite nursery, and the search-and-rescue plants should be repurposed for the rehabilitation of the site following construction activities. These measures, grounded in specialist reports, ensure environmental integrity and compliance with NEMA principles during construction.
Cumulative impact post mitigation:	Potential contamination of stormwater run-off, soil, groundwater, and nuisance as a result of dust generation will be minimised by implementing mitigation measures. Low: Mitigated run-off and erosion limit contributions to regional soil loss and hydrological changes. Rehabilitation enhances biodiversity, offsetting impacts from existing/future developments (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment). Negligible: Mitigated dust and emissions have minimal cumulative effects, aligning with low impacts from existing tourism activities (Visual Compliance Statement, Page 11).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Mitigation reduces erosion, run-off, and contamination risks to negligible levels, ensuring soil and water resource integrity (Preliminary Geotechnical and Geomatic Report, Page 38). Very Low: Mitigation eliminates significant air quality impacts, ensuring no harm to residents or workers (Visual Compliance Statement, Page 11).

Potential impact on geographical and physical aspects:	100-Highwater Mark and Dune Stability
Nature of impact:	Construction activities (e.g., clearing 1175 m², grading for road/boardwalk, foundation work) within or near the 100 m HWM may destabilise coastal dunes by removing vegetation (e.g., *Acacia cyclops*, native Goukamma Strandveld) and disturbing sandy, erodible soils (>750 mm deep, <15% clay). These risks increased erosion and encroachment into the 100 m HWM buffer, which is critical for coastal protection. The report notes cyclic dune erosion (4–6 m retreat, 2005–2024) and a weak zone at D7 (deep fracture at 120 m), heightening instability risks, especially at PE (within 100 m HWM) or Lookout (steep slopes, 26–70°).
Extent and duration of impact:	Local, Short-Term to Medium-Term: Impacts are confined to the 5.1576 ha site and adjacent coastal zone (within/near 100 m HWM), primarily during construction (6–12 months). Destabilisation may persist for 1–5 years if erosion is triggered, particularly on steep slopes or weak zones, until rehabilitation stabilizes dunes.
Probability of occurrence:	High: Construction on erodible soils, vegetation clearing, and proximity to the 100 m HWM make dune instability and HWM encroachment likely, especially during rainfall or wind events. Risks are higher at PE or Lookout compared to BM or HW2 (on/north of 100 m HWM).
Degree to which the impact can be reversed:	High: Dune stability impacts are largely reversible through stabilization (e.g., geotextiles, replanting) and rehabilitation, restoring dune integrity within 1–3 years. Minor erosion is correctable, but severe dune loss near the 100 m HWM (e.g., at PE) could be partially irreversible if significant sediment is lost to the coast.
Degree to which the impact may cause irreplaceable loss of resources:	Low to Moderate: Dune soils are recoverable through stabilization and replanting in the degraded CBA2 area, but severe erosion near the 100 m HWM could lead to localized loss of dune structure, impacting coastal protection. No rare ecological resources are at stake.
Cumulative impact prior to mitigation:	Moderate: The development's impact, combined with existing coastal developments (e.g., Sedgefield dwellings between flood lines; Preliminary Geotechnical and Geomatic Report, Page 38) and cyclic erosion (4–6 m retreat; Page 27), could incrementally worsen dune stability and HWM integrity. Future projects may exacerbate erosion, especially under a projected 30 m inland shift by 2100, if unregulated.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High: High probability, local extent, and potential medium-term effects elevate significance. Unmitigated erosion at PE or Lookout could compromise the 100 m HWM and dune stability, critical for coastal protection.

Degree to which the impact can be mitigated:	High: Strategic site selection (e.g., BM, HW2), erosion controls, and vegetation management can significantly reduce dune instability and protect the 100 m HWM buffer.
Proposed mitigation:	▪ Site Selection: Avoid D7 (weak zone) and Lookout (steep slopes); prioritize BM or HW2 (on/north of 100 m HWM, gentler slopes 0–21°) for dwellings to minimize HWM impact (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Erosion Control: Install silt fences, geotextiles, and temporary cover crops to stabilize dunes during construction (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Vegetation Management: Retain existing vegetation (roots to 60 cm) where possible; salvage natives for replanting per Alien Invasive Management Plan to enhance dune stability (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Foundation Design: Use ECSA-certified foundations with 1.5 m compacted zones for erodible soils to prevent subsidence (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Construction Practices: Limit clearing to 1175 m², use raised boardwalks to minimize soil disturbance, and schedule work during low-rainfall periods (Q3–Q4 2025; Town Planning Report, Page 6; Visual Compliance Statement, Page 3). ▪ Monitoring: Conduct weekly geotechnical inspections during construction to detect instability or HWM encroachment early (Preliminary Geotechnical and Geomatic Report, Page 38).
Cumulative impact post mitigation:	Low: Mitigated impacts (e.g., stabilized dunes, preserved 100 m HWM) minimize contributions to regional erosion trends. Rehabilitation enhances dune resilience, offsetting effects from existing and future developments.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Effective mitigation reduces dune instability and HWM encroachment to negligible levels, ensuring long-term coastal stability and compliance with NEMA and coastal protection regulations.

Potential impact on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Negative: Construction activities (clearing 1175 m² for buildings, road, boardwalk) will remove vegetation, including invasive *Acacia cyclops* and some native Goukamma Strandveld, disrupting habitats in the degraded CBA2 area. This may displace fauna (e.g., small mammals and birds) and reduce local biodiversity temporarily. The Preliminary

	Geotechnical and Geomatic Report (Page 20) notes a well-established coastal forest (Albany Thicket, assumed Strandveld for consistency), with roots stabilising dunes, and clearing could fragment habitats. No impact on CBA1 Milkwood Forest occurs (Terrestrial Biodiversity Assessment).
Extent and duration of impact:	Local, Short-Term to Medium-Term: Impacts are confined to the 1175 m² footprint within the 5.1576 ha site, affecting only the degraded CBA2 southern portion. Vegetation loss and habitat disruption occur during construction (6–12 months; with recovery expected within 1–3 years post-rehabilitation. Fauna displacement is temporary, with recolonization likely after replanting.
Probability of occurrence:	Definite: Clearing 1175 m² will inevitably remove vegetation and disrupt habitats, though the degraded CBA2 area has lower biodiversity value due to *Acacia cyclops* invasion.
Degree to which the impact can be reversed:	High: Habitat loss is reversible through replanting native Goukamma Strandveld and restoring ecological function, as the CBA2 area is degraded and supports no rare species. Fauna displacement is temporary, with recolonization expected post-rehabilitation (1–3 years; Terrestrial Biodiversity Assessment). The Alien Invasive Management Plan enhances reversibility by replacing invasives with natives, improving biodiversity (Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	With correct management in all probability, the degree to which the impact may cause irreplaceable loss of resources can be mitigated. Low: The CBA2 area is degraded, with *Acacia cyclops* reducing native biodiversity. No rare or endangered species are noted, and rehabilitation can restore or enhance habitats (Terrestrial Biodiversity Assessment). Loss is reversible with proper management.
Cumulative impact prior to mitigation:	Moderate: The development's habitat loss, combined with existing coastal developments (e.g., residences 250 m east; Visual Compliance Statement, Page 10) and potential future projects, could incrementally reduce biodiversity resilience in Sedgefield's coastal zone. Historical vegetation clearing and *Acacia cyclops* spread exacerbate this (Terrestrial Biodiversity Assessment). Potential impacts would be related to construction damage on vegetation, as well as edge effects (trampling, erosion, runoff, pollution and spread of alien invasive species). The impact affects a small proportion of the overall biodiversity

	resource - the proposed footprint is relatively small relative to the overall remaining area of the vegetation.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium: Definite occurrence and local extent, but the degraded CBA2 area and temporary nature reduce severity. Impacts are significant without mitigation due to habitat fragmentation (Terrestrial Biodiversity Assessment).
Degree to which the impact can be mitigated:	High: Targeted clearing, invasive species management, and native replanting can significantly reduce habitat and biodiversity loss, potentially yielding a net positive ecological outcome.
Proposed mitigation:	• Targeted Clearing: Limit vegetation removal to 1175 m^2 in CBA2, avoiding CBA1 Milkwood Forest (Terrestrial Biodiversity Assessment; Town Planning Report, Page 16). • Invasive Species Management: Implement the Alien Invasive Management Plan to clear *Acacia cyclops* and prevent regrowth (Terrestrial Biodiversity Assessment). • Rehabilitation: Salvage native plants for nursery propagation and replant post-construction to restore Strandveld (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Construction Practices: Use raised boardwalks to minimize soil/habitat disturbance; schedule clearing during low wildlife activity (Q3–Q4 2025; Town Planning Report, Page 6; Visual Compliance Statement, Page 3). • Fauna Protection: Conduct pre-construction surveys to relocate small fauna; install temporary barriers to limit wildlife access (Terrestrial Biodiversity Assessment). • Monitoring: Monthly ecological inspections during construction to ensure compliance and early intervention (Terrestrial Biodiversity Assessment). It is imperative that impacts on the continuity of ecological processes and corridors must be taken into consideration irrespective of the type of land use proposed or envisaged in the region as a whole. • Removal of Alien Invasive Species during the construction phase. • An onsite nursery must be created and a search and rescue of all plants needs to be conducted prior to construction occurring on site. The plants rescued are to be reused in the rehabilitation of the site after construction. • Appointment of an Environmental Control Officer. • During construction: New roads need to be made using the same / similar materials and methods as the neighbouring road.

Cumulative impact post mitigation:	Low (Potentially Positive): Effective rehabilitation and invasive species removal enhance local biodiversity, offsetting impacts from the development and contributing to regional ecological restoration. Future developments must adopt similar measures to avoid cumulative loss.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low (Potentially Positive): Mitigation restores or improves habitats, reducing impacts to negligible levels and potentially increasing biodiversity through native replanting.

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	Job creation- Positive Impact. No negative impacts on the socioeconomic aspects are foreseen as the proposed construction will not negatively impact on any person's social rights. Employment opportunities (temporary) will be generated during the construction phase. The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.
Extent and duration of impact:	The surrounding neighbourhoods or towns during the construction phase. During the construction phase.
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Positive impacts (jobs, income) are temporary but can be sustained in the operational phase with local hiring for cottages (Town Planning Report, Page 7). No permanent socio-economic harm occurs.
Degree to which the impact may cause irreplaceable loss of resources:	None. No socio-economic resources are irreparably lost.
Cumulative impact prior to mitigation:	Employment opportunities for people from the local community.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High - Positive
Degree to which the impact can be mitigated:	Managing the number of previously disadvantaged/unemployed persons selected for this phase with the relevant skills.
Proposed mitigation:	The contractor should employ people from the local community where possible and ensure that skill transfer and training are provided where feasible.

	Local Hiring: Prioritize 70% of local workers for construction jobs (5–10 direct) to maximize economic benefits (Town Planning Report, Page 7).
Cumulative impact post mitigation:	Employment opportunities for people from the local community. Job creation and sustained beach access enhance Sedgefield's socio-economic resilience.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High–Positive: job creation delivers tangible benefits, ensuring a net positive socio-economic outcome (Town Planning Report, Page 7; Visual Compliance Statement, Page 11).

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Impacts associated with general building construction noise. The construction phase will result in a temporary increase in ambient noise levels from moving machinery, equipment and additional people on site. Construction activities (e.g., clearing, grading, foundation work, heavy machinery for road/boardwalk) will generate noise, potentially disturbing nearby residents (250 m east), tourists using Groenvlei Beach Road, and local wildlife (e.g. birds, small mammals) in the CBA2 area. Noise from equipment (e.g., bulldozers, drills) and vehicle movements may disrupt the tranquil coastal environment of Sedgefield.
Extent and duration of impact:	Local, Short-Term: Noise impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road users), lasting during construction (6–12 months; Town Planning Report, Page 6). Impacts occur primarily during daylight hours and cease post-construction (Visual Compliance Statement, Page 11). Wildlife disturbance is temporary, with species likely to return post-construction.
Probability of occurrence:	Definite: Noise from machinery and construction activities is inevitable during clearing, grading, and building within the 1175 m^2 footprint
Degree to which the impact can be reversed:	High: Noise impacts are fully reversible, as they cease immediately after construction (6–12 months). No long-term disruption to human or wildlife populations occurs, and the tranquil environment is restored post-construction.
Degree to which the impact may cause irreplaceable loss of resources:	None: Noise impacts are temporary and do not result in the loss of socio-economic or ecological resources. Residents'

	quality of life and wildlife behaviour return to baseline post-construction, with no permanent displacement.
Cumulative impact prior to mitigation:	Increased ambient noise levels due to vehicles, equipment and workers on site.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Definite but short-term and localized impacts, with moderate disturbance to residents and wildlife but no lasting harm. The site's distance from dense populations (250 m to nearest residence) reduces severity.
Degree to which the impact can be mitigated:	High: Noise control measures, such as limiting construction hours, using low-noise equipment, and installing barriers, can significantly reduce impacts on residents, tourists, and wildlife.
Proposed mitigation:	• Construction work will take place during the daytime. • No construction activities must occur on Sundays or public holidays. • The equipment and machinery used must be regularly maintained to reduce the potential noise disturbance. • Construction Timing: Restrict construction to daylight hours (e.g., 7 AM–5 PM) to avoid nighttime disturbance (Visual Compliance Statement, Page 11). • Noise Control: Use low-noise machinery and mufflers; install temporary noise barriers (e.g., plywood screens) around high-noise activities like grading (Visual Compliance Statement, Page 11). • Wildlife Protection: Schedule noisy activities (e.g., clearing) during low wildlife activity periods (Q3–Q4 2025) and conduct pre-construction fauna surveys to minimize disturbance (Terrestrial Biodiversity Assessment). • Community Engagement: Notify residents (250 m east) and beach users in advance of noisy activities via community meetings by Q3 2025; establish a complaint hotline (Town Planning Report, Page 8). • Traffic Management: Limit heavy vehicle movements to off-peak hours to reduce noise on Groenvlei Beach Road (Town Planning Report, Page 10). • Monitoring: Conduct weekly noise level checks (e.g., <65 dB at site boundary) during construction to ensure compliance with local regulations (Town Planning Report, Page 6).
Cumulative impact post mitigation:	Negligible: Mitigated noise levels and restricted construction hours minimise contributions to regional disturbance, aligning with low noise impacts from existing tourism

	activities. Future projects must adopt similar measures to avoid cumulative effects.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation reduces noise impacts to negligible levels, ensuring minimal disturbance to residents, tourists, and wildlife, and maintaining Sedgefield's tranquil character.

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	Construction activities (e.g., clearing 1175 m², grading, machinery presence, temporary stockpiles) will temporarily disrupt the scenic coastal landscape of Sedgefield, valued for its unspoilt aesthetic (Visual Compliance Statement, Pages 6, 10). Visible construction elements (e.g., equipment, debris) may detract from the visual quality for residents (250 m east), tourists on Groenvlei Beach Road, and beach users, despite the site's high Visual Absorption Capacity (VAC) due to dense vegetation and cliffs (Visual Compliance Statement, Page 7). Natural Vegetation: The area is characterised by dense natural vegetation typical of the Fynbos biome which offers visual screening. Existing vegetation should be minimally removed and will be a large mitigating factor to lessen the visual impact of the proposed development. The preservation of as much as possible existing vegetation is important to enhance the site's natural aesthetic appeal. Topography: The topography of the area is varied, and sloping landscapes surround the site. The elevated topography of the site allows for optimal views over the ocean, but structures should be designed to fit into the landscape to minimise the visual intrusion of the new buildings. Utilising the natural depressions and contours of the land to minimise visibility during construction activities is important and will facilitate quicker recovery, post-construction, that will help reduce the visual footprint of the development. Existing Infrastructure: There is little existing infrastructure directly surrounding the site; therefore, the area is relatively unspoilt. This emphasises the need for strategic placement and thoughtful design to integrate seamlessly with the existing environment. Special consideration is also required during construction activities so that they do not disrupt the current usage patterns and visual aesthetics of the environment.

Extent and duration of impact:	Local, Short-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), lasting during construction (6–12 months; Town Planning Report, Page 6). The site is not visible from N2, Groenvlei Beach, or Cola Beach, limiting the affected audience (Visual Compliance Statement, Page 10). Impacts cease post-construction with rehabilitation and landscaping (Visual Compliance Statement, Page 11).
Probability of occurrence:	Definite: Construction activities, including clearing and equipment use, will inevitably create temporary visual disturbances within the 1175 m^2 footprint, affecting the aesthetic experience of nearby viewers (Visual Compliance Statement, Pages 7, 11).
Degree to which the impact can be reversed:	High: Noise impacts are fully reversible, as they cease immediately after construction (6–12 months). No long-term disruption to human or wildlife populations occurs, and the tranquil environment is restored post-construction (Visual Compliance Statement, Page 11; Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	None: Aesthetic impacts are temporary and do not result in the loss of scenic resources. The site's high VAC and post-construction landscaping ensure the coastal landscape's visual quality is restored (Visual Compliance Statement, Pages 7, 11).
Cumulative impact prior to mitigation:	Low: Temporary aesthetic disruptions add to minor existing impacts from nearby developments (e.g., residence 250 m east; Visual Compliance Statement, Page 10) and tourism activities (e.g., Lake Pleasant Resort; Visual Compliance Statement, Page 6).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Definite but short-term and localized impacts, with minimal disturbance due to the site's high VAC, invisibility from key viewpoints (N2, beaches), and distance from dense populations (250 m to nearest residence; Visual Compliance Statement, Pages 7, 10).
Degree to which the impact can be mitigated:	High: Effective site management, debris control, and rapid rehabilitation can significantly reduce aesthetic impacts, restoring and enhancing the site's visual integration with the coastal landscape (Visual Compliance Statement, Page 11; Terrestrial Biodiversity Assessment).
Proposed mitigation:	The construction site should be fenced and screened off from the surrounding areas, including chemical toilets (if required). Good housekeeping must be implemented at all

	times and the site must be kept tidy and clean (no litter etc.). Indigenous vegetation must be used for landscaping. During the construction phase, the proposed development will be effectively screened from the N2 motorway using green shade cloth. • Site Management: Screen construction areas with temporary fencing or vegetation to reduce visibility of equipment and stockpiles (Visual Compliance Statement, Page 11). • Debris Control: Regularly clear construction debris and cover stockpiles to maintain a tidy site (Visual Compliance Statement, Page 11). • Construction Timing: Conduct high-impact activities (e.g., clearing, grading) during low tourist seasons (Q3–Q4 2025) to minimize visual exposure (Town Planning Report, Page 6). • Rehabilitation: Replant native Goukamma Strandveld immediately post-construction to restore visual continuity, per the Alien Invasive Management Plan (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Community Engagement: Inform residents and beach users of construction timelines via Q3 2025 meetings to manage expectations (Town Planning Report, Page 8). • Monitoring: Conduct weekly visual inspections during construction to ensure compliance with aesthetic standards (Visual Compliance Statement, Page 11). Construction Management for Visual Impact Reduction • Dust suppression techniques (e.g., water spraying and covered stockpiles) should be enforced to minimize airborne dust that could degrade visual quality. • Limit construction activities to daylight hours to reduce noise and light disturbances during sensitive nighttime periods. • Efficient waste management practices should be applied, ensuring prompt removal of debris and temporary structures post-construction. Lighting Design to Reduce Light Pollution • Install low-intensity, downward-facing lights with motion sensors to minimize unnecessary nighttime illumination. • Use warm-coloured lighting to reduce glare and maintain the natural ambience of the area.

Cumulative impact post mitigation:	Negligible: Mitigated aesthetic impacts, combined with rapid landscaping, ensure minimal contribution to regional visual degradation. The site will be less visually intrusive during the construction phase. The use of the land's inherent Visual Absorption Capacity (VAC) enhances the project's ability to minimise visual impacts substantially. The visual impact of the project is minimal, given its scope and nature, and must be continually managed through best practice methods throughout the project's lifecycle.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation restores the site's visual integration, reducing aesthetic impacts to negligible levels and preserving Sedgefield's unspoilt coastal character (Visual Compliance Statement, Pages 7, 11).

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	Heritage resources may be encountered during excavation activities on-site. A NID will be submitted to Heritage Western Cape. The DFFE Screening Tool indicated the Archaeological and Cultural Heritage Sensitivity as Low.
Extent and duration of impact:	Only during the construction phase.
Probability of occurrence:	Improbable
Degree to which the impact can be reversed:	Irreversible, should culture or historical resources be encountered, but this is not expected.
Degree to which the impact may cause irreplaceable loss of resources:	Full loss of irreplaceable resources, should cultural or historical resources be encountered on-site, but this is not expected.
Cumulative impact prior to mitigation:	Potential loss of cultural or historical resources, should it be encountered during construction activities. However, this is not expected.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low, negative
Degree to which the impact can be mitigated:	It is not expected that cultural or historical resources will be encountered as the site. The impact cannot be avoided during the construction phase as excavation activities are required for the development.

Proposed mitigation:	There are no cultural or historical features on-site. However, the provisions of the National Heritage Resources Act will apply. Environmental awareness training should be presented to all employees at the site. Such training should include the identification of potential heritage resources and how to react if the presence of heritage resources is suspected. If any sign of a heritage or cultural site is unearthed during excavations, then all activities must cease until a heritage specialist has been consulted and had the opportunity to investigate the findings. In case of the unexpected uncovering of fossil bones in the surficial coversands and soil, or buried archaeological material, or unmarked graves, it is recommended that a protocol for finds of potential fossil material (and buried artefacts), the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the Construction Phase of the project. Adjustments to the development plan are not expected to change this recommendation"
Cumulative impact post mitigation:	Potential loss of cultural or historical resources should they be encountered during construction activities, but this is not expected. Because there are no significant heritage resources associated with the property, it does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason, there will be negligible to no cumulative impact on the heritage value of the area. The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low

Potential impact on biological aspects:	**Safety on site**
Nature of impact:	Occupational exposure, fires, explosion, health. Construction activities (e.g., clearing, grading, foundation work, heavy machinery use for road/boardwalk) pose safety risks to workers, including falls, equipment accidents, and exposure to hazardous materials (e.g., fuel spills). The site's erodible soils, steep slopes (26–70° at Lookout), and weak zones (D7 fracture) increase risks of slips or collapses.

	Unauthorised public access (e.g., via Groenvlei Beach Road) could also endanger visitors.
Extent and duration of impact:	Local, Short-Term: Safety risks are confined to the 5.1576 ha site and immediate surroundings (e.g., Groenvlei Beach Road), lasting during construction (6–12 months). Risks are highest during active work hours and cease post-construction, except for minor residual risks during site stabilisation.
Probability of occurrence:	High: Safety incidents are likely due to the inherent hazards of construction (e.g., machinery, uneven terrain), especially given the site's geotechnical challenges (erodible soils, steep slopes). Public access risks are probable without controls.
Degree to which the impact can be reversed:	Moderate: Minor injuries (e.g., cuts, bruises) are fully reversible with medical treatment, and site stabilization reverses geotechnical risks post-construction. Severe injuries or fatalities, though unlikely with mitigation, are irreversible, lowering overall reversibility.
Degree to which the impact may cause irreplaceable loss of resources:	Low to Moderate: Most safety incidents (e.g., minor injuries) do not cause irreplaceable loss, but severe incidents (e.g., fatalities) could result in irreplaceable human loss. Geotechnical risks, if unmitigated, could damage equipment, but no ecological or cultural resources are at stake
Cumulative impact prior to mitigation:	Moderate: Safety risks from this development, combined with other construction projects in Sedgefield (e.g., future coastal developments), could strain local emergency services and increase regional incident rates if safety standards are not enforced. Existing tourism activities (e.g., Lake Pleasant Resort) contribute minimal safety risks.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium: High probability and potential for serious incidents (e.g., falls, collapses) due to site conditions (steep slopes, erodible soils) elevate significance, though risks are localized and short-term.
Degree to which the impact can be mitigated:	High: Robust safety protocols, training, site stabilisation, and access controls can significantly reduce risks to workers and the public, ensuring compliance with occupational health and safety regulations.
Proposed mitigation:	Adequate measures must be in place to ensure the safety of staff on-site, such as proper training of operators, first aid treatment, medical assistance, emergency treatment, prevention of inhalation of dust, protective clothing, footwear and gloves. Manuals and training regarding the correct handling of materials and operation of equipment should be in place and updates as new or updated material

	safety data sheets become available; and monitoring should be carried out on a regular basis, including accident reports. All employees are to be managed in strict accordance with the OH&S Act. Sufficient water must be available for firefighting purposes. All personnel must be trained in responsible fire protection measures. Regular inspections should be carried out to inspect and test fire-fighting equipment and pollution control measures. Relevant SANS Standards shall be implemented at the facility. • Safety Protocols: Implement a Health and Safety Plan per the Occupational Health and Safety Act (OHSA), including risk assessments, personal protective equipment (PPE), and first-aid stations. • Worker Training: Provide regular safety training for all workers (e.g., machinery operation, fall prevention) and appoint a qualified safety officer. • Site Stabilization: Use ECSA-certified foundations with 1.5 m compacted zones and install temporary supports (e.g., geotextiles) at steep slopes (Lookout) and weak zones (D7). • Access Control: Erect fencing and signage to prevent unauthorized public access via Groenvlei Beach Road; monitor entry points during construction. • Hazard Management: Store hazardous materials (e.g., fuel) in bunded areas with spill kits to prevent worker exposure (Terrestrial Biodiversity Assessment). • Monitoring: Conduct daily safety inspections and weekly geotechnical checks to detect unstable areas, ensuring compliance with OHSA.
Cumulative impact post mitigation:	Low: Mitigated safety risks minimize contributions to regional incident rates, aligning with low safety impacts from existing tourism activities. Future projects must enforce similar OHSA-compliant measures to avoid cumulative strain on emergency services Workers are aware of safety risks and consequences and relevant procedures. Mitigatory measures will reduce the chance of an incident occurring.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Mitigation reduces safety risks to negligible levels, ensuring worker and public safety through robust protocols, training, and site controls, compliant with OHSA and NEMA.

Potential impact on biological aspects:	**Waste**
Nature of impact:	Waste generated through construction activities (general and hazardous) that is not correctly managed may result in pollution of water, air and soil resources.
Extent and duration of impact:	Neighbouring properties during the construction phase
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No irreplaceable loss.
Cumulative impact prior to mitigation:	Pollution from waste generation (general and hazardous waste) through construction activities.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	The impacts can be managed by implementing mitigatory measures.
Proposed mitigation:	Appropriate containers for different types of waste should be provided throughout the site. The containers must have sufficient capacity and be removed frequently. Environmental awareness training should include a section on the impacts of waste generation and improper waste management. Ensure that rubble and construction waste is sorted on site and that recyclable material is separated from disposable waste. The contractor should keep safe disposal certificates for record purposes.
Cumulative impact post mitigation:	Little / no potential soil, water or air pollution
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(b) **Impacts that may result from the operational phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.**

Operational Phase

Potential impacts on geographical and physical aspects:	Surface water run-off/groundwater/soil, air quality
Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, landscaping, wastewater management) may increase surface water run-off due to compacted soils and impermeable surfaces (e.g., parking areas) within the 1175 m² footprint. Potential spills (e.g., cleaning chemicals, fuel from vehicles) risk contaminating shallow groundwater (<2 m depth at HW2) and erodible soils (>750 mm deep, <15% clay). Inadequate stormwater management could lead to localized erosion, particularly near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Pages 7–10, 35–38; Town Planning Report, Page 10).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and adjacent areas (e.g., Groenvlei Lake), persisting throughout the operational phase (decades). Run-off and contamination risks are ongoing but manageable with maintenance (Preliminary Geotechnical and Geomatic Report, Page 36; Town Planning Report, Page 6).
Probability of occurrence:	Moderate: Run-off and contamination are likely if stormwater and waste systems are poorly maintained, especially during heavy rainfall. The rehabilitated site (post-construction revegetation) reduces risks compared to the construction phase (Preliminary Geotechnical and Geomatic Report, Pages 7, 38; Terrestrial Biodiversity Assessment).
Degree to which the impact can be reversed:	High: Run-off and soil erosion are reversible through improved stormwater management and revegetation within 1–2 years. Minor groundwater contamination (e.g., small spills) is treatable, but severe contamination could be partially irreversible if it affects deeper aquifers (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	Low: Soil and groundwater resources in the degraded CBA2 area are recoverable with proper management. Severe contamination or erosion near the 100 m HWM could cause localized ecosystem impacts, but these are unlikely with mitigation (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).
Cumulative impact prior to mitigation:	Moderate: Ongoing run-off and potential contamination, combined with existing coastal developments (e.g., Sedgefield dwellings) and cyclic erosion (4–6 m retreat, 2005–2024), could increase sedimentation and pollution risks to Groenvlei Lake and regional groundwater

	(Preliminary Geotechnical and Geomatic Report, Pages 27, 38; Town Planning Report, Page 10).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate: Moderate probability and long-term impacts from operational activities elevate significance, particularly if stormwater or waste systems are inadequate near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Pages 35–38).
Degree to which the impact can be mitigated:	High: Effective stormwater systems, spill prevention, and vegetation maintenance can significantly reduce run-off, contamination, and erosion risks (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Proposed mitigation:	▪ Stormwater Management: Install and maintain permeable surfaces (e.g., gravel) and detention basins to control run-off; direct flows away from the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Spill Prevention: Use designated areas for vehicle maintenance with spill kits; store chemicals in bunded containers (Terrestrial Biodiversity Assessment). ▪ Vegetation Maintenance: Sustain native Goukamma Strandveld to stabilize soils and reduce run-off per Alien Invasive Management Plan (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Wastewater Systems: Install compliant septic or conservancy tanks with regular servicing to prevent groundwater contamination (Town Planning Report, Page 6). ▪ Operational Practices: Limit vehicle use and schedule landscaping during low-rainfall periods (e.g., Q3–Q4 annually; Town Planning Report, Page 6). ▪ Monitoring: Conduct quarterly soil and water quality checks to detect erosion or contamination early (Preliminary Geotechnical and Geomatic Report, Page 38).
Cumulative impact post mitigation:	Low: Mitigated run-off and contamination risks minimize contributions to regional sedimentation and pollution. Future developments must adopt similar measures (Preliminary Geotechnical and Geomatic Report, Page 38; Town Planning Report, Page 10).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Effective mitigation reduces impacts to negligible levels, ensuring soil stability and water quality protection during the operational phase (Preliminary Geotechnical and

	Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).

Potential impact on geographical and physical aspects:	**100-Highwater Mark and Dune Stability**
Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, pedestrian traffic on boardwalks, landscaping maintenance) within the 1175 m² footprint may cause minor soil disturbance and vegetation stress, potentially destabilizing dunes and risking encroachment into the 100 m HWM buffer, critical for coastal protection. Poor stormwater management could exacerbate run-off, leading to erosion of erodible soils (>750 mm deep, <15% clay), particularly at PE (within 100 m HWM) or Lookout (steep slopes, 26–70°). Cyclic dune erosion (4–6 m retreat, 2005–2024) and weak zones (D7 fracture at 120 m) increase vulnerability (Preliminary Geotechnical and Geomatic Report, Pages 7–10, 27, 35–38; Terrestrial Biodiversity Assessment).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and adjacent coastal zone, persisting throughout the operational phase (decades). Rehabilitated vegetation (e.g., Goukamma Strandveld) and raised boardwalks reduce impacts, but ongoing activities pose low-level risks (Preliminary Geotechnical and Geomatic Report, Page 36; Town Planning Report, Page 10).
Probability of occurrence:	Low to Moderate: Dune instability and HWM encroachment are possible if vegetation or stormwater systems are poorly maintained, especially during heavy rainfall or wind events. Risks are lower than during construction due to site stabilization and are minimal at BM or HW2 (on/north of 100 m HWM) compared to PE or Lookout (Preliminary Geotechnical and Geomatic Report, Pages 7, 38; Terrestrial Biodiversity Assessment).
Degree to which the impact can be reversed:	High: Dune stability impacts are reversible through stabilization (e.g., replanting, erosion controls) within 1–2 years. Minor erosion is correctable, but severe dune loss near the 100 m HWM (e.g., at PE) could be partially irreversible if significant sediment is lost (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	Low: Dune soils in the degraded CBA2 area are recoverable through maintenance and replanting. Severe erosion near the 100 m HWM could cause localized loss of dune structure, but this is unlikely with mitigation (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).

Cumulative impact prior to mitigation:	Low to Moderate: Minor dune disturbance and run-off, combined with existing coastal developments (e.g., Sedgefield dwellings; Preliminary Geotechnical and Geomatic Report, Page 38) and cyclic erosion (4–6 m retreat), could incrementally affect dune stability and HWM integrity. Future projects and a projected 30 m inland shift by 2100 increase long-term risks (Preliminary Geotechnical and Geomatic Report, Pages 27, 36).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low to Moderate: Low to moderate probability and long-term but low-intensity impacts result in low to moderate significance. Risks are higher at PE or Lookout if maintenance is inadequate (Preliminary Geotechnical and Geomatic Report, Pages 35–38).
Degree to which the impact can be mitigated:	High: Effective stormwater management, vegetation maintenance, and restricted access can significantly reduce dune instability and protect the 100 m HWM buffer (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Proposed mitigation:	▪ Site Management: Restrict vehicle and pedestrian access to designated gravel roads and raised boardwalks to minimize soil disturbance (Preliminary Geotechnical and Geomatic Report, Page 38; Town Planning Report, Page 10). ▪ Stormwater Management: Maintain permeable surfaces and detention basins to control run-off and prevent erosion near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Vegetation Maintenance: Sustain native Goukamma Strandveld (roots to 60 cm) per Alien Invasive Management Plan to enhance dune stability; conduct annual replanting as needed (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Erosion Control: Install and maintain geotextiles or cover crops in high-risk areas (e.g., PE, Lookout) if erosion is detected (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Operational Practices: Schedule landscaping during low-rainfall periods (e.g., Q3–Q4 annually) to reduce run-off risks (Town Planning Report, Page 6). ▪ Monitoring: Conduct quarterly geotechnical inspections to detect instability or HWM encroachment early; monitor vegetation health annually (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Cumulative impact post mitigation:	Low: Mitigated impacts minimize contributions to regional dune erosion and HWM degradation. Sustained vegetation and stormwater systems enhance resilience against future

	developments (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Effective mitigation reduces dune instability and HWM encroachment to negligible levels, ensuring long-term coastal stability during the operational phase (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).

Potential impact on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Negative: Operational activities (e.g., pedestrian traffic on boardwalks, landscaping maintenance, vehicle use on gravel roads) within the 1175 m² footprint may cause minor vegetation disturbance and habitat stress in the degraded CBA2 area, potentially affecting fauna (e.g., small mammals, birds). Improper management of invasive species (*Acacia cyclops*) or landscaping could reduce native Goukamma Strandveld cover, impacting biodiversity. No impact on CBA1 Milkwood Forest occurs (Terrestrial Biodiversity Assessment; Preliminary Geotechnical and Geomatic Report, Page 20).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 1175 m² footprint within the 5.1576 ha site, persisting throughout the operational phase (decades). Rehabilitated vegetation (post-construction) minimizes impacts, but ongoing disturbance could delay habitat recovery (Terrestrial Biodiversity Assessment; Town Planning Report, Page 10).
Probability of occurrence:	Definite: Clearing 1175 m² will inevitably remove vegetation and disrupt habitats, though the degraded CBA2 area has lower biodiversity value due to *Acacia cyclops* invasion.
Degree to which the impact can be reversed:	High: Habitat and biodiversity impacts are reversible through enhanced vegetation management and replanting of native species within 1–2 years. No rare species are affected in the degraded CBA2 area (Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	Low: No rare or endangered species are impacted, and the degraded CBA2 area can be restored through rehabilitation. Improper management could cause localized biodiversity loss, but this is unlikely with mitigation (Terrestrial Biodiversity Assessment).
Cumulative impact prior to mitigation:	Low to Moderate: Minor habitat disturbance, combined with existing coastal developments (e.g., residence 250 m east; Visual Compliance Statement, Page 10) and potential future projects, could incrementally reduce biodiversity resilience. Historical *Acacia cyclops* invasion exacerbates this

	(Terrestrial Biodiversity Assessment; Town Planning Report, Page 10).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Low to moderate probability and minimal disturbance from operational activities result in low significance, supported by post-construction rehabilitation and the CBA2's degraded state (Terrestrial Biodiversity Assessment).
Degree to which the impact can be mitigated:	High: Effective vegetation management, invasive species control, and restricted access can significantly reduce habitat and biodiversity impacts (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11).
Proposed mitigation:	• Vegetation Management: Implement and sustain the Alien Invasive Management Plan to control *Acacia cyclops* and promote native Goukamma Strandveld growth (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Access Control: Restrict pedestrian and vehicle access to designated boardwalks and gravel roads to minimize habitat disturbance (Terrestrial Biodiversity Assessment; Town Planning Report, Page 10). • Landscaping Practices: Use native species for landscaping; schedule maintenance during low wildlife activity (e.g., Q3–Q4 annually) to avoid fauna disruption (Terrestrial Biodiversity Assessment; Town Planning Report, Page 6). • Fauna Protection: Install signage to deter wildlife disturbance; conduct annual fauna surveys to monitor populations (Terrestrial Biodiversity Assessment). - Community Engagement: Educate residents and tourists on biodiversity protection via annual updates (Town Planning Report, Page 8). • Monitoring: Conduct quarterly ecological inspections to assess vegetation health and biodiversity recovery (Terrestrial Biodiversity Assessment).
Cumulative impact post mitigation:	Low: Mitigated impacts minimize contributions to regional biodiversity loss. Sustained native vegetation enhances resilience against future developments (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 10).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Effective mitigation reduces habitat and biodiversity impacts to negligible levels, ensuring ecological stability during the operational phase (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11).

Potential impacts on socio-economic aspects:	Socio-economic
Nature of impact:	Positive and Negative: Positive: The development supports local tourism through three 65 m² cottages, generating revenue and creating permanent jobs (e.g., 3–5 positions for staff quarters, maintenance, hospitality). It aligns with Sedgefield's tourism-driven economy (e.g., proximity to Groenvlei Beach Road, Lake Pleasant Resort).
Extent and duration of impact:	Local to Regional, Long-Term: Positive impacts (e.g., jobs, tourism revenue) benefit Sedgefield and the Garden Route region, persisting throughout the operational phase (decades).
Probability of occurrence:	High: Positive impacts (e.g., job creation, tourism revenue) are highly likely due to the development's design for tourist accommodation and alignment with Sedgefield's tourism market.
Degree to which the impact can be reversed:	High: Positive impacts (e.g., jobs) are sustained unless the development ceases operation, which is unlikely.
Degree to which the impact may cause irreplaceable loss of resources:	None. No socio-economic resources are irreparably lost.
Cumulative impact prior to mitigation:	Moderate: Positive impacts add to Sedgefield's tourism and employment base, complementing existing developments (e.g., Lake Pleasant Resort; Visual Compliance Statement, Page 6). Employment opportunities for people from the local community.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate (Positive): High-probability positive impacts (e.g., jobs, tourism) have moderate significance due to economic benefits.
Degree to which the impact can be mitigated:	Managing the number of previously disadvantaged/unemployed persons selected for this phase with the relevant skills.
Proposed mitigation:	Employ people from the local community where possible and ensure that skill transfer and training are provided where feasible. Operational Restrictions: Schedule maintenance (e.g., landscaping) during low-tourist seasons (Q3–Q4 annually) and restrict noisy activities to daytime hours (Town Planning Report, Page 6; Visual Compliance Statement, Page 11).
Cumulative impact post mitigation:	Employment opportunities for people from the local community. Job creation and sustained beach access

	enhance Sedgefield's socio-economic resilience. Mitigation enhances positive impacts to high significance by maximizing economic benefits.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High–Positive: job creation delivers tangible benefits, ensuring a net positive socio-economic outcome (Town Planning Report, Page 7; Visual Compliance Statement, Page 11).

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, tourist activities in cottages, landscaping maintenance) within the 1175 m² footprint generate low-level noise (e.g., vehicle engines, lawnmowers, human activity), potentially disturbing residents (250 m east) and tourists on Groenvlei Beach Road. Noise may also affect fauna (e.g., birds, small mammals) in the degraded CBA2 area, though impacts are minimal compared to construction. The site's isolation and high Visual Absorption Capacity (VAC) reduce noise propagation (Town Planning Report, Pages 8, 10; Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 7).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), persisting throughout the operational phase (decades). Noise is intermittent and low-intensity, occurring during daytime activities (Town Planning Report, Page 10; Visual Compliance Statement, Page 10).
Probability of occurrence:	Low to Moderate: Noise from vehicles, tourists, and maintenance is likely but reduced by low traffic volumes (e.g., residents, occasional tourists) and the site's isolation (250 m to nearest residence). Impacts on fauna are less likely due to the CBA2's degraded state (Town Planning Report, Page 10; Terrestrial Biodiversity Assessment).
Degree to which the impact can be reversed:	High: Noise impacts are fully reversible, as disturbances cease immediately upon stopping activities. Fauna and residents adapt quickly with proper management, with no lasting effects (Terrestrial Biodiversity Assessment; Town Planning Report, Page 8).
Degree to which the impact may cause irreplaceable loss of resources:	None: Temporary noise disturbances cause no permanent loss of socio-economic or ecological resources. Residents and fauna experience no long-term harm (Town Planning Report, Page 10; Terrestrial Biodiversity Assessment).

Cumulative impact prior to mitigation:	Low: Minor noise from operational activities adds to existing low-level noise from tourism (e.g., traffic near Lake Pleasant Resort) and potential future coastal developments, but impacts remain localized and minimal due to the site's isolation (Town Planning Report, Page 10; Visual Compliance Statement, Page 6).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Low to moderate probability and low-intensity noise result.
Degree to which the impact can be mitigated:	High: Noise control measures, activity scheduling, and community engagement can effectively minimize disturbances for residents and fauna (Town Planning Report, Page 8; Terrestrial Biodiversity Assessment).
Proposed mitigation:	No mitigation is required for the one dwelling unit.
Cumulative impact post mitigation:	No cumulative impacts are anticipated following the implementation of mitigation measures.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation reduces noise impacts to negligible levels, ensuring minimal disturbance to residents, tourists, and wildlife, and maintaining Sedgefield's tranquil character.

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	Long-term visual intrusion into a coastal fynbos landscape due to the operational presence of a built structure. Potential change in the area's visual character and aesthetic quality.
Extent and duration of impact:	Local, Short-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), The site is not visible from N2, Groenvlei Beach, or Cola Beach, limiting the affected audience (Visual Compliance Statement, Page 10). Localised – confined to the development footprint and immediate surroundings; Long-term – for the lifespan of the structure.
Probability of occurrence:	Definite: Visual presence of the main dwelling is certain once operational.
Degree to which the impact can be reversed:	Low to Moderate – Although theoretically removable, structural intervention (e.g., site leveling, vegetation clearance) causes lasting changes.

Degree to which the impact may cause irreplaceable loss of resources:	Low – The visual impact does not affect critical view corridors or unique scenic resources; the site is not visible from major public viewpoints such as the N2, Groenvlei Lake, or Cola Beach.
Cumulative impact prior to mitigation:	Medium – Incremental development in a largely natural area may collectively erode visual integrity over time.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High – Due to the high scenic quality of the area and potential for long-term visibility from limited receptors.
Degree to which the impact can be mitigated:	High – Effective mitigation through sensitive design, site placement, and vegetation retention.
Proposed mitigation:	• Fragmented building layout to reduce bulk. • Use of natural, low-contrast materials (timber, glass, steel). • Strategic placement behind dune ridges and within vegetated areas. • Restoration of disturbed vegetation post-construction. • Controlled and shielded lighting at night
Cumulative impact post mitigation:	Negligible: Mitigated aesthetic impacts, combined with rapid landscaping, ensure minimal contribution to regional visual degradation. Low to Medium – If all mitigation measures are applied, the development integrates into the natural landscape with minimal residual impact
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation restores the site's visual integration, reducing aesthetic impacts to negligible levels and preserving Sedgefield's unspoilt coastal character (Visual Compliance Statement, Pages 7, 11). Visual changes are effectively screened, minimized, or made compatible with the surrounding character.

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	It is not expected that any cultural-historical aspects will be impacted as a result of operational activities.
Extent and duration of impact:	N/A
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A

Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

Potential impact on biological aspects:	**Safety on site**
Nature of impact:	Occupational exposure, fires, explosion, health.
Extent and duration of impact:	The owner of the property will be residing in the main dwelling.
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

Potential impact on biological aspects:	**Waste**
Nature of impact:	Normal household waste will be generated.

Extent and duration of impact:	Site only.
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

Alternative 2

The proposed project will comprise one primary residence with a footprint of 400 square meters (total footprint 1375 m^2), in addition to three cottages, each with an area of 80 square meters. A boardwalk will connect all four units. Furthermore, the project will provide six parking bays allocated for the use of the units. There will also be an 80 square meter shed, along with a 50 square meter cottage designated as staff quarters.

Environmental Impacts:

- Surface water run-off/groundwater/soil, air quality
- 100m High water mark and Dune stability
- Impacts on the Critical Biodiversity Area
- Socio-economic impacts
- Noise disturbance
- Aesthetic impacts
- Safety on site
- Waste
- Cultural-historical impacts

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Planning, Design and Construction Phase

Potential impacts on geographical and physical aspects:	**Surface water run-off/groundwater/soil, air quality**
Nature of impact:	Construction activities (e.g., clearing 1375 m², grading, foundation work) increase surface water run-off by removing vegetation (*Acacia cyclops*, Goukamma Strandveld) and disturbing erodible soils (>750 mm deep, <15% clay), risking erosion and sedimentation into nearby water bodies (e.g., Groenvlei Lake). Excavation and fuel spills may contaminate shallow groundwater (<2 m depth at HW2). Soil compaction and loss reduce land stability, especially at PE (within 100 m HWM) or Lookout (steep slopes, 26–70°) Compaction of soil for the internal road and the main dwelling house. Groundwater may be impacted on during construction if substances, such as fuels and oils associated with the usage of machinery and equipment, are allowed to leak onto soil and potentially leach into the groundwater. <u>Soil</u> Mixing cement directly on the ground could also result in contamination. Contaminated soil will have to be rehabilitated or disposed of, depending on the level and nature of the contamination. Soil erosion and topsoil loss are not expected during construction as activities will be limited to the development footprint. <u>Air pollution</u> Dust will be generated during the construction activities, particularly during excavations. During the construction phase of the associated infrastructure dust will be generated. The effect on air quality is expected to be minor and localised, as well as of short-term duration as the construction phase is temporary. The contribution of exhaust fumes from the associated construction equipment and vehicles will be negligible.
Extent and duration of impact:	Local, Short-Term to Medium-Term: Impacts are confined to the 5.1576 ha site and adjacent areas (e.g., Groenvlei Lake), occurring during construction (6–12 months). Erosion and groundwater contamination may persist for 1–3 years if unmitigated, particularly with the larger footprint.
Probability of occurrence:	High: Increased clearing (17% more than 1175 m²) on erodible soils and proximity to the 100 m HWM heighten

	run-off, erosion, and contamination risks, especially during rainfall.
Degree to Which the Impact Can Be Reversed	Moderate: Soil erosion and run-off impacts are reversible through stabilization and revegetation within 1–3 years. Minor groundwater contamination (e.g., fuel spills) is treatable, but severe contamination or significant soil loss near the 100 m HWM could be partially irreversible.
Degree to which the impact may cause irreplaceable loss of resources:	Moderate: Soil loss and groundwater contamination are largely recoverable in the degraded CBA2 area, but severe erosion or pollution near the 100 m HWM could impair coastal ecosystems or water resources long-term.
Cumulative impact prior to mitigation:	Moderate to High: Increased run-off and soil loss, combined with existing coastal developments (e.g., Sedgefield dwellings) and cyclic erosion (4–6 m retreat, 2005–2024), exacerbate sedimentation and contamination risks to Groenvlei Lake and regional groundwater. Temporary dust and emissions add to existing tourism-related air quality impacts (e.g., Lake Pleasant Resort but are localized and short-term. Future developments could increase dust if not mitigated. Potential contamination of stormwater run-off, soil, and groundwater, dust generation and soil erosion.
Significance rating of impact prior to mitigation **(Low, Medium, Medium-High, High, or Very-High)**	High: The larger footprint (1375 m^2) and high probability of erosion, run-off, and contamination elevate significance, particularly at PE or Lookout.
Degree to which the impact can be mitigated:	Moderate to High: Erosion controls, spill prevention, and rehabilitation can reduce impacts, but the larger footprint limits effectiveness compared to the preferred alternative.
Proposed mitigation:	Effective erosion control, spill prevention, and vegetation management can significantly reduce impacts Dust suppression and emission controls can minimize air quality impacts. • Erosion Control: Use silt fences, temporary cover crops, and retain vegetation (roots to 60 cm) to stabilize soils (Preliminary Geotechnical and Geomatic Report, Page 38). • Erosion Control: Install reinforced silt fences, geotextiles, and cover crops to reduce run-off and erosion (Preliminary Geotechnical and Geomatic Report, Page 38).

	• Spill Prevention: Store fuel in bunded areas with spill kits; use biodegradable fluids where possible (Terrestrial Biodiversity Assessment). • Vegetation Management: Retain vegetation where feasible; replant natives per Alien Invasive Management Plan to stabilize soil (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Foundation Design: Use ECSA-certified foundations with 2 m compacted zones to minimize soil disturbance (Preliminary Geotechnical and Geomatic Report, Page 38). • Construction Practices: Limit clearing to 1375 m², use raised boardwalks, and schedule work in low-rainfall periods (Q3–Q4 2025; Town Planning Report, Page 6; Visual Compliance Statement, Page 3). • Monitoring: Conduct weekly soil and water quality checks to detect erosion or contamination early (Preliminary Geotechnical and Geomatic Report, Page 38). As per the Geotechnical Report: Structural Foundation and Stability Measures • Avoid weight-bearing structures at position D7, as it has been identified as structurally weak. • Specialized foundation designs must be implemented for sites with soft, highly erodible soil (Lookout, BM path split, and PE) to prevent settlement and ensure long-term stability. • Compacted foundation zones of at least 1.5m around external walls should be established to enhance soil stability and reduce erosion risk. • Reinforcement at HW2 is required due to weak soil zones at 160mm and 360mm depths, where additional stabilization (such as deep compaction or geogrid reinforcement) should be incorporated. • All structural plans must be reviewed and approved by an ECSA-registered structural engineer to ensure compliance with engineering safety standards. Erosion and Soil Movement Mitigation • Implement soil stabilisation techniques, such as geotextiles, retaining walls, or soil-binding vegetation, to counteract erosion, especially in the high-risk zone south of Lookout Point. • Grading and slope management should be prioritized to minimize excessive soil displacement and reduce the risk of landslides.

	• Minimize ground disturbance during construction and phase excavation activities to reduce exposure of erodible soil to wind and water forces. • Erosion control barriers, such as silt fences or terracing, should be installed in vulnerable areas to limit sediment displacement. Climate-Resilient Infrastructure • Wind-resistant and weatherproof materials should be used to account for long-term climatic variations. • Sustainable drainage solutions, such as permeable surfaces, should be incorporated to reduce surface runoff and prevent soil saturation. • Dune stabilization measures, including vegetation reinforcement and dune rehabilitation programs, should be applied to safeguard against wind-driven erosion. 5. Construction Best Practices • Limit heavy machinery operations in sensitive areas to prevent unnecessary soil compaction and degradation. • Monitor construction activities regularly to ensure compliance with erosion control and soil stabilization protocols. • Implement revegetation strategies post-construction, using indigenous plant species to restore disturbed areas and strengthen soil structure. • Strict compliance with setback regulations (30m building line, 100m high-water mark) should be enforced to align with regional coastal development precedents. Rainwater tanks will be placed around the main dwelling to collect rainwater for reuse from roofs. Stockpiles of excavated materials or spoils during the construction phase should be strategically positioned to mitigate wind erosion and avoid adverse impacts on drainage lines. Dust suppression measures should be implemented in accordance with specific site conditions. Vehicles transporting materials prone to being displaced by wind must be securely covered. Ingress and egress points onto public roads must be cleared of any dust or mud. To minimise emissions resulting from exhaust fumes, regular maintenance of vehicles and equipment is essential to ensure optimal working conditions. • Blanket clearing of the site. • It is proposed that steel or concrete piling be utilised for the building structures, thereby limiting the exposure of bare soils and wind-blown dust.

	• Erosion protection measures must be implemented in disturbed areas. • Topsoil and soil stockpiles should be covered, wetted or otherwise stabilised to prevent wind erosion and dust generation. • A water cart must be employed on windy days to wet soils that would be prone to wind erosion to limit dust generation. • Disturbed areas should be rehabilitated in parallel with construction completion. • Compile and implement an Environmental Management Programme; and audit reporting by an ECO during construction. • During construction: New roads need to be made using the same / similar materials and methods as the neighbouring road. • Dust Suppression: Apply water sprays and cover stockpiles during clearing/grading (Visual Compliance Statement, Page 11). • Emission Control: Use low-emission machinery and limit idling (Visual Compliance Statement, Page 11). • Construction Timing: Daylight-only operations to reduce dust spread (Visual Compliance Statement, Page 11). • Monitoring: Daily air quality checks during construction (Q3–Q4 2025; Town Planning Report, Page 6). <u>Construction activities</u> Storage of potential pollutants such as fuel, oil, cement, etc. should be confined to a sealed surface with a bund wall to prevent soil contamination from accidental leaks and spills. Only the volume of fuel required for the day should be stored. The use of potentially polluting substances should be strictly controlled and handled in designated areas under the supervision of competent and trained personnel as stipulated in the EMPr. No vehicle or equipment will be serviced on-site. Appropriately sized drip trays must always be used in emergency situations. Approved absorbent material must be kept on-site in sufficient quantities to deal with small spills. Absorbent material and contaminated soil should be disposed of at a registered hazardous waste site. No cement mixing is to occur directly on the ground and any cement or hydrocarbon spills should be cleared away immediately. The generation of dust during the construction phase is expected to be minimal. Stockpiles of fine construction

	materials should be positioned such that they are not exposed to wind erosion or drainage lines. Dust suppression should be implemented according to the prevailing site-specific conditions. Construction vehicles transporting construction materials must be suitably covered to prevent materials from being blown off. Vehicles and machinery will be kept in good working order to avoid excess emissions. All development activities must remain within the demarcated construction area. Chemical toilets should be provided for construction workers if the on-site ablution facilities are not adequate (1 toilet per 30 workers). Their use should be enforced. Chemical toilets will be serviced by an appropriate service provider, provided with toilet paper and cleaned regularly. Servicing will include emptying without spills and appropriate disposal by the service provider. It is essential to maintain an onsite nursery, and the search-and-rescue plants should be repurposed for the rehabilitation of the site following construction activities. These measures, grounded in specialist reports, ensure environmental integrity and compliance with NEMA principles during construction.
Cumulative impact post mitigation:	Potential contamination of stormwater run-off, soil, groundwater, and nuisance as a result of dust generation will be minimised by implementing mitigation measures. Moderate: Mitigation reduces impacts, but the larger footprint sustains some cumulative effects on regional water quality and soil stability. Negligible: Mitigated dust and emissions have minimal cumulative effects, aligning with low impacts from existing tourism activities (Visual Compliance Statement, Page 11).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate: Mitigation lowers risks, but increased soil disturbance and run-off potential maintain moderate significance, making this alternative less preferred.

Potential impact on geographical and physical aspects:	**100-Highwater Mark and Dune Stability**
Nature of impact:	Construction activities (e.g., clearing 1375 m², grading for road/boardwalk, foundation work) within or near the 100 m HWM increase dune destabilization risks by removing more vegetation (e.g., Acacia cyclops, native Goukamma Strandveld) and disturbing sandy, erodible soils (>750 mm deep, <15% clay). This heightens erosion and encroachment

	into the 100 m HWM buffer, critical for coastal protection (Preliminary Geotechnical and Geomatic Report, Pages 7–10, 36). Cyclic erosion (4–6 m retreat, 2005–2024) and weak zones (D7 fracture at 120 m) amplify risks, especially at PE (within 100 m HWM) or Lookout (steep slopes, 26–70°).
Extent and duration of impact:	Local, Short-Term to Medium-Term: Impacts are confined to the 5.1576 ha site and adjacent coastal zone, primarily during construction (6–12 months; Town Planning Report, Page 6). The larger 1375 m² footprint increases soil disturbance, with destabilization potentially persisting 2–5 years if erosion is triggered, particularly at steep slopes or weak zones.
Probability of occurrence:	High: Increased clearing (17% more than 1175 m²) on erodible soils near the 100 m HWM makes dune instability and HWM encroachment highly likely, especially during rainfall or wind events. Risks are elevated at PE or Lookout.
Degree to which the impact can be reversed:	Moderate: Dune stability is partially reversible through stabilization (e.g., geotextiles, replanting), but the larger footprint increases erosion risks, potentially causing semi-permanent sediment loss near the 100 m HWM (e.g., at PE). Recovery may take 2–5 years.
Degree to which the impact may cause irreplaceable loss of resources:	Moderate: Greater soil disturbance risks localized dune loss, impacting coastal protection. While rehabilitation is possible in the degraded CBA2 area, severe erosion near the 100 m HWM could be difficult to fully restore.
Cumulative impact prior to mitigation:	Moderate to High: The larger footprint exacerbates impacts, compounding existing coastal developments (e.g., Sedgefield dwellings) and cyclic erosion (4–6 m retreat). Future projects and a projected 30 m inland shift by 2100 increase regional risks.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High: Increased footprint (1375 m²) and high probability of erosion near the 100 m HWM elevate significance. Unmitigated impacts at PE or Lookout could severely compromise dune stability and coastal protection.
Degree to which the impact can be mitigated:	Moderate to High: Strategic site selection (e.g., BM, HW2), enhanced erosion controls, and vegetation management can reduce risks, but the larger footprint limits mitigation effectiveness compared to the preferred alternative
Proposed mitigation:	▪ Site Selection: Avoid D7 and Lookout; prioritize BM or HW2 (on/north of 100 m HWM, gentler slopes 0–21°) (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Enhanced Erosion Control: Use reinforced silt fences, geotextiles, and cover crops to counter increased disturbance (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Vegetation Management: Retain more vegetation (roots to 60 cm); salvage and replant natives per Alien Invasive

	Management Plan (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Foundation Design: Use ECSA-certified foundations with 2 m compacted zones to address greater soil disturbance (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Construction Practices: Minimize clearing to 1375 m², use raised boardwalks, schedule work in low-rainfall periods (Q3–Q4 2025; Town Planning Report, Page 6; Visual Compliance Statement, Page 3). ▪ Monitoring: Bi-weekly geotechnical inspections to detect instability or HWM encroachment (Preliminary Geotechnical and Geomatic Report, Page 38).
Cumulative impact post mitigation:	Moderate: Mitigation reduces impacts, but the larger footprint sustains some cumulative effects with existing and future developments. Enhanced stabilization is critical to offset risks.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate: Mitigation lowers risks, but the larger footprint and proximity to the 100 m HWM maintain moderate significance, making this alternative less preferred.

Potential impact on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Negative: Clearing 1375 m² removes more vegetation (*Acacia cyclops*, native Goukamma Strandveld), increasing habitat disruption in the degraded CBA2 area. This displaces fauna (e.g., small mammals, birds) and reduces biodiversity temporarily (Terrestrial Biodiversity Assessment). The Preliminary Geotechnical and Geomatic Report (Page 20) notes coastal forest (assumed Strandveld), with roots stabilizing dunes; increased clearing fragments habitats. No impact on CBA1 Milkwood Forest occurs.
Extent and duration of impact:	Local, Short-Term to Medium-Term: Impacts affect the 1375 m² footprint within the 5.1576 ha site, occurring during construction (6–12 months; Town Planning Report, Page 6). Recovery takes 1–3 years post-rehabilitation, with the larger footprint delaying fauna recolonization due to greater habitat fragmentation.
Probability of occurrence:	Definite: Clearing 1375 m² (17% more than 1175 m²) ensures vegetation loss and habitat disruption, though the CBA2's degraded state (due to *Acacia cyclops* invasion) limits ecological value.
Degree to which the impact can be reversed:	High: Habitat loss is reversible through replanting and restoration within 1–3 years. The larger footprint delays recovery slightly but does not affect rare species in the degraded CBA2 area.

Degree to which the impact may cause irreplaceable loss of resources:	With correct management in all probability, the degree to which the impact may cause irreplaceable loss of resources can be mitigated. Low: No rare or endangered species are impacted, and rehabilitation can restore habitats in the degraded CBA2 area. The larger footprint increases disturbance but does not result in irreplaceable loss.
Cumulative impact prior to mitigation:	Moderate to High: Increased habitat loss, combined with existing coastal developments (e.g., residence 250 m east; Visual Compliance Statement, Page 10) and potential future projects, further reduces biodiversity resilience in Sedgefield's coastal zone. Historical clearing and *Acacia cyclops* spread exacerbate this.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High: The larger footprint (1375 m^2) increases habitat fragmentation and fauna displacement, elevating significance despite the CBA2's degraded state.
Degree to which the impact can be mitigated:	Moderate to High: Targeted clearing, invasive species management, and enhanced replanting reduce impacts, but the larger footprint limits mitigation effectiveness compared to the preferred alternative.
Proposed mitigation:	• Targeted Clearing: Limit vegetation removal to 1375 m^2 in CBA2, avoiding CBA1 Milkwood Forest (Terrestrial Biodiversity Assessment; Town Planning Report, Page 16). • Invasive Species Management: Implement the Alien Invasive Management Plan to clear *Acacia cyclops* and prevent regrowth (Terrestrial Biodiversity Assessment). • Rehabilitation: Salvage and replant a higher volume of native plants (e.g., Strandveld species) post-construction to offset increased clearing (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Construction Practices: Use raised boardwalks to minimize soil/habitat disturbance; schedule clearing during low wildlife activity (Q3–Q4 2025; Town Planning Report, Page 6; Visual Compliance Statement, Page 3). • Fauna Protection: Conduct pre-construction fauna surveys to relocate small mammals and birds; install temporary barriers to limit wildlife access (Terrestrial Biodiversity Assessment). • Monitoring: Conduct monthly ecological inspections during construction to ensure compliance and early intervention (Terrestrial Biodiversity Assessment). • Removal of Alien Invasive Species during the construction phase. • An onsite nursery must be created and a search and rescue of all plants needs to be conducted prior to

	construction occurring on site. The plants rescued are to be reused in the rehabilitation of the site after construction. • Appointment of an Environmental Control Officer. • During construction: New roads need to be made using the same / similar materials and methods as the neighbouring road.
Cumulative impact post mitigation:	Moderate: Mitigation reduces impacts by restoring habitats, but the larger footprint sustains some cumulative effects with existing and future developments, limiting biodiversity recovery compared to the preferred alternative.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate: Mitigation restores habitats through replanting, but the increased disturbance from the larger footprint maintains moderate significance, making this alternative less preferred.

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	Job creation- Positive Impact. No negative impacts on the socioeconomic aspects are foreseen as the proposed construction will not negatively impact on any person's social rights. Employment opportunities (temporary) will be generated during the construction phase. The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.
Extent and duration of impact:	The surrounding neighbourhoods or towns during the construction phase. During the construction phase.
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Positive impacts (jobs, income) are temporary but can be sustained in the operational phase with local hiring for cottages (Town Planning Report, Page 7). No permanent socio-economic harm occurs.
Degree to which the impact may cause irreplaceable loss of resources:	None. No socio-economic resources are irreparably lost.
Cumulative impact prior to mitigation:	Employment opportunities for people from the local community.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High - Positive

Degree to which the impact can be mitigated:	Managing the number of previously disadvantaged/unemployed persons selected for this phase with the relevant skills.
Proposed mitigation:	The contractor should employ people from the local community where possible and ensure that skill transfer and training are provided where feasible. Local Hiring: Prioritize 70% of local workers for construction jobs (5–10 direct) to maximize economic benefits (Town Planning Report, Page 7).
Cumulative impact post mitigation:	Employment opportunities for people from the local community. Job creation and sustained beach access enhance Sedgefield's socio-economic resilience.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High–Positive: job creation delivers tangible benefits, ensuring a net positive socio-economic outcome (Town Planning Report, Page 7; Visual Compliance Statement, Page 11).

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Impacts associated with general building construction noise. The construction phase will result in a temporary increase in ambient noise levels from moving machinery, equipment and additional people on site. Construction activities (e.g., clearing, grading, foundation work, heavy machinery for road/boardwalk) will generate noise, potentially disturbing nearby residents (250 m east), tourists using Groenvlei Beach Road, and local wildlife (e.g. birds, small mammals) in the CBA2 area. Noise from equipment (e.g., bulldozers, drills) and vehicle movements may disrupt the tranquil coastal environment of Sedgefield.
Extent and duration of impact:	Local, Short-Term: Noise impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road users), lasting during construction (6–12 months; Town Planning Report, Page 6). Impacts occur primarily during daylight hours and cease post-construction (Visual Compliance Statement, Page 11). Wildlife disturbance is temporary, with species likely to return post-construction.
Probability of occurrence:	Definite: Noise from machinery and construction activities is inevitable during clearing, grading, and building within the 1375 m^2 footprint

Degree to which the impact can be reversed:	High: Noise impacts are fully reversible, as they cease immediately after construction (6–12 months). No long-term disruption to human or wildlife populations occurs, and the tranquil environment is restored post-construction.
Degree to which the impact may cause irreplaceable loss of resources:	None: Noise impacts are temporary and do not result in the loss of socio-economic or ecological resources. Residents' quality of life and wildlife behaviour return to baseline post-construction, with no permanent displacement.
Cumulative impact prior to mitigation:	Increased ambient noise levels due to vehicles, equipment and workers on site.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Definite but short-term and localized impacts, with moderate disturbance to residents and wildlife but no lasting harm. The site's distance from dense populations (250 m to the nearest residence) reduces severity.
Degree to which the impact can be mitigated:	High: Noise control measures, such as limiting construction hours, using low-noise equipment, and installing barriers, can significantly reduce impacts on residents, tourists, and wildlife.
Proposed mitigation:	• Construction work will take place during the daytime. • No construction activities must occur on Sundays or public holidays. • The equipment and machinery used must be regularly maintained to reduce the potential noise disturbance. • Construction Timing: Restrict construction to daylight hours (e.g., 7 AM–5 PM) to avoid nighttime disturbance (Visual Compliance Statement, Page 11). • Noise Control: Use low-noise machinery and mufflers; install temporary noise barriers (e.g., plywood screens) around high-noise activities like grading (Visual Compliance Statement, Page 11). • Wildlife Protection: Schedule noisy activities (e.g., clearing) during low wildlife activity periods (Q3–Q4 2025) and conduct pre-construction fauna surveys to minimize disturbance (Terrestrial Biodiversity Assessment). • Community Engagement: Notify residents (250 m east) and beach users in advance of noisy activities via community meetings by Q3 2025; establish a complaint hotline (Town Planning Report, Page 8). • Traffic Management: Limit heavy vehicle movements to off-peak hours to reduce noise on Groenvlei Beach Road (Town Planning Report, Page 10). • Monitoring: Conduct weekly noise level checks (e.g., <65 dB at site boundary) during construction to ensure

	compliance with local regulations (Town Planning Report, Page 6).
Cumulative impact post mitigation:	Negligible: Mitigated noise levels and restricted construction hours minimise contributions to regional disturbance, aligning with low noise impacts from existing tourism activities. Future projects must adopt similar measures to avoid cumulative effects.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation reduces noise impacts to negligible levels, ensuring minimal disturbance to residents, tourists, and wildlife, and maintaining Sedgefield's tranquil character.

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	Negative: Increased clearing of 1375 m² (17% more than 1175 m²) and intensified construction activities (e.g., grading, machinery, stockpiles) heighten visual disruption of Sedgefield's scenic coastal landscape, valued for its unspoilt aesthetic (Visual Compliance Statement, Pages 6, 10). The larger footprint reduces the site's high Visual Absorption Capacity (VAC) due to greater vegetation removal (*Acacia cyclops*, Goukamma Strandveld), increasing visibility for residents (250 m east) and tourists on Groenvlei Beach Road.
Extent and duration of impact:	Local, Short-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), lasting during construction (6–12 months; Town Planning Report, Page 6). The site remains invisible from N2, Groenvlei Beach, or Cola Beach, but increased clearing heightens local visual impact. Impacts cease post-construction with rehabilitation.
Probability of occurrence:	Definite: The larger footprint and intensified construction activities ensure greater visual disturbance, reducing the site's ability to absorb impacts visually.
Degree to which the impact can be reversed:	High: Aesthetic impacts are fully reversible post-construction through landscaping and replanting of native Goukamma Strandveld, restoring the site's visual integration within 6–12 months.
Degree to which the impact may cause irreplaceable loss of resources:	None: Temporary visual disruptions cause no permanent loss of scenic resources. The site's high VAC and post-construction landscaping ensure the coastal landscape's visual quality is restored.
Cumulative impact prior to mitigation:	Moderate: Increased visual disruption from the larger footprint adds to minor existing impacts from nearby

	developments (e.g., residence 250 m east; Visual Compliance Statement, Page 10) and tourism activities (e.g., Lake Pleasant Resort; Visual Compliance Statement, Page 6). Future coastal projects could exacerbate visual clutter if unregulated (Town Planning Report, Page 10).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate: The larger footprint (1375 m²) reduces the site's VAC, increasing visual impact for local viewers despite invisibility from key viewpoints (N2, beaches). The impact is short-term but more pronounced than the preferred alternative (Visual Compliance Statement, Pages 7, 10).
Degree to which the impact can be mitigated:	Moderate to High: Enhanced screening, debris control, and rapid rehabilitation can reduce aesthetic impacts, but the larger footprint limits mitigation effectiveness compared to the preferred alternative (Visual Compliance Statement, Page 11; Terrestrial Biodiversity Assessment).
Proposed mitigation:	The construction site should be fenced and screened off from the surrounding areas, including chemical toilets (if required). Good housekeeping must be implemented at all times and the site must be kept tidy and clean (no litter etc.). Indigenous vegetation must be used for landscaping. During the construction phase, the proposed development will be effectively screened from the N2 motorway using green shade cloth. • Site Management: Screen construction areas with temporary fencing or vegetation to reduce the visibility of equipment and stockpiles (Visual Compliance Statement, Page 11). • Site Management: Use enhanced screening with denser temporary fencing or additional vegetation to reduce the visibility of construction activities and stockpiles (Visual Compliance Statement, Page 11). • Debris Control: Regularly clear construction debris and cover stockpiles with tarps to maintain a tidy site appearance (Visual Compliance Statement, Page 11). • Construction Timing: Schedule high-impact activities (e.g., clearing, grading) during low tourist seasons (Q3–Q4 2025) to minimize visual exposure (Town Planning Report, Page 6). • Rehabilitation: Replant native Goukamma Strandveld immediately post-construction per the Alien Invasive Management Plan to restore visual continuity (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Community Engagement: Inform residents (250 m east) and beach users of construction timelines via Q3 2025

	community meetings to manage expectations (Town Planning Report, Page 8). • Monitoring: Conduct weekly visual inspections during construction to ensure compliance with aesthetic standards (Visual Compliance Statement, Page 11). Construction Management for Visual Impact Reduction • Dust suppression techniques (e.g., water spraying and covered stockpiles) should be enforced to minimize airborne dust that could degrade visual quality. • Limit construction activities to daylight hours to reduce noise and light disturbances during sensitive nighttime periods. • Efficient waste management practices should be applied, ensuring prompt removal of debris and temporary structures post-construction. Lighting Design to Reduce Light Pollution • Install low-intensity, downward-facing lights with motion sensors to minimize unnecessary nighttime illumination. • Use warm-coloured lighting to reduce glare and maintain the natural ambience of the area.
Cumulative impact post mitigation:	Low: Mitigated aesthetic impacts, combined with rapid landscaping, minimize contributions to regional visual degradation. Future projects must adopt similar measures to maintain Sedgefield's scenic quality. The use of the land's inherent Visual Absorption Capacity (VAC) enhances the project's ability to minimise visual impacts substantially. The visual impact of the project is minimal, given its scope and nature, and must be continually managed through best practice methods throughout the project's lifecycle.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Enhanced mitigation restores the site's visual integration, reducing aesthetic impacts to negligible levels, but the increased disturbance from the larger footprint makes this alternative less preferred (Visual Compliance Statement, Pages 7, 11; Terrestrial Biodiversity Assessment).

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	Heritage resources may be encountered during excavation activities on-site. A NID will be submitted to Heritage Western Cape. The DFFE Screening Tool indicated the Archaeological and Cultural Heritage Sensitivity as Low.

Extent and duration of impact:	Only during the construction phase.
Probability of occurrence:	Improbable
Degree to which the impact can be reversed:	Irreversible, should culture or historical resources be encountered, but this is not expected.
Degree to which the impact may cause irreplaceable loss of resources:	Full loss of irreplaceable resources, should cultural or historical resources be encountered on-site, but this is not expected.
Cumulative impact prior to mitigation:	Potential loss of cultural or historical resources, should it be encountered during construction activities. However, this is not expected.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low, negative
Degree to which the impact can be mitigated:	It is not expected that cultural or historical resources will be encountered as the site. The impact cannot be avoided during the construction phase as excavation activities are required for the development.
Proposed mitigation:	There are no cultural or historical features on-site. However, the provisions of the National Heritage Resources Act will apply. Environmental awareness training should be presented to all employees at the site. Such training should include the identification of potential heritage resources and how to react if the presence of heritage resources is suspected. If any sign of a heritage or cultural site is unearthed during excavations, then all activities must cease until a heritage specialist has been consulted and had the opportunity to investigate the findings. In case of the unexpected uncovering of fossil bones in the surficial coversands and soil, or buried archaeological material, or unmarked graves, it is recommended that a protocol for finds of potential fossil material (and buried artefacts), the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the Construction Phase of the project. Adjustments to the development plan are not expected to change this recommendation"
Cumulative impact post mitigation:	Potential loss of cultural or historical resources should they be encountered during construction activities, but this is not expected. Because there are no significant heritage resources associated with the property, it does not meaningfully contribute to the already altered cultural landscape of the area. For the same reason, there will be negligible to no

	cumulative impact on the heritage value of the area. The positive socio-economic impact, including a few short-, medium- and long-term jobs outweigh the negligible to zero negative impacts this project may have on heritage resources.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low

Potential impact on biological aspects:	**Safety on site**
Nature of impact:	Occupational exposure, fires, explosion, health. Construction activities (e.g., clearing, grading, foundation work, heavy machinery use for road/boardwalk) pose safety risks to workers, including falls, equipment accidents, and exposure to hazardous materials (e.g., fuel spills). The site's erodible soils, steep slopes (26–70° at Lookout), and weak zones (D7 fracture) increase risks of slips or collapses. Unauthorised public access (e.g., via Groenvlei Beach Road) could also endanger visitors.
Extent and duration of impact:	Local, Short-Term: Safety risks are confined to the 5.1576 ha site and immediate surroundings (e.g., Groenvlei Beach Road), lasting during construction (6–12 months). Risks are highest during active work hours and cease post-construction, except for minor residual risks during site stabilisation.
Probability of occurrence:	High: Safety incidents are likely due to the inherent hazards of construction (e.g., machinery, uneven terrain), especially given the site's geotechnical challenges (erodible soils, steep slopes). Public access risks are probable without controls.
Degree to which the impact can be reversed:	Moderate: Minor injuries (e.g., cuts, bruises) are fully reversible with medical treatment, and site stabilization reverses geotechnical risks post-construction. Severe injuries or fatalities, though unlikely with mitigation, are irreversible, lowering overall reversibility.
Degree to which the impact may cause irreplaceable loss of resources:	Low to Moderate: Most safety incidents (e.g., minor injuries) do not cause irreplaceable loss, but severe incidents (e.g., fatalities) could result in irreplaceable human loss. Geotechnical risks, if unmitigated, could damage equipment, but no ecological or cultural resources are at stake
Cumulative impact prior to mitigation:	Moderate: Safety risks from this development, combined with other construction projects in Sedgefield (e.g., future

	coastal developments), could strain local emergency services and increase regional incident rates if safety standards are not enforced. Existing tourism activities (e.g., Lake Pleasant Resort) contribute minimal safety risks.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium: High probability and potential for serious incidents (e.g., falls, collapses) due to site conditions (steep slopes, erodible soils) elevate significance, though risks are localized and short-term.
Degree to which the impact can be mitigated:	High: Robust safety protocols, training, site stabilisation, and access controls can significantly reduce risks to workers and the public, ensuring compliance with occupational health and safety regulations.
Proposed mitigation:	Adequate measures must be in place to ensure the safety of staff on-site, such as proper training of operators, first aid treatment, medical assistance, emergency treatment, prevention of inhalation of dust, protective clothing, footwear and gloves. Manuals and training regarding the correct handling of materials and operation of equipment should be in place and updates as new or updated material safety data sheets become available; and monitoring should be carried out on a regular basis, including accident reports. All employees are to be managed in strict accordance with the OH&S Act. Sufficient water must be available for firefighting purposes. All personnel must be trained in responsible fire protection measures. Regular inspections should be carried out to inspect and test fire-fighting equipment and pollution control measures. Relevant SANS Standards shall be implemented at the facility. • Safety Protocols: Implement a Health and Safety Plan per the Occupational Health and Safety Act (OHSA), including risk assessments, personal protective equipment (PPE), and first-aid stations. • Worker Training: Provide regular safety training for all workers (e.g., machinery operation, fall prevention) and appoint a qualified safety officer. • Site Stabilization: Use ECSA-certified foundations with 1.5 m compacted zones and install temporary supports (e.g., geotextiles) at steep slopes (Lookout) and weak zones (D7). • Access Control: Erect fencing and signage to prevent unauthorized public access via Groenvlei Beach Road; monitor entry points during construction.

	• Hazard Management: Store hazardous materials (e.g., fuel) in bunded areas with spill kits to prevent worker exposure (Terrestrial Biodiversity Assessment). • Monitoring: Conduct daily safety inspections and weekly geotechnical checks to detect unstable areas, ensuring compliance with OHSA.
Cumulative impact post mitigation:	Low: Mitigated safety risks minimize contributions to regional incident rates, aligning with low safety impacts from existing tourism activities. Future projects must enforce similar OHSA-compliant measures to avoid cumulative strain on emergency services Workers are aware of safety risks and consequences and relevant procedures. Mitigatory measures will reduce the chance of an incident occurring.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Mitigation reduces safety risks to negligible levels, ensuring worker and public safety through robust protocols, training, and site controls, compliant with OHSA and NEMA.

Potential impact on biological aspects:	**Waste**
Nature of impact:	Waste generated through construction activities (general and hazardous) that is not correctly managed may result in pollution of water, air and soil resources.
Extent and duration of impact:	Neighbouring properties during the construction phase
Probability of occurrence:	Probable
Degree to which the impact can be reversed:	Reversible
Degree to which the impact may cause irreplaceable loss of resources:	No irreplaceable loss.
Cumulative impact prior to mitigation:	Pollution from waste generation (general and hazardous waste) through construction activities.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be mitigated:	The impacts can be managed by implementing mitigatory measures.
Proposed mitigation:	Appropriate containers for different types of waste should be provided throughout the site. The containers must have sufficient capacity and be removed frequently. Environmental awareness training should include a section

	on the impacts of waste generation and improper waste management. Ensure that rubble and construction waste is sorted on site and that recyclable material is separated from disposable waste. The contractor should keep safe disposal certificates for record purposes.
Cumulative impact post mitigation:	Little / no potential soil, water or air pollution
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Low

(c) **Impacts that may result from the operational phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase.**

Operational Phase

Potential impacts on geographical and physical aspects:	**Surface water run-off/groundwater/soil, air quality**
Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, landscaping, wastewater management) may increase surface water run-off due to compacted soils and impermeable surfaces (e.g., parking areas) within the 1375 m² footprint. Potential spills (e.g., cleaning chemicals, fuel from vehicles) risk contaminating shallow groundwater (<2 m depth at HW2) and erodible soils (>750 mm deep, <15% clay). Inadequate stormwater management could lead to localized erosion, particularly near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Pages 7–10, 35–38; Town Planning Report, Page 10). Increased impervious surfaces (roof, paving) lead to greater surface water run-off, reduced infiltration, potential erosion on slopes, and altered shallow groundwater patterns. Soil compaction from foot and vehicle traffic may reduce biological activity and increase runoff velocity.
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and adjacent areas (e.g., Groenvlei Lake), persisting throughout the operational phase (decades). Run-off and contamination risks are ongoing but manageable with maintenance (Preliminary Geotechnical and Geomatic Report, Page 36; Town Planning Report, Page 6).

	Local (on-site and immediately downslope); Long-term – especially if hydrological pathways or soils are degraded.
Probability of occurrence:	High: Larger footprint increases hydrological disruption likelihood. Run-off and contamination are likely if stormwater and waste systems are poorly maintained, especially during heavy rainfall. The rehabilitated site (post-construction revegetation) reduces risks compared to the construction phase (Preliminary Geotechnical and Geomatic Report, Pages 7, 38; Terrestrial Biodiversity Assessment).
Degree to which the impact can be reversed:	Moderate: Restoration is possible through soil rehabilitation and stormwater management but can be resource intensive. Run-off and soil erosion are reversible through improved stormwater management and revegetation within 1–2 years. Minor groundwater contamination (e.g., small spills) is treatable, but severe contamination could be partially irreversible if it affects deeper aquifers (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).
Degree to which the impact may cause irreplaceable loss of resources:	Moderate: Potential for irreversible loss of native soil structure and small-scale groundwater-dependent ecosystems. Soil and groundwater resources in the degraded CBA2 area are recoverable with proper management. Severe contamination or erosion near the 100 m HWM could cause localized ecosystem impacts, but these are unlikely with mitigation (Preliminary Geotechnical and Geomatic Report, Page 36; Terrestrial Biodiversity Assessment).
Cumulative impact prior to mitigation:	Medium-High: Larger developments across dune systems increase sedimentation and habitat loss. Ongoing run-off and potential contamination, combined with existing coastal developments (e.g., Sedgefield dwellings) and cyclic erosion (4–6 m retreat, 2005–2024), could increase sedimentation and pollution risks to Groenvlei Lake and regional groundwater (Preliminary Geotechnical and Geomatic Report, Pages 27, 38; Town Planning Report, Page 10).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High: Due to sensitive terrain, sandy soils, and limited buffering capacity. Moderate probability and long-term impacts from operational activities elevate significance, particularly if stormwater or waste systems are inadequate near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Pages 35–38).
Degree to which the impact can be mitigated:	Moderate to High: With engineered drainage, runoff reduction strategies, and revegetation. Effective stormwater systems, spill prevention, and vegetation maintenance can significantly reduce run-off, contamination, and erosion risks

	(Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Proposed mitigation:	▪ Implement permeable paving or gravel instead of concrete. ▪ Install swales or infiltration trenches along slopes. ▪ Restore natural vegetation buffers along drainage lines. ▪ Avoid channelling runoff near dune edges or exposed soils. ▪ Restrict vehicle movement to designated gravel roads. ▪ Stormwater Management: Install and maintain permeable surfaces (e.g., gravel) and detention basins to control run-off; direct flows away from the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Spill Prevention: Use designated areas for vehicle maintenance with spill kits; store chemicals in bunded containers (Terrestrial Biodiversity Assessment). ▪ Vegetation Maintenance: Sustain native Goukamma Strandveld to stabilize soils and reduce run-off per Alien Invasive Management Plan (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Wastewater Systems: Install compliant septic or conservancy tanks with regular servicing to prevent groundwater contamination (Town Planning Report, Page 6). ▪ Operational Practices: Limit vehicle use and schedule landscaping during low-rainfall periods (e.g., Q3–Q4 annually; Town Planning Report, Page 6). ▪ Monitoring: Conduct quarterly soil and water quality checks to detect erosion or contamination early (Preliminary Geotechnical and Geomatic Report, Page 38).
Cumulative impact post mitigation:	Low to Medium: Effectiveness depends on long-term maintenance. Mitigated run-off and contamination risks minimize contributions to regional sedimentation and pollution. Future developments must adopt similar measures (Preliminary Geotechnical and Geomatic Report, Page 38; Town Planning Report, Page 10).
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium

Potential impact on geographical and physical aspects:	**100-Highwater Mark and Dune Stability**

Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, pedestrian traffic on boardwalks, landscaping maintenance) within the 1375 m² footprint may cause minor soil disturbance and vegetation stress, potentially destabilizing dunes and risking encroachment into the 100 m HWM buffer, critical for coastal protection. Poor stormwater management could exacerbate run-off, leading to erosion of erodible soils (>750 mm deep, <15% clay), particularly at PE (within 100 m HWM) or Lookout (steep slopes, 26–70°). Cyclic dune erosion (4–6 m retreat, 2005–2024) and weak zones (D7 fracture at 120 m) increase vulnerability (Preliminary Geotechnical and Geomatic Report, Pages 7–10, 27, 35–38; Terrestrial Biodiversity Assessment). Potential encroachment into the legislated 100m buffer zone from the high-water mark of the Indian Ocean. Larger structure and associated infrastructure (e.g., boardwalks, roads) may disturb or destabilise sensitive coastal dune systems that act as natural erosion and climate buffers
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and adjacent coastal zone, persisting throughout the operational phase (decades). Rehabilitated vegetation (e.g., Goukamma Strandveld) and raised boardwalks reduce impacts, but ongoing activities pose low-level risks (Preliminary Geotechnical and Geomatic Report, Page 36; Town Planning Report, Page 10). Local (site-specific but critical); Long-term to permanent if erosion processes are triggered or dune vegetation is degraded.
Probability of occurrence:	High: Increased development footprint raises the likelihood of infringing buffer and disturbing dune integrity through vegetation clearing or altered drainage.
Degree to which the impact can be reversed:	Low: Once destabilised, dune systems are difficult and expensive to rehabilitate; recovery may take decades and depends on specific plant community restoration.
Degree to which the impact may cause irreplaceable loss of resources:	High: Coastal dunes are critical buffers against sea-level rise, wind erosion, and protect inland biodiversity; loss may be ecologically and geologically irreversible
Cumulative impact prior to mitigation:	High: dune systems in the region are vulnerable; cumulative encroachment leads to systemic erosion and biodiversity degradation.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High: Especially if buildings or services are within the 100m HWM setback or if sensitive dune vegetation is disturbed.
Degree to which the impact can be mitigated:	Moderate: Mitigation is possible but must be proactively integrated during siting and detailed design.
Proposed mitigation:	▪ Strict enforcement of the 100m HWM setback for all permanent structures and excavation.

	▪ Use raised, removable boardwalks instead of footpaths across dunes. ▪ Preserve primary dune vegetation; revegetate any disturbed areas with native pioneer species. ▪ Avoid channelised drainage that could destabilise dune slopes. ▪ Include erosion control measures (e.g., coir logs, root mats). ▪ Site Management: Restrict vehicle and pedestrian access to designated gravel roads and raised boardwalks to minimize soil disturbance (Preliminary Geotechnical and Geomatic Report, Page 38; Town Planning Report, Page 10). ▪ Stormwater Management: Maintain permeable surfaces and detention basins to control run-off and prevent erosion near the 100 m HWM (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Vegetation Maintenance: Sustain native Goukamma Strandveld (roots to 60 cm) per Alien Invasive Management Plan to enhance dune stability; conduct annual replanting as needed (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). ▪ Erosion Control: Install and maintain geotextiles or cover crops in high-risk areas (e.g., PE, Lookout) if erosion is detected (Preliminary Geotechnical and Geomatic Report, Page 38). ▪ Operational Practices: Schedule landscaping during low-rainfall periods (e.g., Q3–Q4 annually) to reduce run-off risks (Town Planning Report, Page 6). ▪ Monitoring: Conduct quarterly geotechnical inspections to detect instability or HWM encroachment early; monitor vegetation health annually (Preliminary Geotechnical and Geomatic Report, Page 38; Terrestrial Biodiversity Assessment).
Cumulative impact post mitigation:	Medium: Provided no encroachment occurs and restoration actions are actively implemented.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High: Sensitive natural systems remain vulnerable even with strong mitigation, especially under changing climate conditions.

Potential impact on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Negative: Operational activities (e.g., pedestrian traffic on boardwalks, landscaping maintenance, vehicle use on gravel roads) within the 1135 m² footprint may cause minor vegetation disturbance and habitat stress in the degraded

	CBA2 area, potentially affecting fauna (e.g., small mammals, birds). A larger development footprint may reduce connectivity and displace native flora/fauna, including species with small habitat ranges. Improper management of invasive species (*Acacia cyclops*) or landscaping could reduce native Goukamma Strandveld cover, impacting biodiversity. No impact on CBA1 Milkwood Forest occurs (Terrestrial Biodiversity Assessment; Preliminary Geotechnical and Geomatic Report, Page 20).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 1375 m² footprint within the 5.1576 ha site, persisting throughout the operational phase (decades). Rehabilitated vegetation (post-construction) minimizes impacts, but ongoing disturbance could delay habitat recovery (Terrestrial Biodiversity Assessment; Town Planning Report, Page 10).
Probability of occurrence:	Definite: Clearing 1375 m² will inevitably remove vegetation and disrupt habitats, though the degraded CBA2 area has lower biodiversity value due to *Acacia cyclops* invasion. High: A 400 m² structure and associated infrastructure (roads, services) will almost certainly lead to greater vegetation removal and habitat disruption.
Degree to which the impact can be reversed:	Low to Moderate: Once disturbed, fynbos habitats are slow to recover and highly sensitive to soil disturbance and edge effects.
Degree to which the impact may cause irreplaceable loss of resources:	Moderate to High: Potential loss of endemic or regionally significant plant species and critical cover for small fauna. Fynbos ecosystems are biodiversity hotspots with limited resilience to disturbance.
Cumulative impact prior to mitigation:	High: The site lies in an unspoilt natural area; additional habitat conversion reduces ecological integrity over time.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High: Compared to the preferred alternative, the expanded footprint has higher biodiversity consequences.
Degree to which the impact can be mitigated:	Moderate: Mitigation through selective clearing, rehabilitation, and planting is possible but limited in scope.
Proposed mitigation:	• Site structures to avoid highest-value vegetation zones. • Minimise clearing during construction; retain existing tree canopies. • Establish a native plant nursery for post-construction replanting. • Create biodiversity corridors between vegetated patches. • Monitor and manage invasive species.

	• Vegetation Management: Implement and sustain the Alien Invasive Management Plan to control *Acacia cyclops* and promote native Goukamma Strandveld growth (Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 11). • Access Control: Restrict pedestrian and vehicle access to designated boardwalks and gravel roads to minimize habitat disturbance (Terrestrial Biodiversity Assessment; Town Planning Report, Page 10). • Landscaping Practices: Use native species for landscaping; schedule maintenance during low wildlife activity (e.g., Q3–Q4 annually) to avoid fauna disruption (Terrestrial Biodiversity Assessment; Town Planning Report, Page 6). • Fauna Protection: Install signage to deter wildlife disturbance; conduct annual fauna surveys to monitor populations (Terrestrial Biodiversity Assessment). - Community Engagement: Educate residents and tourists on biodiversity protection via annual updates (Town Planning Report, Page 8). • Monitoring: Conduct quarterly ecological inspections to assess vegetation health and biodiversity recovery (Terrestrial Biodiversity Assessment).
Cumulative impact post mitigation:	Medium: Recovery is possible but depends on long-term active management.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High: Impact remains notable due to ecological sensitivity, but can be reduced through strong stewardship

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	Positive and Negative: Positive: The development supports local tourism through three 65 m² cottages, generating revenue and creating permanent jobs (e.g., 3–5 positions for staff quarters, maintenance, hospitality). It aligns with Sedgefield's tourism-driven economy (e.g., proximity to Groenvlei Beach Road, Lake Pleasant Resort).
Extent and duration of impact:	Local to Regional, Long-Term: Positive impacts (e.g., jobs, tourism revenue) benefit Sedgefield and the Garden Route region, persisting throughout the operational phase (decades).
Probability of occurrence:	High: Positive impacts (e.g., job creation, tourism revenue) are highly likely due to the development's design for tourist

	accommodation and alignment with Sedgefield's tourism market.
Degree to which the impact can be reversed:	High: Positive impacts (e.g., jobs) are sustained unless the development ceases operation, which is unlikely.
Degree to which the impact may cause irreplaceable loss of resources:	None. No socio-economic resources are irreparably lost.
Cumulative impact prior to mitigation:	Moderate: Positive impacts add to Sedgefield's tourism and employment base, complementing existing developments (e.g., Lake Pleasant Resort; Visual Compliance Statement, Page 6). Employment opportunities for people from the local community.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Moderate (Positive): High-probability positive impacts (e.g., jobs, tourism) have moderate significance due to economic benefits.
Degree to which the impact can be mitigated:	Managing the number of previously disadvantaged/unemployed persons selected for this phase with the relevant skills.
Proposed mitigation:	Employ people from the local community where possible and ensure that skill transfer and training are provided where feasible. Operational Restrictions: Schedule maintenance (e.g., landscaping) during low-tourist seasons (Q3–Q4 annually) and restrict noisy activities to daytime hours (Town Planning Report, Page 6; Visual Compliance Statement, Page 11).
Cumulative impact post mitigation:	Employment opportunities for people from the local community. Job creation and sustained beach access enhance Sedgefield's socio-economic resilience.Mitigation enhances positive impacts to high significance by maximizing economic benefits.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	High–Positive: job creation delivers tangible benefits, ensuring a net positive socio-economic outcome (Town Planning Report, Page 7; Visual Compliance Statement, Page 11).

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Negative: Operational activities (e.g., vehicle use on gravel roads, tourist activities in cottages, landscaping maintenance) within the 1375 m² footprint generate low-

	level noise (e.g., vehicle engines, lawnmowers, human activity), potentially disturbing residents (250 m east) and tourists on Groenvlei Beach Road. Noise may also affect fauna (e.g., birds, small mammals) in the degraded CBA2 area, though impacts are minimal compared to construction. The site's isolation and high Visual Absorption Capacity (VAC) reduce noise propagation (Town Planning Report, Pages 8, 10; Terrestrial Biodiversity Assessment; Visual Compliance Statement, Page 7).
Extent and duration of impact:	Local, Long-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), persisting throughout the operational phase (decades). Noise is intermittent and low-intensity, occurring during daytime activities (Town Planning Report, Page 10; Visual Compliance Statement, Page 10).
Probability of occurrence:	Low to Moderate: Noise from vehicles, tourists, and maintenance is likely but reduced by low traffic volumes (e.g., residents, occasional tourists) and the site's isolation (250 m to nearest residence). Impacts on fauna are less likely due to the CBA2's degraded state (Town Planning Report, Page 10; Terrestrial Biodiversity Assessment).
Degree to which the impact can be reversed:	High: Noise impacts are fully reversible, as disturbances cease immediately upon stopping activities. Fauna and residents adapt quickly with proper management, with no lasting effects (Terrestrial Biodiversity Assessment; Town Planning Report, Page 8).
Degree to which the impact may cause irreplaceable loss of resources:	None: Temporary noise disturbances cause no permanent loss of socio-economic or ecological resources. Residents and fauna experience no long-term harm (Town Planning Report, Page 10; Terrestrial Biodiversity Assessment).
Cumulative impact prior to mitigation:	Low: Minor noise from operational activities adds to existing low-level noise from tourism (e.g., traffic near Lake Pleasant Resort) and potential future coastal developments, but impacts remain localized and minimal due to the site's isolation (Town Planning Report, Page 10; Visual Compliance Statement, Page 6).
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Low: Low to moderate probability and low-intensity noise result.
Degree to which the impact can be mitigated:	High: Noise control measures, activity scheduling, and community engagement can effectively minimize disturbances for residents and fauna (Town Planning Report, Page 8; Terrestrial Biodiversity Assessment).

Proposed mitigation:	No mitigation is required for the one dwelling unit.
Cumulative impact post mitigation:	No cumulative impacts are anticipated following the implementation of mitigation measures.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Very Low: Mitigation reduces noise impacts to negligible levels, ensuring minimal disturbance to residents, tourists, and wildlife, and maintaining Sedgefield's tranquil character.

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	Long-term visual intrusion into a coastal fynbos landscape due to the operational presence of a built structure. Potential change in the area's visual character and aesthetic quality. Visual intrusion into a pristine natural landscape. A 400 m² structure increases massing and breaks the natural character more substantially than the preferred alternative. Aesthetic discord may arise from bulk, form, or dominance on the dune crest (Visual Compliance Statement).
Extent and duration of impact:	Local, Short-Term: Impacts are confined to the 5.1576 ha site and immediate surroundings (e.g., 250 m east residence, Groenvlei Beach Road), The site is not visible from N2, Groenvlei Beach, or Cola Beach, limiting the affected audience (Visual Compliance Statement, Page 10). Localised – confined to the development footprint and immediate surroundings; Long-term – for the lifespan of the structure.
Probability of occurrence:	High: Larger structure and scale make aesthetic impacts more likely, even with dense vegetation and elevation shielding.
Degree to which the impact can be reversed:	Low to Moderate – Although theoretically removable, structural intervention (e.g., site leveling, vegetation clearance) causes lasting changes. Building removal or major alteration would be needed to reverse form and visual scale impacts.
Degree to which the impact may cause irreplaceable loss of resources:	Moderate: While not affecting specific protected views, the increased scale could permanently alter visual harmony in an unspoilt setting.
Cumulative impact prior to mitigation:	High: One larger building contributes more significantly to the cumulative transformation of a natural visual landscape than dispersed low-impact forms.

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	High: In a high-sensitivity visual landscape with low current development footprint, the increased structure scale raises concern.
Degree to which the impact can be mitigated:	Moderate: Design can reduce visual prominence, but scale limits integration potential compared to smaller, fragmented buildings.
Proposed mitigation:	• Use of muted, natural building materials (timber, stone, matte finishes). • Vegetation buffers maintained and enhanced around the building. • Avoid overly rectilinear or monolithic massing; introduce architectural articulation. • Screen lighting; limit night-time illumination spill.
Cumulative impact post mitigation:	Medium: Mitigation reduces visibility and intrusion, but the massing remains significantly larger than the surrounding natural forms.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Medium-High: Even with a sensitive design, the increased bulk introduces aesthetic dissonance in a visually sensitive area.

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	It is not expected that any cultural-historical aspects will be impacted as a result of operational activities.
Extent and duration of impact:	N/A
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

Potential impact on biological aspects:	**Safety on site**
Nature of impact:	Occupational exposure, fires, explosion, health.
Extent and duration of impact:	The owner of the property will be residing in the main dwelling.
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

Potential impact on biological aspects:	**Waste**
Nature of impact:	Normal household waste will be generated.
Extent and duration of impact:	Site only.
Probability of occurrence:	N/A
Degree to which the impact can be reversed:	N/A
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Cumulative impact prior to mitigation:	N/A

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	N/A
Cumulative impact post mitigation:	N/A
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	N/A

No-Go Alternative Impact Summary

The No-Go Option involves maintaining the site in its current undeveloped condition, prohibiting any construction or formal development without a rezoning process or the implementation of an alternative land use. In this scenario, the property would remain vacant, with no residential dwelling established.

While this option would preserve the existing natural state of the site, it does not align with the landowner's right to develop the property in accordance with existing land use rights. The property is privately owned, and the applicant intends to exercise their right to construct a residential dwelling, a right that is consistent with broader planning frameworks and historical use allowances in the area.

Moreover, the no-go option would result in a missed opportunity for job creation and economic growth. The proposed development will provide employment opportunities during both the construction and operational phases, supporting local businesses, contractors, and service providers or the potential for low-impact tourism in line with conservation objectives (in cases where a small tourism component is proposed). The current proposal includes a land use change to Open Space III for nature conservation purposes on the majority of the site (over 99%), allowing for the protection of the critical biodiversity area and the coastal forest, while accommodating a small, low-impact residential footprint.

To reserve the land for potential agricultural purposes, a closer examination reveals that the agricultural viability of the property is limited and does not present a meaningful opportunity for productive use. The site is relatively small in scale (approximately 5.21 ha) and fragmented by ecological sensitivities, including a Critical Biodiversity Area (CBA) and steep, erosion-prone slopes. These constraints significantly reduce the portion of the land that could theoretically be utilised for any viable agricultural activity. The property also lacks key agricultural infrastructure such as irrigation systems, water sources suitable for farming, and access roads that can accommodate agricultural vehicles or operations.

The site is located within a coastal, dune-rich environment and is characterised by sandy soils with high organic content in certain areas. These soil conditions are highly erodible, poorly structured for agricultural productivity, and not suited for cultivation or intensive farming. Furthermore, the natural vegetation on the site is dominated by coastal forest and Fynbos, both of which are indicators of low agricultural potential and are typically protected under environmental legislation due to their biodiversity value.

To retain the property under its current agricultural zoning (Agriculture Zone I) without allowing for rezoning or appropriate alternative land use would not promote agricultural production, rural economic development, or sustainable land management. On the contrary, it would prevent a more suitable and environmentally responsible land use from being realised, one that aligns with the site's actual capacity, conservation significance, and broader spatial planning goals.

Therefore, while the No-Go Option maintains the status quo, it may not be the most desirable outcome in terms of integrated environmental management, land use efficiency, or the realisation of private landowner rights. The proposed development, through careful planning, environmental sensitivity, and legal compliance, offers a more balanced approach that harmonises development needs with conservation priorities.

As per the Agricultural Compliance Statement, the no-go alternative considers impacts that will occur to the agricultural environment in the absence of the proposed development. There are no agricultural impacts of the no-go alternative, but this is not significantly different from the negligible impact of the development, and so from an agricultural impact perspective, there is no preferred alternative between the no-go and the development.

Environmental Impacts:

- Stormwater runoff and erosion as a result of the construction of the internal road
- Impacts on Ecosystems – biodiversity
- Impacts on the Critical Biodiversity Area

Impacts that may result from the planning, design and construction phase (briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase.

Potential impacts on geographical and physical aspects:	**Surface water run-off/groundwater/soil, air quality**
Nature of impact:	Construction activities: Compaction of soil for the primary residence (200 m²), three self-catering tourist accommodation chalets (65 m² each), staff housing (50 m²), an equipment shed (80 m²), a parking area, and a gravel access road (<3 m wide, 200 m long) within a 1175 m² (0.1175 ha) development footprint.
Extent and duration of impact:	No disturbances of the soil on the site.
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option

Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impacts on geographical and physical aspects:	**100-Highwater Mark and Dune Stability**
Nature of impact:	Construction activities (grading for road/boardwalk, foundation work) within or near the 100 m HWM may destabilise coastal dunes by removing vegetation.
Extent and duration of impact:	No disturbances of the soil on the site.
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impacts on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Vegetation disturbance and habitat stress in the degraded CBA2 area, potentially affecting fauna (e.g., small mammals, birds).
Extent and duration of impact:	No loss of vegetation as a result of construction activities.
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	No job creation- negative Impact.
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option

Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential noise impacts:	**Noise disturbance**
Nature of impact:	No additional ambient noise will be created.
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	No development will be undertaken,
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option

Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	It is not expected that any cultural-historical aspects will be impacted as a result of no construction activities being undertaken.
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impact on biological aspects:	**Safety on site**

Nature of impact:	No development will be undertaken.
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Potential impact on biological aspects:	**Waste**
Nature of impact:	No waste will be generated.
Extent and duration of impact:	Not applicable to the No-Go option
Probability of occurrence:	Not applicable to the No-Go option
Degree to which the impact can be reversed:	Not applicable to the No-Go option
Degree to which the impact may cause irreplaceable loss of resources:	Not applicable to the No-Go option
Cumulative impact prior to mitigation:	Not applicable to the No-Go option
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option
Degree to which the impact can be mitigated:	Not applicable to the No-Go option
Proposed mitigation:	Not applicable to the No-Go option
Cumulative impact post mitigation:	Not applicable to the No-Go option

Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High)	Not applicable to the No-Go option

Section I

5. Conclusion and Recommendations

To be completed in the Final BAR

6. Recommended Mitigation and Conditions of Authorisation

To be completed in the Final BAR