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FINAL BASIC ASSESSMENT REPORT

FOR

The Proposed Development of a Primary Dwelling, 3 Cottages and an 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:	14/12/16/3/3/1/3235
AUTHOR:	BIANCA GILFILLAN (EAPASA REG 2023/7929)
DATE:	APRIL 2026

FINAL BASIC ASSESSMENT REPORT:
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DFFE REF: 14/12/16/3/3/1/3235

"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.

Contents

Introduction

The property is located east of Cola Beach within the Groenvlei rural area of Sedgefield, Western Cape, and measures approximately 5.1576 hectares. The southern boundary of the property adjoins Coastal Public Property, while the site borders Portion 78 of Farm Ruygte Valley No. 205, which is zoned Agriculture Zone I and managed as a private nature reserve adjacent to the Lake Pleasant Private Nature Reserve.

According to the Western Cape Biodiversity Spatial Plan (2025), the northern portion of the site is classified as Critical Biodiversity Area 1 (CBA 1), while the southern portion is mapped as a degraded Critical Biodiversity Area 2 (CBA 2), largely as a result of historical disturbance and invasion by Acacia cyclops.

The site falls within the Knysna Municipal Area and is primarily accessed via Groenvlei Beach Road, a gravel road providing access toward the beach at the western boundary of the Goukamma Nature Reserve. A Public Servitude Road (Bushy Way, SG Diagram 6532/61) runs along the northern boundary of the property and connects to the N2 via the Groenvlei Divisional Road (DR 1594).

It is acknowledged that the servitude route is currently overgrown and does not constitute an established vehicular access road in its current state. Access to the site will therefore require limited and controlled vegetation clearing along a proposed alignment, which will be refined during detailed design to minimise disturbance to indigenous vegetation and avoid sensitive habitats.

The property forms part of a smallholding area subdivided in 1961 from Portion 70 (originally Portion 38 of Lake Pleasant Estate). The site remains undeveloped and is zoned Agriculture Zone I in terms of the Knysna Zoning Scheme By-Law (1992), which permits one dwelling as a primary right. Title deed conditions imposed by Lake Pleasant Estate (Pty) Ltd require owner consent for additional dwellings and building plan approval, which will be sought from Knysna Municipality.

The site supports Goukamma Strandveld (classified as Vulnerable in the SANBI Vegetation Map, 2025) and patches of Western Cape Milkwood Forest within the CBA 1 area. The southern degraded CBA 2 portion is dominated by alien thicket vegetation. Prominent sandstone sea cliffs exceeding 80 m in height occur along the southern coastal boundary.

The property forms part of an elevated coastal dune system comprising semi-consolidated fossil dunes and aeolian sands. It is therefore acknowledged that the site exhibits ridgeline characteristics at a broader landscape scale.

The property is therefore situated on elevated terrain approximately 80 m above mean sea level, well above the active shoreline. Surrounding natural areas, including the proposed Goukamma Nature Reserve buffer expansion, contribute to regional ecological connectivity and the functioning of the coastal corridor.

Portions of the property fall within the broader 100-metre High Water Mark (HWM) inland zone, as identified for coastal management purposes under the National Environmental Management: Integrated Coastal Management Act, 2008 (ICMA). The HWM, as reflected on available mapping products, is indicative in nature and not a gazetted or legislatively fixed development setback line, but rather a planning tool used to identify areas potentially influenced by coastal processes such as storm surge, wave run-up, and long-term sea-level rise.

Importantly, development within the HWM requires careful risk-based assessment and mitigation, provided that site-specific coastal risk has been assessed and appropriate mitigation measures are implemented. The purpose of the HWM is therefore to inform risk-averse planning and decision-making rather than to function as an absolute exclusion area. This constraint has been explicitly considered during the site planning and layout process.

It is further acknowledged that, given the elevated dune setting, visibility of the proposed development from certain viewpoints, including the beach, may occur. The visual assessment, therefore, considers impact significance rather than assuming complete non-visibility.

While complete avoidance of the 100 m HWM zone is not feasible due to the configuration of the property and the presence of other environmental constraints (including CBA 1 areas and Milkwood Forest), the amended preferred layout has been refined through a constraints-led design process to avoid geotechnically sensitive areas, including the previously identified D7 structurally weak zone.

The revised footprint avoids the most sensitive coastal features, including the active shoreline, coastal cliffs, and areas of elevated erosion and instability risk, as confirmed through specialist geotechnical and engineering assessment. The amended layout therefore represents the least constrained and lowest-risk development option, informed by the updated Site Constraints Map and supported by specialist investigations.

The proposed development comprises a main dwelling, three small self-contained units, staff accommodation, an equipment shed, and associated parking and access infrastructure. The landowners currently intend to utilise the additional units for private family and guest accommodation. From a planning perspective, the proposed rezoning provides a tourism-compatible land-use framework required for multiple accommodation units on agriculturally zoned land and is aligned with long-term conservation and land-management objectives.

Vehicular access will be provided via a 3 m-wide gravel access road approximately 220 m in length, terminating in a parking area comprising four parking bays with a total area of approximately 765 m².

The final access alignment will be confirmed during detailed design and may require selective clearing of indigenous vegetation. This will be undertaken in accordance with the EMPr and under Environmental Control Officer (ECO) supervision to minimise ecological and visual impacts.

The total building footprint is approximately 525 m², and pedestrian access to the units will be provided via elevated timber boardwalks to minimise soil compaction and disturbance to underlying vegetation.

The total development footprint, including buildings, access road, parking, and boardwalks, amounts to approximately 1 375 m², representing less than 2.7% of the total site area. Approximately 97.3% of the property will remain in a natural or rehabilitated state, ensuring that the overwhelming majority of the site continues to function as a conservation landscape.

All service infrastructure will be off-grid, comprising rainwater harvesting and storage systems, solar power generation, conservancy tanks for wastewater management, and off-site waste disposal via municipal collection services. The architectural design incorporates lightweight, eco-sensitive materials, including timber, steel, glass, and natural stone, to ensure visual integration with the surrounding dune and coastal landscape.

<u>Mitigation Commitments</u>

- Register a conservation easement (±4.25 ha) with the Western Cape Nature Conservation Board.
- Apply for rezoning to Open Space III (Nature Conservation Area), formalising long-term conservation management alongside private residential use.
- Implement an Alien Invasive Species Management Plan, with annual monitoring by a registered ecologist.
- Obtain the required National Forests Act permit prior to any disturbance of Western Cape Milkwood Forest.
- Undertake a pre-construction ecological walk-through to identify any Species of Conservation Concern (SCC), with avoidance or permitting implemented where required.

The proposal aligns with the Knysna Spatial Development Framework (2020), which supports low-impact rural living and private conservation initiatives beyond the urban edge. By locating development within a degraded CBA 2 area, applying sensitive design principles, and committing to long-term conservation management, the proposed development achieves an appropriate balance between residential use and biodiversity protection within Ward 1 of the Knysna Local Municipality

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 -	
Regulatory Requirement	BAR Section
(1)(a) Details of the Environmental Assessment Practitioner (EAP), including expertise and curriculum vitae	Section A
(1)(b) Location of the activity, including: (i) 21-digit Surveyor General Code, (ii) Physical address and/or farm name, (iii) Coordinates where applicable	Section B
(1)(c) A plan indicating the location of the proposed activity and associated infrastructure	Section C
(1)(d) Description of the scope of the proposed activity, including: (i) Listed and specified activities triggered, (ii) Description of activities, structures and infrastructure	Section D
(1)(e) Description of the policy and legislative context, including: (i) Applicable legislation, policies, plans and tools (ii) Compliance with and response to the same	Section E
(1)(f) Motivation for the need and desirability of the proposed development	Section F
(1)(g) Motivation for the preferred site, activity and technology alternative	Section G
(1)(h) Description of the process followed to reach the preferred alternative, including:	
• Details of alternatives considered	Section H
• Public participation process undertaken in terms of Regulation 41	Section H
• Summary of issues raised by I&APs and responses	Section H (Comments & Responses Report)
• Environmental attributes associated with the alternatives	Section H
• Impacts and risks identified for each alternative, including nature, extent, duration, probability and significance	Section H
• Impact assessment methodology	Section I
• Positive and negative impacts on the environment and community	Section H
• Mitigation measures and residual risks	Section H & EMPr
• Outcome of the site selection / alternatives assessment	Section G & H
• Motivation where alternatives were screened out	Section G & H

• Concluding statement indicating the preferred alternative	Section H

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 Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Low-cost housing development in Swellendam.	Environmental Authorisation 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 Authorisation 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 Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of resorts, tourist facilities, golf courses and residential accommodation at Quaggaskloof, Worcester.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Applications for equestrian estates in the West Coast and Boland areas.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Upgrade of the Water Treatment Works in Vanryhnsdorp.	Environmental Authorisation 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	Environmental Authorisation was obtained.

	Composting Facility - i.e. an Integrated Waste Management Facility (IWMF).	
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Rezoning and construction of an incinerator at Swartklip Products, Khayelitsha.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Extension of the Khayelitsha Railway Line, Cape Town.	Environmental Authorisation 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 Authorisation 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 Authorisation 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 Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of chicken farms and upgrading of abattoirs, Cape Town.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Wind farm development in Hopefield and Beaufort West.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Rerouting and establishment of a new pipeline at the Lebanon mountain area.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of housing units at Royal Palms, Paarl.	Environmental Authorisation was obtained.
Name: Bianca Gilfillan Role: Environmental Assessment Practitioner.	Development of a waste disposal site in Murraysburg, Beaufort West.	Environmental Authorisation 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 Role: Environmental Assessment Practitioner- Audits	• Boskloof Farm Eurepgap compliance for the use of "virgin land" for export vineyards. • Food and human health safety at Protea Boerdery, Worcester, for Eurepgap. • ISO 14000 Management systems. • Various Filling Service Stations	Approval obtained.

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:

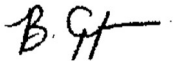
Languages	Speaking	Reading	Writing
English	Excellent	Excellent	Excellent
Afrikaans	Excellent	Excellent	Excellent

Adequacy for the Assignment:

Detailed Tasks Assigned to Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrate the 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.

<u>Certification</u> :

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  22 January 2026

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 is situated east of Cola Beach within the Groenvlei rural area of Sedgefield, Western Cape, and measures approximately 5.1576 hectares. The property is bounded to the south by Coastal Public Property, adjoins Portion 78 of Farm Ruygte Valley No. 205 — a privately managed nature reserve zoned Agriculture Zone I — and lies adjacent to the Lake Pleasant Private Nature Reserve to the east.

According to the Western Cape Biodiversity Spatial Plan (WCBSP, 2025), the northern portion of the property is classified as a Critical Biodiversity Area 1 (CBA1), while the southern portion is mapped as a degraded Critical Biodiversity Area 2 (CBA2). The site supports Goukamma Strandveld, classified as Vulnerable in the SANBI Vegetation Map (2025), with patches of Western Cape Milkwood Forest occurring within the CBA1 area. The degraded CBA2 portion is dominated by Acacia cyclops. The southern coastal boundary is characterised by steep

sandstone sea cliffs exceeding 80 metres in height, forming a visually prominent and environmentally sensitive geological feature.

The site forms part of an elevated coastal dune system comprising semi-consolidated fossil dunes and aeolian sands and is therefore associated with ridgeline characteristics at a broader landscape scale.

The site is therefore situated on elevated terrain approximately 80 metres above mean sea level, well above the active shoreline.

The property forms part of a smallholding area subdivided in 1961 from Portion 70 (originally Portion 38 of Lake Pleasant Estate). The site remains undeveloped and is zoned Agriculture Zone I in terms of the Knysna Zoning Scheme By-Law (1992), which permits one dwelling house as a primary right. Title deed conditions imposed by Lake Pleasant Estate (Pty) Ltd require written consent for the establishment of additional dwellings and approval of building plans, which will be sought from the relevant authorities.

Access to the site is provided via Groenvlei Beach Road, a gravel road leading toward the western beach of the Goukamma Nature Reserve, as well as a Public Servitude Road (Bushy Way, SG Diagram 6532/61) that connects to the N2 via the Groenvlei Divisional Road (DR 1594).

Bushy Way is currently overgrown and does not function as an established vehicular access route in its present condition. Access to the site will therefore require controlled and selective clearing along a proposed alignment, which will be refined during the detailed design phase to minimise disturbance to indigenous vegetation and avoid sensitive ecological features.

Figure 1 illustrates the Updated Site Constraints Map, indicating vegetation types (CBA1 and CBA2), slope contours, access routes, the indicative 100 m High Water Mark (HWM) buffer, and the proposed amended development area on Portion 79 of Farm Ruygte Valley No. 205 (Appendix B1).

It is noted that while slope considerations informed the layout through site verification and geotechnical input, a detailed slope analysis overlay is not explicitly presented on the Site Constraints Map.

<u>Coastal Context and High-Water Mark (HWM)</u>

Portions of the property fall within the broader 100-metre High Water Mark (HWM) inland zone, as defined for coastal management purposes under the National Environmental Management: Integrated Coastal Management Act, 2008 (ICMA). The HWM, as depicted on available mapping products, represents an indicative planning and risk-screening tool, rather than a gazetted or legislatively fixed development setback line. Its purpose is to identify areas potentially influenced by coastal processes such as storm surge, wave run-up, erosion, and long-term sea-level rise. Importantly, development within the HWM requires careful risk-based assessment and mitigation, provided that site-specific coastal risk has been assessed and appropriate mitigation measures are implemented. The HWM, therefore, functions as a trigger for environmental assessment and precautionary planning rather than an absolute exclusion area.

This constraint has been explicitly considered during the site planning and layout process. While complete avoidance of the 100 m HWM zone is not feasible due to the configuration of the property and the presence of other environmental constraints — including CBA1 areas and Milkwood Forest — the amended preferred development footprint has been positioned to avoid the most sensitive coastal features. These include the active shoreline, coastal cliffs, and areas of elevated erosion, flooding, and instability risk.

It is further acknowledged that, given the elevated dune setting, visibility of the proposed development from certain viewpoints, including the beach, may occur. The assessment therefore considers visual impact significance rather than assuming complete non-visibility.
The revised layout further avoids the geotechnically constrained D7 zone, thereby reducing long-term structural and erosion risk. Specialist geotechnical and engineering assessments confirm that the selected footprint represents the least constrained and lowest-risk development option within a highly sensitive coastal environment.

Proposed Development

The amended preferred development comprises a main dwelling and three small self-contained accommodation units clustered within a single compact development node, together with associated access, parking, and pedestrian boardwalk infrastructure. The landowners intend to utilise the additional units for private family and guest accommodation within a conservation-compatible land-use framework.

The total building footprint associated with the preferred alternative is approximately ±1 375 m², inclusive of buildings, access infrastructure, and associated disturbed areas. This represents approximately 2.7% of the total property area (±5.16 ha), ensuring that more than 97% of the site remains in a natural or rehabilitated state.
The development footprint includes all associated disturbance areas, including access roads, parking areas, boardwalks, and construction-related disturbance. Final alignment and micro-siting of infrastructure will be confirmed during the detailed design phase in accordance with the EMPr.

The updated Constraints Map confirms that the preferred layout is confined to degraded portions of the site, avoids CBA1 and indigenous forest areas, and excludes mapped high-risk coastal erosion and flood zones. The limited and clustered footprint supports long-term biodiversity protection, dune stability, and preservation of the scenic coastal landscape.

All service infrastructure will operate off-grid and will comprise rainwater harvesting tanks, sealed conservancy tanks for wastewater management, solar power generation, and off-site waste disposal via municipal collection services. The architectural design adopts an environmentally sensitive approach, utilising lightweight materials such as timber, steel, glass, and natural stone to blend with the surrounding landscape and minimise excavation and visual intrusion.

Although zoned Agriculture Zone I, the site is unsuitable for commercial agriculture due to its ecological sensitivity, steep slopes, and the presence of Critical Biodiversity Areas. The proposed development supports private conservation use consistent with the findings of the Terrestrial Biodiversity Assessment and Town Planning Report and reinforces long-term ecological stewardship of the property.

Geotechnical and Physical Context

The site forms part of a coastal dune system underlain by fossilised sandstone formations dipping southwards at approximately 45 degrees. According to the Preliminary Geotechnical Report (Rock Hounds, 2024) and the Civil and Structural Engineering Confirmation (2025), subsurface conditions comprise loose to medium-dense sandy loam and fine sand with organic-rich top layers. These soils are highly permeable but structurally weak, necessitating careful foundation and stormwater design to prevent erosion and instability.

Key engineering recommendations include:

- use of reinforced raft or piled foundations suitable for low-bearing soils (G7–G9).
- avoidance of deep box cuts, with structures following natural contours to maintain slope stability.
- natural dispersion of stormwater in accordance with Sustainable Urban Drainage System (SUDS) principles; and

- immediate rehabilitation of disturbed dune areas using locally indigenous vegetation.

Slope conditions across the site were assessed through site inspections and geotechnical investigations. While a detailed GIS-based slope overlay is not included in the BAR, steep and unstable areas were identified and avoided during layout planning. Final slope verification and micro-siting will be undertaken during detailed design.

Vegetation within the upper 65 m contour comprises coastal forest and thicket, transitioning to shrubland toward the coast. Analysis of historical satellite imagery indicates long-term stability of the dune system, with consistent vegetation cover recorded between 2005 and 2024.

Climatic modelling indicates a marginal projected increase in seasonal rainfall and no indication of unacceptable coastal flooding risk in the short to medium term, subject to appropriate design and stormwater management.

It is acknowledged that no dedicated coastal erosion specialist study has been undertaken. Coastal risk has been assessed through available geotechnical input and constraints mapping. Should the Competent Authority require further assessment, a detailed coastal processes study may be undertaken at the detailed design stage.

While portions of the property fall within the 100 m HWM trigger area, the amended preferred development footprint is located outside mapped high-risk erosion and flood zones and represents the lowest practicable risk position within a constrained coastal environment.

Section C - Locality Map

FIGURE 1: LOCALITY MAP

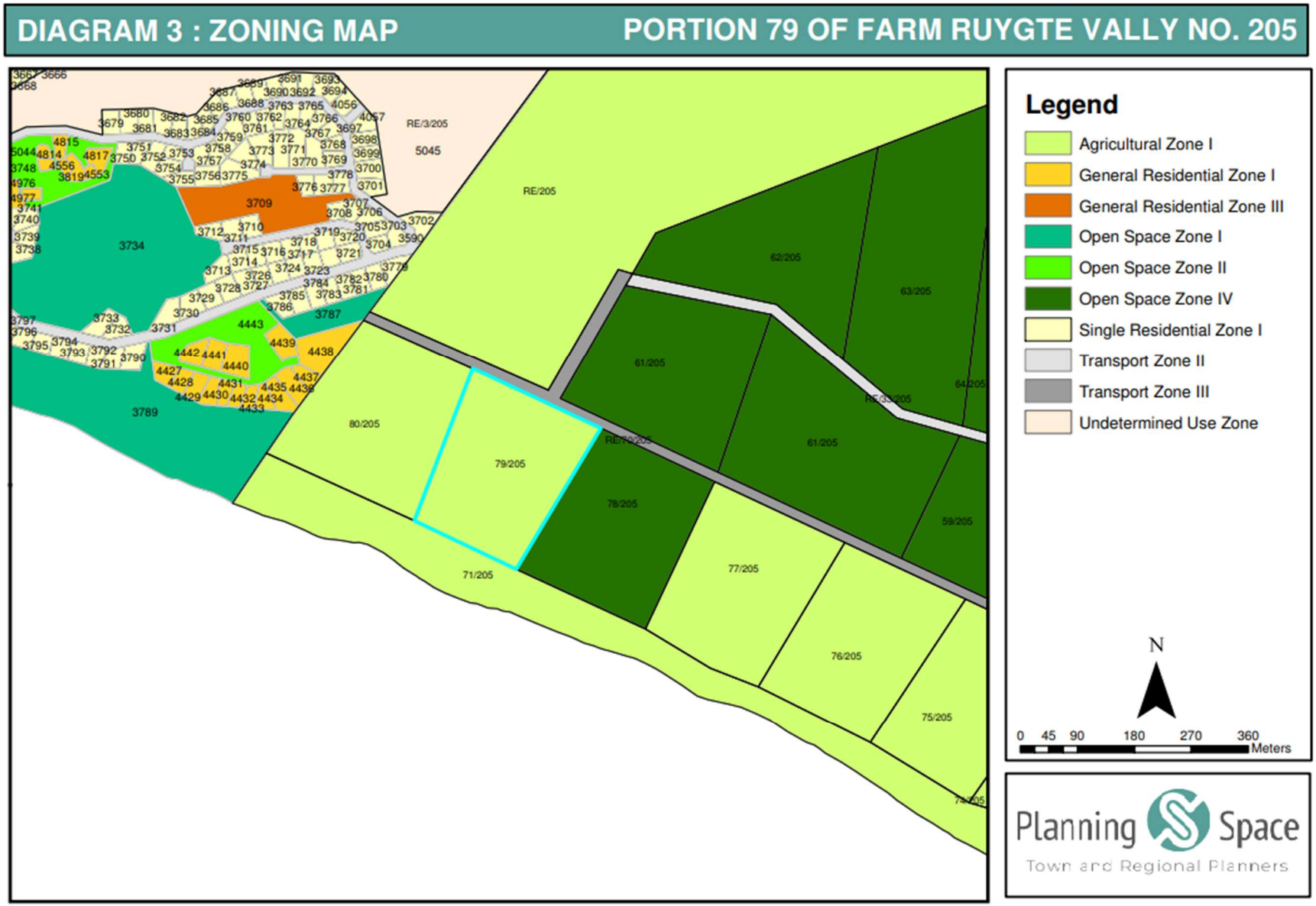


FIGURE 2: ZONING MAP, TOWN PLANNING REPORT, PLANNING SPACE, TOWN AND REGIONAL PLANNERS

LOCALITY MAP:

FIGURE 3: 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.

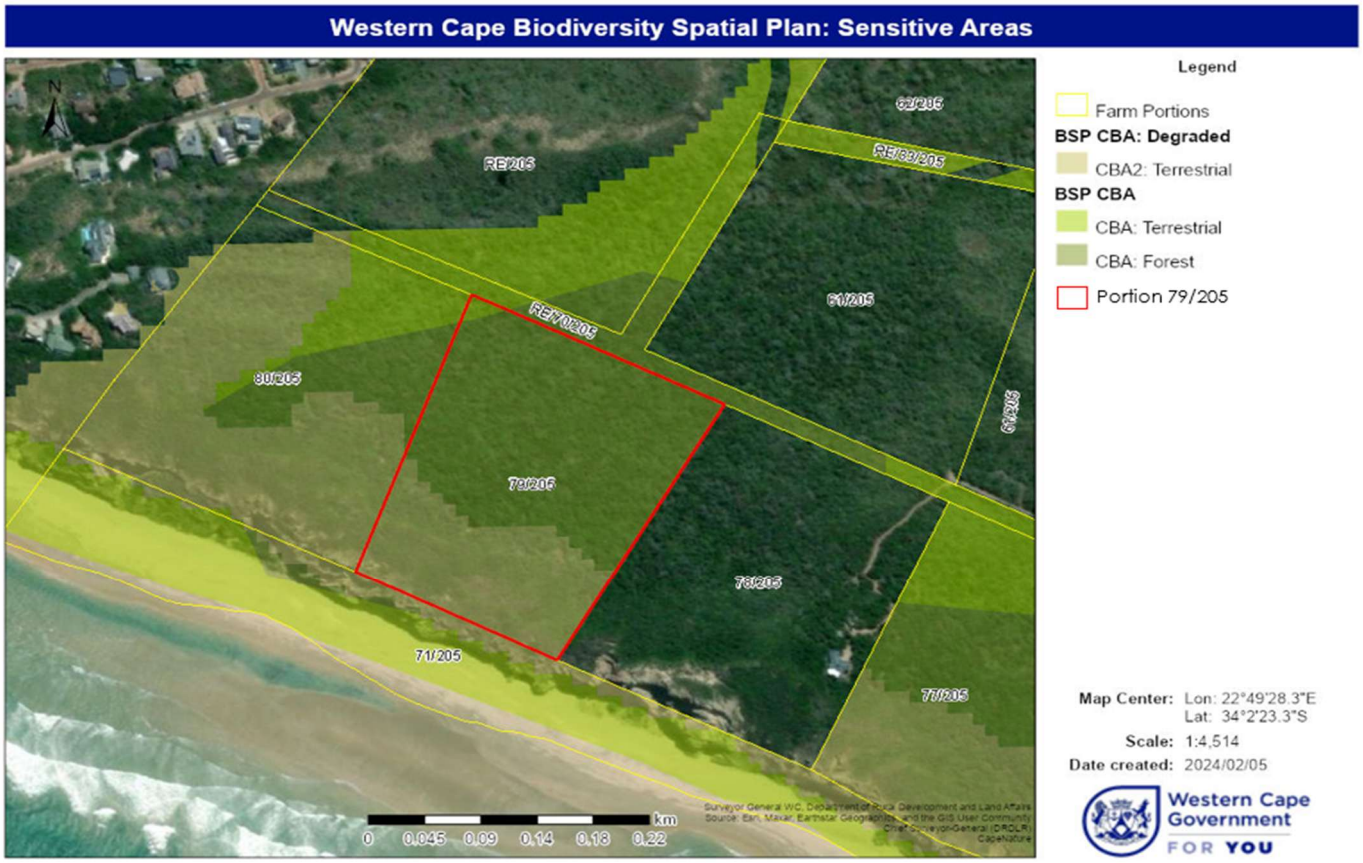


FIGURE 4: WESTERN CAPE BIODIVERSITY SPATIAL PLAN (2017) PROTECTED AREAS (CBA 1 AND CBA 2)

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: PORTIONS OF PORTION 79/205, AND PORTIONS OF THE PROPOSED DEVELOPMENT FOOTPRINT FALL WITHIN 100 METRES OF THE HIGH-WATER MARK.

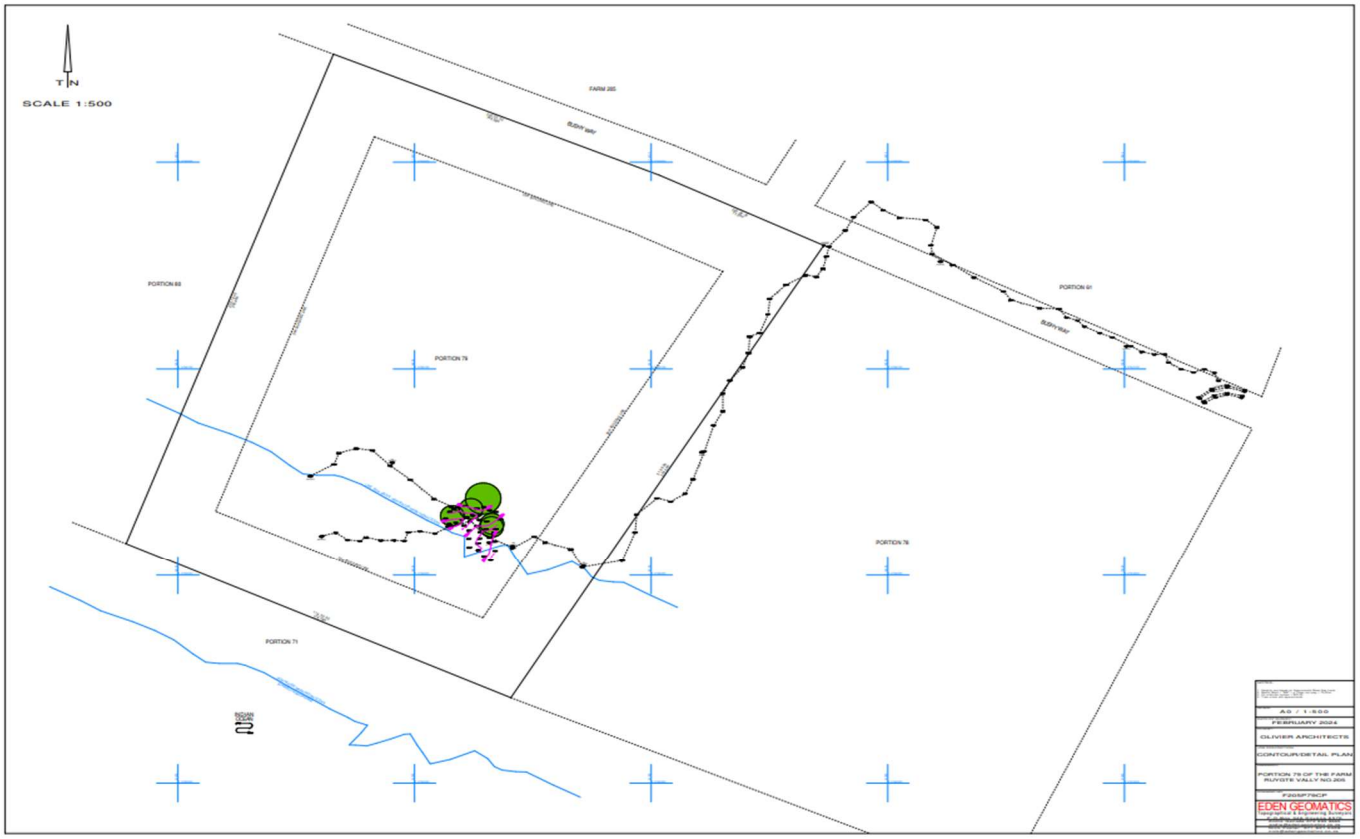


FIGURE 8: 100-METER HIGH-WATER MARK (AS INDICATED BY OLIVIER ARCHITECTS, FEBRUARY 2024)

The 100-year low-risk coastal hazard projection, as illustrated on the Site Constraints Map (Figure 1; Appendix B1), indicates that the projected coastal hazard zone is expected to align approximately with the 40-metre contour line, which corresponds with the southern boundary of the property and broadly coincides with the inland extent of the

indicative 100-metre High Water Mark (HWM) buffer defined under the National Environmental Management: Integrated Coastal Management Act, 2008.

In contrast, the 100-year high-risk coastal hazard projection indicates that the coastal hazard zone could extend further inland, potentially reaching the vicinity of Lookout Point, located approximately 50 metres from the present coastal cliff edge, as reflected on the Site Constraints Map (Figure 1; Appendix B1).

Coastal flooding projections for the year 2100 similarly suggest that the 100-year coastal flood line may extend to approximately the same inland position. Analysis of historical satellite imagery between 2005 and 2024 indicates long-term relative stability of the coastal system, with an observed inland movement of approximately 6 metres over a 20-year period. When conservatively extrapolated over a 100-year timeframe, this suggests a potential inland advance of approximately 30 metres.

This projected inland movement is broadly consistent with the lower-risk coastal hazard scenario identified in the Preliminary Geotechnical and Geomatic Report. However, coastal processes are inherently dynamic and subject to variability, uncertainty, and episodic extreme events. For this reason, the development layout does not rely on a single hazard contour or projection line, but instead adopts a precautionary, constraints-led planning approach.

As reflected on the Site Constraints Map (Figure 1; Appendix B1), the preferred development footprint has been positioned landward of mapped high-risk erosion and flood zones and outside areas of known geotechnical instability. Coastal risk projections, slope constraints, biodiversity sensitivity, and access limitations were assessed collectively to inform the final layout. The resulting configuration represents the lowest practicable coastal risk option within a highly constrained environment and is consistent with risk-averse planning principles required under NEMA and ICMA.

Accordingly, while portions of the property fall within the broader HWM trigger zone, the proposed development avoids active coastal processes, respects long-term erosion projections, and incorporates engineering and rehabilitation measures that maintain dune stability and ecological integrity. The layout therefore achieves an appropriate balance between lawful land use and long-term coastal resilience.

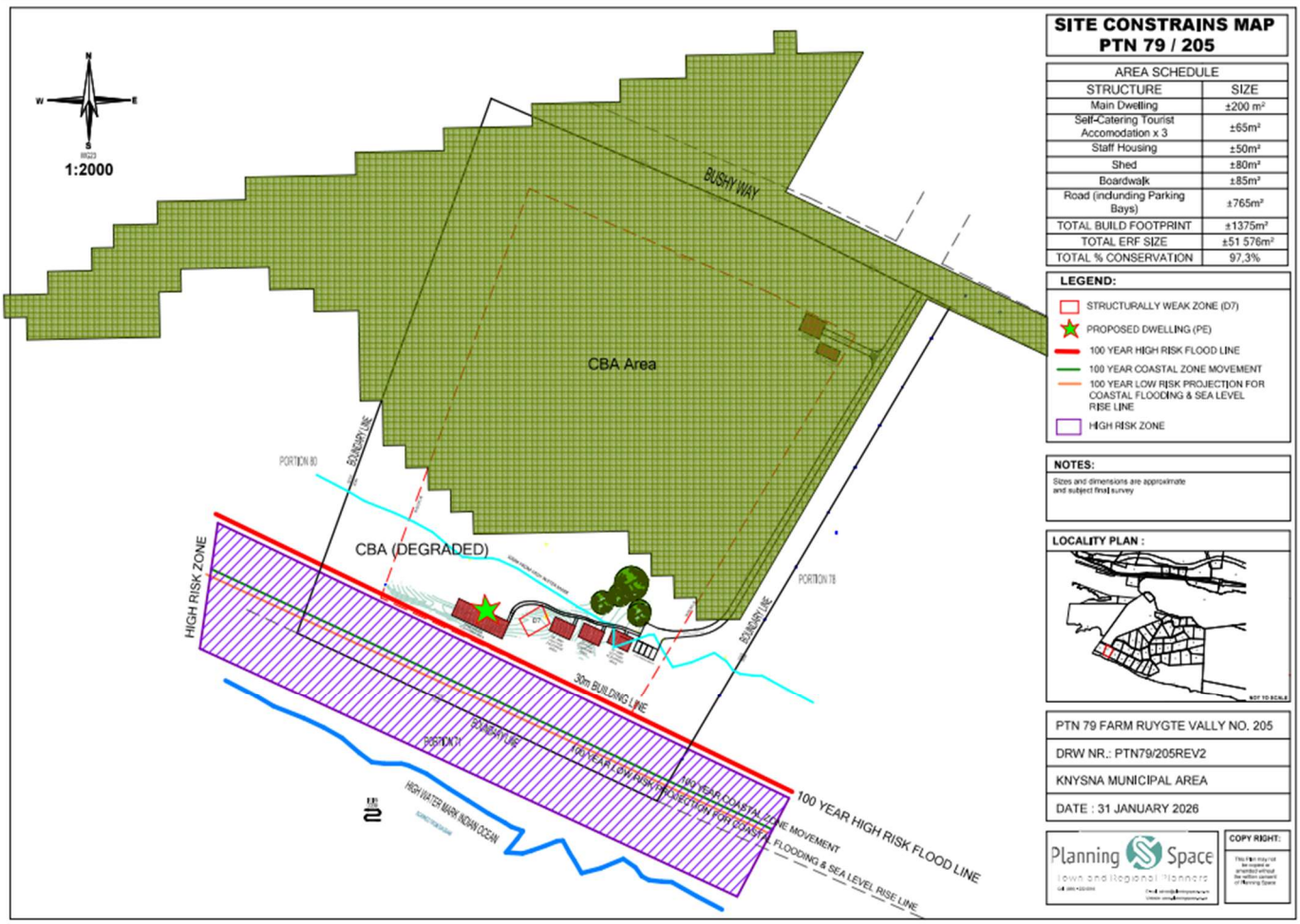


FIGURE 9: UPDATED SITE CONSTRAINTS MAP SHOWING VEGETATION TYPES (CBA1, CBA2), SLOPE CONTOURS, ACCESS ROUTES, AND PROPOSED DEVELOPMENT AREA ON PORTION 79 OF FARM RUYGTE VALLEY NO. 205, SEDGEFIELD. SOURCE: APPENDIX B1 – SITE CONSTRAINTS MAP (2026).

Section D

Description of the scope of the proposed activity

Portion 79 of Farm Ruygte Valley No. 205, situated east of Cola Beach within the Groenvlei rural area of Sedgefield, Western Cape, measures approximately 5.1576 hectares. The property is bounded to the south by Coastal Public Property, adjoins Portion 78 of Farm Ruygte Valley No. 205—a private nature reserve zoned Agriculture Zone I—and lies adjacent to the Lake Pleasant Private Nature Reserve to the east. According to the Western Cape Biodiversity Spatial Plan (WCBSP, 2025), the northern portion of the property is classified as a Critical Biodiversity Area 1 (CBA1), while the southern portion is designated as a degraded Critical Biodiversity Area 2 (CBA2). The site supports Goukamma Strandveld (classified as Vulnerable in the SANBI Vegetation Map, 2025), with patches of Western Cape Milkwood Forest occurring within the CBA1 area. The degraded CBA2 portion is dominated by Acacia cyclops.

The southern coastal boundary is characterised by steep sandstone cliffs exceeding 80 metres in height, forming a visually prominent and environmentally sensitive geological feature. The site further forms part of an elevated coastal dune system comprising semi-consolidated fossil dunes and aeolian sands, and therefore exhibits ridgeline characteristics at a broader landscape scale. The property forms part of a smallholding area subdivided in 1961 from Portion 70 (originally Portion 38 of Lake Pleasant Estate). The site remains undeveloped and is zoned Agriculture

Zone I in terms of the Knysna Zoning Scheme By-Law (1992), which permits one dwelling house as a primary land-use right. Title deed conditions imposed by Lake Pleasant Estate (Pty) Ltd require written consent for the establishment of additional dwellings and approval of building plans, which will be sought from the relevant authorities.

Access to the site is provided via Groenvlei Beach Road, a gravel road leading toward the western beach of the Goukamma Nature Reserve, as well as a Public Servitude Road (Bushy Way, SG Diagram 6532/61) that connects to the N2 via the Groenvlei Divisional Road (DR 1594). Bushy Way is currently overgrown and does not function as an established vehicular access route in its present condition. Access to the site will therefore require controlled and selective clearing along a proposed alignment, which will be refined during detailed design to minimise disturbance to indigenous vegetation and avoid sensitive ecological features.

Portions of the property fall within the 100-metre High Water Mark (HWM) buffer, as defined under the National Environmental Management: Integrated Coastal Management Act, 2008. The presence of the HWM represents a significant spatial and environmental constraint on development within the southern portion of the site. This constraint has been explicitly considered during the site planning and layout process. While complete avoidance of the HWM buffer is not feasible due to the configuration of the property and the presence of other environmental constraints, the proposed development footprint has been positioned to avoid the most sensitive coastal features, including the active shoreline, steep coastal cliffs, and areas associated with higher-risk coastal hazard projections. It is further acknowledged that, given the elevated dune setting, visibility of the proposed development from certain viewpoints, including the beach, may occur. The visual assessment, therefore, considers impact significance rather than assuming complete non-visibility.

The preferred layout represents the least constrained and lowest-risk development option available, as informed by the Site Constraints Map (Figure 1; Appendix B1) and supported by the engineering and geotechnical assessments.

The Applicant proposes the development of a primary residence, three additional self-contained accommodation units, a parking area, and a garage/storeroom on Portion 79 of Farm Ruygte Valley No. 205. Vehicular access to the site will be provided via a gravel access road less than 3 metres wide, with the final alignment to be confirmed during detailed design in accordance with the EMPr and under Environmental Control Officer supervision.

The proposed development comprises a main dwelling (±200 m²), three small self-contained units (±65 m² each), staff accommodation (±50 m²), an equipment shed (±80 m²), and associated parking and access infrastructure. The landowners currently plan to utilise the additional units for private family and guest accommodation. From a planning perspective, the proposed rezoning provides a tourism-compatible land-use framework required for multiple accommodation units on agriculturally zoned land and is aligned with long-term conservation and land-management objectives.

Vehicular access will lead to a parking area of approximately 660 m², from which pedestrian access to the main dwelling and accommodation units will be provided via elevated timber boardwalks, reducing soil compaction and disturbance to underlying vegetation. The development concept is to establish a low-impact private retreat within a natural coastal landscape. The architectural design will utilise lightweight, environmentally sensitive materials, including timber, steel, glass, and natural stone, enabling the structures to blend visually with the surrounding environment and minimising excavation. The total development footprint is approximately 1 375 m², representing less than 2.7% of the property. Approximately 97.3% of the site remains protected under conservation-compatible land use.

As a result, approximately 97.3% of the site will remain in a natural or near-natural state. According to the Preliminary Geotechnical and Geomatic Report (Rock Hounds, 2024) and the Civil and Structural Engineering Confirmation (Marius van Coller, Pr Eng, 2025), the proposed development area (located at approximately 75 m above mean sea level) lies above the 100-year high-risk coastal erosion line and within a geotechnically feasible zone, provided that appropriate slope-stabilisation and stormwater-management measures are implemented. The preferred development footprint avoids structurally weak zones and areas of elevated erosion risk identified on the Site Constraints Map.

Slope conditions across the site were assessed through site inspections and geotechnical investigations. While a detailed GIS-based slope overlay is not separately included, steep and unstable areas were identified and avoided during layout planning. Final slope verification and micro-siting will be undertaken during detailed design.

The Western Cape Biodiversity Spatial Plan (2025) identifies the northern portion of the property as CBA 1 (Critical Biodiversity Area – Maintain) and the southern portion as CBA 2 (Critical Biodiversity Area – Restore). The proposed development footprint is located entirely within the degraded CBA 2 area, thereby avoiding intact forest and higher-value biodiversity within the CBA 1 zone.

The Terrestrial Biodiversity Assessment (2025) confirms that the property supports Goukamma Strandveld (Vulnerable, SANBI VegMap 2025). The coastal margin comprises parabolic dunes with Knysna Sand Fynbos on inland ridges, transitioning into Mesic Dune Thicket and Milkwood Forest within protected areas. All proposed infrastructure is located outside the steep southern slopes and within areas of previous disturbance and degraded vegetation, consistent with the mitigation hierarchy.

A pre-construction ecological walk-through by a suitably qualified specialist will be undertaken to verify the presence of any Species of Conservation Concern (SCC) within the final footprint. Any confirmed SCC will be avoided where feasible or managed in accordance with applicable permitting requirements.

Given the existing agricultural zoning, the small development footprint, and the Applicant's commitment to rehabilitation and long-term conservation management of the undeveloped portions of the property, the proposal represents a balanced and conservation-compatible land use.

The development aligns with the Western Cape Biodiversity Spatial Plan, the Knysna Spatial Development Framework (2020), and the principles of NEMA, which promote sustainable rural development and private stewardship of environmentally sensitive land. Subject to the implementation of appropriate fire-management measures, stormwater controls, coastal forest protection measures, Protected Environment compliance requirements, and all applicable authorisations, the proposed development is considered supportable from an environmental and planning perspective (refer to Section F: Fire Management).

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, utilising 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 (Listing Notice 3) Activity 12 Listed activity as described in GN R.327 (Activity 12): *The clearance of an area of 300 square metres or more of indigenous vegetation,* *where such clearance occurs—* *(a) within a Critical Biodiversity Area as identified in a biodiversity plan; or* *(b) within a buffer area identified in such a plan.*	The proposed dwelling, ancillary accommodation units, access road, parking area and associated infrastructure will require the clearance of indigenous vegetation exceeding 300 m². The affected vegetation occurs within mapped Critical Biodiversity Areas and within a coastal environment containing indigenous thicket / fynbos vegetation types. Activity 12 is therefore triggered.
GN R.327 (Listing Notice 3) 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.	Portions of the proposed buildings, parking area, boardwalks and associated infrastructure exceed 50 m² and are located within 100 metres inland of the High Water Mark of the sea. No gazetted development setback line applies to this portion of coastline and the property is not located within an urban area. Activity 17 is therefore triggered.

(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.	
GN R.327 (Listing Notice 3) 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.	Construction of the proposed buildings, access road, parking area, boardwalk supports and associated services will require excavation and movement of soil exceeding 5 cubic metres within 100 metres inland of the High-Water Mark of the sea. No gazetted development setback line applies. Activity 19A is therefore triggered.

FIGURE 10: PORTIONS OF PORTION 79/205, AND PORTIONS OF THE PROPOSED DEVELOPMENT FOOTPRINT FALL WITHIN 100 METRES OF THE HIGH-WATER MARK.

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

The principles articulated in Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, require that environmental management place people and their needs at the forefront of decision-making and serve their physical, psychological, developmental, cultural and social interests equitably. These principles further require that development be environmentally, socially and economically sustainable, and that negative environmental impacts be avoided, or where avoidance is not possible, minimised and remedied.

The Applicant proposes the establishment of a low-impact residential development comprising a primary residence, three additional self-contained accommodation units, a parking area, a garage/store structure and associated access infrastructure on Portion 79 of Farm Ruygte Valley No. 205.

The site is located within Ward 1 of the Knysna Local Municipality, east of Sedgefield, and is currently zoned Agriculture Zone I, which permits one dwelling house as a primary land-use right.

The proposed development comprises:

- a main dwelling;
- three small self-contained accommodation units;
- a garage/store structure; and
- associated access, parking and pedestrian infrastructure.

The additional units are intended for private family and guest accommodation within a low-intensity residential setting. From a planning perspective, the proposed rezoning provides a land-use framework to accommodate multiple units on agriculturally zoned land, subject to the relevant planning approvals, and is aligned with long-term conservation and land-management objectives.

Vehicular access will be provided via a gravel access road of approximately 220 metres in length and 3 metres in width, routed along the eastern boundary of the site through previously disturbed and selectively cleared vegetation. The road terminates in a parking area accommodating four parking bays with a total area of approximately 765 m².

Pedestrian movement between the parking area and the proposed structures will occur via elevated timber boardwalks designed to reduce soil compaction, minimise vegetation disturbance, and maintain natural drainage patterns.

The total building footprint is approximately 525 m², while the overall development footprint — including buildings, access road, parking area and boardwalks — is approximately 1 375 m², representing less than 2.7% of the total property area.

Approximately 97.3% of the property will remain in a natural or rehabilitated state, ensuring that development intensity remains low and compatible with the surrounding conservation landscape.

Ancillary structures and infrastructure are intended to support residential use, land stewardship and long-term conservation management of the property. The proposal, therefore, seeks to balance legitimate residential use with ecological protection, rehabilitation commitments and sustainable land management in accordance with the principles of Section 2 of NEMA.

In accordance with the principles articulated in Section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, development must be socially, environmentally and economically sustainable and must place people and their needs at the forefront of decision-making. These principles further require that development address the physical, psychological, developmental, cultural and social interests of people in an equitable manner, while ensuring that negative environmental impacts are avoided, or where avoidance is not reasonably practicable, minimised and remedied.
The proposed development has been assessed against these sustainability criteria as set out below.

Social Sustainability

Social sustainability entails fostering community well-being, maintaining equitable access to resources, and minimising adverse effects on local lifestyles and sense of place. From a public perspective, the proposed development is

evaluated in terms of its influence on community cohesion, environmental quality, access to coastal resources, and compatibility with the surrounding rural landscape.

Positive Impacts

The proposal comprises a low-intensity residential development incorporating three additional small self-contained units intended for private family and guest accommodation within a low-density residential setting. From a planning perspective, the proposed rezoning provides a land-use framework capable of accommodating multiple units, subject to the relevant approvals.

The modest scale and clustered layout are consistent with the broader Sedgefield and Groenvlei character, which is associated with low-key coastal living, conservation-oriented properties, and rural residential development.
Whether used for private occupation or any other lawful approved use in future, the scale of development does not introduce mass-tourism, high-density activity, or urban-type land uses. The anticipated low intensity reduces the likelihood of increased traffic, noise, or pressure on local services and helps preserve the rural coastal sense of place.
The development will also generate short-term construction employment opportunities, supporting local labour, contractors, artisans, and service providers within the Sedgefield and Knysna area.

Public Concerns

Public concerns may relate to perceived impacts on access to Groenvlei Beach and the surrounding coastal environment. Sensitivity regarding development within the broader 100 m High Water Mark (HWM) trigger zone may heighten community concern relating to coastal access, privatisation, and landscape change.

Mitigation

Public access to Groenvlei Beach will remain available via existing public routes, including Groenvlei Beach Road and the registered Public Servitude Road (Bushy Way), subject to normal lawful access arrangements.
Continued public participation, transparent communication, and compliance with authorisation conditions will reinforce that no unlawful restriction of public coastal access is proposed.

Environmental Sustainability

The proposed development is located within a mapped Critical Biodiversity Area and has been designed in accordance with the mitigation hierarchy, prioritising avoidance of higher sensitivity features.
The development footprint is confined to degraded CBA2 vegetation, avoiding intact vegetation and Milkwood Forest associated with the CBA1 zone to the extent feasible. The Terrestrial Biodiversity Assessment confirms that the site supports Goukamma Strandveld (Vulnerable), with ecological functions linked to dune stabilisation and coastal processes.

The total development footprint is approximately 1 375 m², representing less than 2.7% of the property. Approximately 97.3% of the site will remain in a natural or rehabilitated state, maintaining ecological connectivity, landscape permeability, and habitat integrity.
The proposed layout has been refined to avoid mapped high-risk coastal erosion areas, steep slopes where practicable, and geotechnically constrained portions of the property.

Visual and Landscape Considerations

The site occurs within an elevated coastal dune landscape. It is acknowledged that some visibility from certain viewpoints may occur depending on final building design, vegetation retention, and viewer location. However, due to the limited scale of the development, fragmented layout, surrounding vegetation, and available visual absorption capacity, the overall visual impact is assessed as low to moderate and capable of mitigation through design controls.

Public Concerns

Concerns may arise regarding temporary construction impacts such as dust, vegetation disturbance, noise, and perceived erosion risk within the coastal zone. Historical dune sensitivity underscores the need for careful siting and responsible construction practices.

Mitigation

Mitigation measures include:

- dust suppression during construction
- restricted working hours
- erosion and stormwater control measures
- rehabilitation with locally indigenous vegetation
- avoidance of unnecessary vegetation clearance
- implementation of geotechnical recommendations
- ECO monitoring during construction
- low-profile, non-reflective architectural design

These measures reduce both short-term disturbance and long-term environmental risk.

Economic Sustainability

Economic sustainability requires that development support livelihoods, deliver long-term value, and remain financially viable without creating unreasonable burdens on public infrastructure.

The modest scale of the project contributes to the local economy through:

- short-term construction employment
- local procurement of materials and services
- support to local contractors and small businesses
- private investment in land stewardship and property management

This is generally aligned with municipal planning objectives, encouraging appropriately scaled private investment outside the urban edge.

The available geotechnical and engineering inputs indicate that the site is technically developable, subject to detailed design and professional certification. This assists in ensuring that economic investment is underpinned by appropriate engineering consideration and reduces the likelihood of future structural or environmental liabilities.

Infrastructure Impacts

The development is intended to operate substantially off-grid, incorporating:

- solar power
- rainwater harvesting
- sealed conservancy or approved wastewater systems
- private waste removal arrangements

No significant municipal bulk infrastructure upgrades are anticipated. Any access improvements required for the development will be privately funded.

Job Creation and Local Economy

Construction of the dwelling and associated infrastructure will generate temporary employment for local labourers, artisans, and contractors. Local sourcing of materials and services may provide positive secondary economic benefits within the region.

Public concerns regarding the temporary nature of construction employment are acknowledged. Mitigation includes prioritising local labour where feasible and promoting skills transfer during construction.

Infrastructure and Public Resources

The off-grid servicing approach reduces pressure on municipal infrastructure. Temporary construction disturbances will be managed through the EMPr, including traffic control, dust suppression, waste management, and site rehabilitation.

Overall Sustainability Conclusion

From a planning, environmental, and public-interest perspective, the proposed development is considered socially, environmentally, and economically sustainable, provided that the approved layout, mitigation measures, and Environmental Management Programme are implemented.

Although additional units require an appropriate planning framework, the proposal remains a low-intensity rural residential development of limited scale. The small footprint (±1 375 m²), off-grid servicing approach, constraints-led siting, and conservation-oriented management measures reduce pressure for urbanisation and assist in protecting the Groenvlei coastal landscape.

Implementation of the EMPr, ECO oversight, rehabilitation measures, and compliance with all authorisation conditions will address construction disturbance, biodiversity impacts, visual effects, and dune sensitivity concerns.
The development is therefore considered compatible with the applicable planning and conservation context while enabling responsible private land use consistent with the sustainable development principles of NEMA

(i) 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.

Section 2(4)(a)(ii) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), requires that waste be avoided, or where avoidance is not reasonably practicable, minimised, re-used or recycled where possible, and otherwise disposed of in a responsible and environmentally sound manner.

The proposed development will apply the waste hierarchy during both the construction and operational phases in accordance with the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008). This approach prioritises waste avoidance, followed by minimisation, re-use, recycling and responsible disposal, thereby reducing environmental impacts and promoting efficient resource use.

Waste Avoidance

The relatively small development footprint (±1 375 m²), together with an eco-sensitive building design incorporating lightweight steel framing, timber and glass, will reduce material requirements and limit unnecessary site disturbance. Careful planning of construction activities, accurate material ordering, and staged delivery of materials will further reduce excess waste generation.

Waste Minimisation and Re-use

Vegetation clearance will be strictly limited to the approved development footprint and associated authorised infrastructure areas. Alien invasive vegetation, primarily *Acacia cyclops*, removed during site preparation may be chipped, mulched and re-used on site for erosion control, landscaping, or rehabilitation purposes, thereby reducing the volume of waste requiring off-site disposal.
Where suitable, excavated natural material may be re-used on site for backfilling, shaping, or rehabilitation, subject to geotechnical suitability and environmental controls.

The incorporation of rainwater harvesting systems and off-grid infrastructure will further reduce resource consumption and associated waste generation during the operational phase.

Recycling and Responsible Disposal

All construction waste shall be separated at source where feasible. Recyclable materials, including metal, timber off-cuts, glass, cardboard, plastics and packaging, shall be collected and transported to appropriately authorised recycling facilities.

Waste that cannot be re-used or recycled shall be removed from site and disposed of at a licensed municipal or private waste disposal facility authorised to receive such waste.

Any hazardous waste that may arise, including hydrocarbon-contaminated material, used oils, chemical containers or similar substances, shall be stored safely, removed by an appropriately authorised service provider, and disposed of at a facility licensed to accept hazardous waste in accordance with applicable legislation.

Management and Monitoring

Detailed waste handling, temporary storage, collection and disposal procedures shall be included in the Environmental Management Programme (EMPr).

No waste shall be buried, burned, dumped, or disposed of on-site.

Compliance with waste management measures shall be monitored by the appointed Environmental Control Officer (ECO) during construction, with the landowner remaining responsible for ongoing waste management during the operational phase.

Through implementation of these measures, the proposed development is considered consistent with the waste management principles contained in Section 2 of NEMA.

(ii) 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.

Section 2(4)(a)(iii) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), requires that the use and exploitation of non-renewable natural resources be responsible and equitable, taking into account the consequences of resource depletion.

The proposed development will not entail the on-site extraction of non-renewable natural resources. However, it is acknowledged that the construction and operational phases will require the indirect use of non-renewable resources through building materials, fuel, transport, manufactured products and associated services.

The relatively small scale of the proposed development and limited footprint (±1 375 m²) will reduce overall material demand when compared to conventional or higher-density development.

Construction materials will be sourced, as far as reasonably practicable, from lawfully operating and appropriately authorised suppliers. Preference will be given, where feasible, to durable materials, responsibly sourced timber, recycled content products, and materials with lower embodied energy.

The design and operation of the development incorporate principles of resource efficiency, including:

- energy-efficient building design;
- passive heating and cooling measures where feasible;

- water-saving fittings and appliances;
- minimisation of material waste; and
- long-life, low-maintenance construction materials.

The off-grid servicing approach, including solar energy generation and rainwater harvesting, will reduce long-term reliance on fossil-fuel-based electricity supply and municipal resource demand.

During construction, efficient material ordering, phased deliveries, and careful site management will further reduce unnecessary consumption and wastage of resources.

Through responsible sourcing, efficient design, reduced scale of development, and low-impact servicing infrastructure, the proposed development is considered consistent with the principles of responsible and equitable use of non-renewable natural resources as contemplated in Section 2 of NEMA.

(iii) 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.

Section 2(4)(a)(iv) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), requires that the development, use and exploitation of renewable resources and the ecosystems of which they form part do not exceed the level beyond which their integrity is jeopardised.

The proposed development has been designed to minimise demands on renewable natural resources and to ensure that the scale and intensity of land use remain compatible with the sensitivity of the receiving environment.

<u>The development will make use of low-impact off-grid systems, including:</u>

- rainwater harvesting and storage;
- solar energy generation; and
- sealed conservancy or approved wastewater systems.

These systems reduce dependence on external water supply networks, conventional grid electricity, and municipal infrastructure, thereby promoting more efficient use of renewable resources.

Rainwater harvesting tanks will be installed to capture and store rainfall runoff for domestic use and limited irrigation purposes, subject to seasonal availability. This will reduce demand on external potable water resources. Solar energy infrastructure will provide a renewable and lower-carbon source of electricity for operational needs, thereby reducing long-term reliance on fossil-fuel based energy sources.

The compact development footprint (±1 375 m²), representing approximately 2.7% of the property, ensures that the majority of the site remains in a natural or rehabilitated state. This assists in maintaining vegetation cover, ecological connectivity, soil stability, and the broader functioning of the coastal dune ecosystem.

Vegetation clearance will be limited to the approved footprint, with disturbed areas rehabilitated using locally indigenous species where feasible.

Given the limited scale of the proposal, the retention of approximately 97.3% of the site in a natural or rehabilitated condition, and the implementation of mitigation measures, the proposed development is not expected to place renewable resources or associated ecosystems under pressure beyond sustainable levels.

The development is therefore considered consistent with the principles contained in Section 2 of NEMA.

(iv) 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.

Section 2(4)(a)(v) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), requires that a risk-averse and cautious approach be applied, taking into account the limits of current knowledge regarding the consequences of decisions and actions.
This principle has informed the planning, assessment and design of the proposed development. A precautionary and evidence-informed approach has been applied in considering ecological sensitivity, geotechnical conditions, coastal risk, drainage patterns, access constraints and visual considerations.
Specialist investigations, site inspections, environmental screening tools and constraints mapping have informed the Site Development Plan (SDP), with the objective of locating development within the least constrained and most suitable portion of the property reasonably available.

The preferred layout has been refined to reduce interaction, to the extent feasible, with:

- structurally weaker geotechnical zones;
- higher-risk coastal process areas;
- steeper slopes;
- intact CBA1 vegetation;
- indigenous forest patches; and
- other sensitive environmental features.

It is acknowledged that all environmental uncertainty cannot be eliminated, particularly within a dynamic coastal dune environment. For this reason, the Environmental Management Programme (EMPr) incorporates adaptive management measures, monitoring requirements, and site-specific controls to respond to any unforeseen impacts identified during construction or operation.

<u>These include:</u>

- Environmental Control Officer (ECO) oversight during construction;
- demarcation of no-go areas;
- erosion and stormwater controls;
- vegetation protection and rehabilitation measures;
- authority notification where unexpected impacts arise; and
- refinement of final micro-siting where necessary within the approved footprint.

The proposed development is therefore considered consistent with the precautionary principle by reducing avoidable risk, recognising uncertainty, and providing mechanisms to manage impacts responsibly should new information arise.

(v) 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.

Section 2(4)(a)(vi) of the National Environmental Management Act, 1998 (Act No. 107 of 1998), requires that negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where prevention is not reasonably practicable, minimised and remedied.

Potential environmental impacts and associated risks have been identified and assessed through the environmental authorisation process, informed by specialist studies, site investigations, public participation, and applicable environmental screening tools.

A hierarchy of avoidance, minimisation, management, rehabilitation and monitoring measures has been incorporated into the project design and formalised through the Environmental Management Programme (EMPr). The proposed low-intensity residential development has been planned to align with the principles of NEMA through sensitive siting, a compact development footprint, and specialist-informed mitigation measures.

The development footprint is primarily located within degraded portions of the site and has been refined to reduce interaction, where feasible, with higher sensitivity ecological features, coastal constraints, steeper slopes and indigenous forest areas.

The layout and mitigation strategy have been informed by, inter alia:

- Town Planning Report;
- Terrestrial Biodiversity Assessment;
- Visual Compliance Statement;
- Preliminary Geotechnical and Geomatic Report; and
- Civil and Structural Engineering input.

These studies indicate that the proposed development can be accommodated at the site without unacceptable impacts, provided that the recommended mitigation measures, detailed design controls, and EMPr requirements are fully implemented.

Key mitigation measures include:

- avoidance, where feasible, of CBA1 vegetation, indigenous forest and higher sensitivity areas;
- confinement of disturbance to a compact footprint (±1 375 m²);
- low-impact and lightweight construction techniques to reduce excavation requirements;
- rehabilitation of disturbed areas using locally indigenous vegetation where feasible;
- long-term alien invasive species control;
- stormwater, drainage and erosion control measures informed by engineering input;
- demarcation of no-go areas prior to construction;
- Environmental Control Officer (ECO) monitoring during construction; and
- Corrective action should be taken in case unforeseen impacts arise.

Through implementation of these measures, potential impacts are proactively managed and residual effects reduced to acceptable levels.

The proposal, therefore, supports a development outcome consistent with sustainable development and responsible environmental management as contemplated in NEMA.

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
NATIONAL ENVIRONMENTAL MANAGEMENT ACT (ACT 107 OF 1998) AND THE 2014 EIA REGULATIONS AS AMENDED IN 2017	Department of Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), 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**	This Act is applicable to the proposed development as 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 Forestry, Fisheries and the Environment (DFFE), 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 a formally declared protected area; however, it is located adjacent to privately conserved land and within the broader Knysna Protected Environment.
	Department of Forestry, Fisheries and the	~~PERMIT / LICENSE/ AUTHORIZATION /~~	The Waste Hierarchy will be

NATIONAL ENVIRONMENTAL MANAGEMENT: WASTE ACT (ACT 59 OF 2008)	Environment (DFFE), Republic of South Africa. All State and Provincial Departments, as well as Local Authorities, that have been identified as relevant Competent Authorities.	~~COMMENT/~~ **RELEVANT CONSIDERATION**	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 Forestry, Fisheries and the Environment (DFFE), 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~~	No Atmospheric Emission Licence is required. Dust and emissions associated with construction activities will be managed in accordance with the Air Quality Act and are addressed in the EMPr.
NATIONAL FORESTS ACT (ACT 84 OF 1998)	Department of Forestry, Fisheries and the Environment (DFFE), Republic of South Africa. All State and Provincial Departments, as well as Local Authorities, that have been identified as relevant Competent Authorities. *DFFE (Forestry Branch)*	~~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 Forestry, Fisheries and the Environment (DFFE), Republic of South Africa. All State and Provincial Departments, as well as Local Authorities, that have been identified as relevant Competent Authorities. *DFFE (Forestry Branch)*	~~PERMIT / LICENSE/ AUTHORIZATION / COMMENT/~~ **RELEVANT CONSIDERATION**	N/A
NATIONAL WATER ACT (ACT 36 OF 1998)	Department of Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), Republic of South Africa. All State and Provincial Departments, as well as Local Authorities, that have	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	No watercourses or wetlands occur on the site, and no water uses in terms of Section 21 of the National Water Act are triggered. The

	been identified as relevant Competent Authorities. *Dept of Water Affairs Jurisdiction*		Department of Water and Sanitation will be afforded an opportunity to comment during public participation.
SEA SHORE ACT (ACT 21 OF 1935)	Department of Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), Republic of South Africa. All State and Provincial Departments, as well as Local Authorities, that have been identified as relevant Competent Authorities. *Dept. of Agriculture Jurisdiction*	~~PERMIT / LICENSE/ AUTHORIZATION /~~ **COMMENT/ RELEVANT CONSIDERATION**	The Department of Agriculture to provide comment as part of the public participation process. An agricultural Compliance Statement was prepared.
NATIONAL HERITAGE RESOURCES ACT (ACT 25 OF 1999)	Department of Forestry, Fisheries and the Environment (DFFE), 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~~	Heritage Western Cape confirmed that no further heritage assessment is required in terms of Section 38 of the National Heritage Resources Act.
NATIONAL HEALTH ACT (ACT 61 OF 2003)	Department of Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), 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 Forestry, Fisheries and the Environment (DFFE), 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 Outeniqua Sensitive Coastal Area Extension Report is a relevant coastal planning guideline. Its principles have informed the site constraints analysis and layout design.

POLICY / GUIDELINES	ADMINISTERING AUTHORITY
EIA Guideline and Information Document Series: Guideline on Generic Terms of Reference for EAPs and Project Schedules	Department of Forestry, Fisheries and the Environment (DFFE), Republic of South Africa
	The Environmental Assessment Practitioner (EAP) is required to be independent and to submit all information as prescribed by the EIA Regulations and associated guidelines. This requirement is addressed throughout the BAR.
EIA Guideline and Information Document Series: Guideline on Public Participation	Department of Forestry, Fisheries and the Environment (DFFE), Republic of South Africa
	The public participation process must comply with the requirements of the EIA Regulations. This has been implemented and documented in the BAR.
EIA Guideline and Information Document Series: Guideline on Alternatives	Department of Forestry, Fisheries and the Environment (DFFE), Republic of South Africa
	Reasonable and feasible alternatives have been considered and assessed in the Alternatives section of the BAR.
EIA Guideline and Information Document Series: Guideline on Need and Desirability	Department of Forestry, Fisheries and the Environment (DFFE), Republic of South Africa
	The need for and desirability of the proposed development are assessed in accordance with this guideline in the relevant section of the BAR.
Guideline on Public Participation (2010), EIA Guideline and Information Document Series	Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)
	Provincial public participation requirements have been applied and integrated into the BAR in accordance with Western Cape practice.

Section F

Need and Desirability for the proposed development

Need

The need for and desirability of the proposed development constitute key considerations in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). The proposal must be considered within the context of applicable spatial planning instruments, including the Knysna Municipal Spatial Development Framework (SDF, 2020), the Integrated Development Plan (IDP), and the Garden Route Environmental Management Framework (EMF).

The purpose of the proposed development on Portion 79 of Farm Ruygte Valley No. 205 is the establishment of a primary private residence, together with three low-intensity accommodation units and associated access and ancillary infrastructure, within a sensitive coastal and biodiversity-rich environment. For land-use planning and rezoning purposes, the additional units are described as tourist accommodation in accordance with the applicable zoning scheme provisions. The landowners currently indicate that the units are intended for private family and guest accommodation.

The proposal responds to a legitimate need for conservation-compatible residential use and appropriately scaled accommodation within a coastal landscape. The Knysna SDF recognises the role of low-intensity development outside the urban edge where it reinforces conservation objectives, promotes responsible land stewardship, and does not undermine environmental integrity.

Portions of the site fall within the broader 100-metre High Water Mark (HWM) trigger area as defined for coastal management purposes under the National Environmental Management: Integrated Coastal Management Act, 2008. The HWM, as reflected on available mapping, functions as a regulatory trigger and planning consideration rather than a gazetted setback line. Development within this zone requires risk-based assessment and mitigation.

Available specialist investigations indicate that the proposed development footprint is located on elevated terrain, landward of the active coastal edge, and outside mapped higher-risk erosion and flood-prone areas identified in the available constraints mapping. The preferred footprint therefore represents a comparatively lower-risk location within a constrained coastal environment.

The proposal consolidates development within a compact node, retaining approximately 97.3% of the property in a natural or rehabilitated state and reducing broader landscape disturbance. Environmental constraints, including biodiversity sensitivity, topography and coastal processes, have informed the layout and design.

The development further responds to the need for responsible land management, including alien invasive species control, ecological rehabilitation, and long-term conservation stewardship. Available specialist inputs indicate that the site has limited commercial agricultural potential and is more suited to conservation-oriented low-intensity use.

The design incorporates off-grid or low-demand infrastructure, including solar energy generation, rainwater harvesting, and on-site wastewater management, thereby reducing reliance on municipal services and promoting sustainable resource use.

Desirability

Desirability relates to the suitability of the site, compatibility with surrounding land uses, and alignment with spatial and environmental planning frameworks.

The site is considered physically suitable for limited residential and low-intensity accommodation development, subject to implementation of all mitigation measures identified in the geotechnical and engineering inputs. These include slope stabilisation where required, erosion control, stormwater management, and professional engineering oversight.

Although portions of the site fall within the broader 100 m HWM trigger area, available assessments indicate that the preferred development footprint is located outside mapped higher-risk coastal erosion and flood zones and on elevated terrain. The HWM has therefore been treated as a planning and assessment constraint rather than an automatic exclusion line.

The development footprint has been positioned to reduce interaction, where feasible, with steeper slopes, natural forest areas, and mapped CBA1 areas, with development primarily confined to degraded CBA2 portions of the site. The proposal is compatible with surrounding land uses, which include private conservation properties, low-density rural residential holdings, and protected natural areas.

The scale and anticipated low-intensity nature of the additional units indicate that the proposal is unlikely to introduce urban or resort-type land-use characteristics. Available visual specialist input indicates that visual impacts can be reduced through vegetation retention, sensitive architectural treatment, muted finishes, and careful siting.

From a planning perspective, the proposal is broadly aligned with the Knysna SDF and the Garden Route EMF, which support conservation-compatible development and appropriately scaled nature-based accommodation outside the urban edge where constraints can be responsibly managed.

The proposed rezoning to Open Space III (Nature Conservation), if approved by the relevant authority, would formalise long-term conservation management over the majority of the property while allowing a limited development envelope of approximately 1 375 m².

Accordingly, the development may be regarded as desirable in environmental, spatial, and social terms, as it:

- Maintains the majority of the property in a natural or rehabilitated condition;
- Applies specialist-informed siting and design within the HWM trigger context;
- Supports low-impact, conservation-aligned accommodation consistent with the Garden Route context;
- Seeks to minimise unnecessary visual, ecological, and physical disturbance;
- Encourages private stewardship and long-term conservation management; and
- Is unlikely to create a significant additional traffic or municipal service burden.

Conclusion

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 may be regarded as both needed and desirable within the context of sustainable rural development and conservation-based land use.

The project comprises a private residence and three low-intensity accommodation units. While these units are described as tourist accommodation for planning purposes, the current intended use is private family and guest accommodation.

The proposal responds to the need for responsible land management and conservation stewardship on a site with limited agricultural potential and located within a sensitive coastal landscape.

While portions of the site fall within the broader 100 m High Water Mark trigger area, the development has been assessed with reference to available specialist inputs and coastal risk considerations. The preferred layout reflects an attempt to locate development in the comparatively lower-risk and less constrained portion of the property.

With a limited development footprint (±1 375 m²), elevated siting, low-demand servicing, avoidance of higher sensitivity features where feasible, and rehabilitation and management commitments, the proposal seeks to protect the scenic and ecological qualities of the site while enabling low-intensity residential use.

The proposal further consolidates built form within a single compact node, thereby limiting dispersed disturbance across the property and supporting the retention of the balance of the site under conservation-oriented management.

Accordingly, subject to all required approvals and implementation of mitigation measures, the proposed development is considered supportable from a need and desirability perspective.

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

Is the activity permitted in terms of the property's existing land use rights?
Portion 79 of Farm Ruygte Valley No. 205, Sedgefield, is currently zoned Agriculture Zone I in terms of the Knysna Zoning Scheme Regulations (1992). This zoning permits agricultural activities and one dwelling house as a primary land-use right, subject to compliance with all other applicable legislation, building plan approval requirements, and title deed restrictions. The construction of a single dwelling house on the property is therefore capable of being considered under the existing zoning framework. However, the property is environmentally sensitive and has limited agricultural potential, as indicated in the available specialist studies, including the Terrestrial Biodiversity Assessment and Agricultural Compliance Statement. These studies suggest that the site is more appropriately managed as a conservation-oriented property with limited and carefully controlled low-impact development. Accordingly, the Applicant proposes that the property be rezoned to Open Space III (Nature Conservation Area). Such rezoning would formalise the long-term conservation intent of the property, strengthen protection of ecological and scenic attributes, and create an appropriate planning framework for a limited development envelope. The proposed rezoning is broadly aligned with the Knysna Spatial Development Framework (SDF, 2020), which supports environmental protection, biodiversity stewardship, and appropriately scaled low-intensity development outside the urban edge, subject to environmental and planning constraints. <u>Development Parameters for Open Space III</u> In terms of the Knysna Zoning Scheme Regulations (1992), land zoned Open Space III may be subject to development controls and municipal approval requirements, which may include: (a) the submission of an Environmental Management Plan or equivalent management measures where required; (b) development restrictions and site-specific parameters informed by conservation objectives; (c) provision for a dwelling house where permitted in terms of the applicable scheme provisions and subject to the circumstances of the land unit; (d) application for consent uses, where applicable, for tourism-related or accommodation uses; and (e) submission of a Site Development Plan indicating structures, access arrangements and services. <u>Current Application</u> The current environmental application assesses the environmental acceptability of the proposed development footprint, associated infrastructure, site sensitivities, and mitigation measures.

The proposal includes a primary dwelling, associated access and services, together with three additional low-intensity accommodation units forming part of the broader intended land-use concept.
In order to implement the full proposal, the Applicant intends to pursue the necessary separate municipal planning approvals, which may include:

- rezoning of the property to Open Space III (Nature Conservation Area); and
- any required consent use approval for additional accommodation units, if determined necessary by the Municipality.

While the additional units may be described as tourist accommodation for planning purposes, the Applicant currently indicates that they are intended primarily for use by the landowners, family members, and guests.

The Environmental Authorisation process does not grant land-use rights, amend zoning, or predetermine the outcome of any municipal rezoning or land-use application. Those processes remain separate statutory processes subject to their own public participation, municipal assessment, and approval requirements.

The proposed planning approach would enable the Municipality to regulate development intensity while potentially securing long-term conservation management over the majority of the property, with development confined to a compact footprint of approximately 1 375 m² and approximately 97.3% of the property remaining natural or rehabilitated.

The proposal therefore seeks to combine:

- an existing entitlement for one dwelling house under the current zoning framework;
- a low-intensity additional accommodation component subject to planning approval; and
- a long-term conservation outcome,

in a manner broadly consistent with the Knysna SDF, applicable planning policy, and the principles of sustainable development contained in NEMA.

Will the activity be in line with the Provincial Spatial Development Framework (PSDF)

The Western Cape Provincial Spatial Development Framework (PSDF), approved by the Provincial Cabinet, provides a strategic spatial framework to guide sustainable development across the Province's urban and rural landscapes. The PSDF promotes responsible management of natural assets, containment of urban expansion, improved settlement efficiency, and protection of biodiversity-rich, scenic, and agriculturally important land.

Within the eastern portion of the Province, the PSDF recognises the Garden Route as an important scenic, biodiversity, agricultural, and tourism corridor, incorporating regional centres such as George, Knysna and Plettenberg Bay along the N2 development axis. The area is characterised by high environmental sensitivity and strategic economic importance linked to tourism, agriculture, conservation and lifestyle-driven rural development.

The PSDF supports appropriately scaled rural development and nature-based economic activity, provided that ecological integrity, landscape quality, and long-term resource sustainability are maintained.

PSDF Spatial Themes

The PSDF is broadly structured around three interrelated spatial themes:

- **Resources** – protection, efficient use and restoration of biodiversity, land, water and ecological systems;
- **Space Economy** – strengthening regional and local economies through spatially appropriate, resource-efficient development; and
- **Settlement** – promoting compact, efficient and environmentally responsive settlement patterns while avoiding urban sprawl and fragmented development.

A key objective of the PSDF is to support economic growth while reducing environmental degradation and improving long-term climate and resource resilience.

Alignment of the Proposal with the PSDF

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 is considered broadly aligned with the PSDF in the following respects:

- **Resource Protection:** Approximately 97.3% of the property is proposed to remain natural or rehabilitated, with development concentrated within a limited footprint of approximately 1 375 m².
- **Compact Development Form:** Built form is consolidated into a single node rather than dispersed across the property, thereby reducing fragmentation and infrastructure spread.
- **Environmental Stewardship:** The proposal includes alien invasive species management, rehabilitation measures, and conservation-oriented land management over the balance of the site.
- **Space Economy:** The proposal may contribute modestly to the local economy through construction employment, ongoing property management, and low-intensity accommodation use.
- **Settlement Efficiency:** The proposal is of limited scale, located outside the urban edge, and does not constitute urban sprawl or a township-style expansion.
- **Resource Efficiency:** Off-grid or low-demand systems, including solar power, rainwater harvesting, and on-site wastewater management, reduce pressure on municipal infrastructure.

Landscape and Scenic Considerations

The Garden Route is recognised as a scenic landscape of provincial importance. Development within this context must be sensitively designed and carefully sited.

The proposed development is of limited scale and subject to mitigation measures intended to reduce visual intrusion, including compact clustering, vegetation retention where feasible, muted finishes, and environmentally responsive architectural treatment.

Conclusion on PSDF Alignment

The proposed activity is considered broadly supportive of the objectives of the Western Cape PSDF in that it seeks to:

(i) promote a resource-conscious and efficient pattern of development;
(ii) support sustainable rural land use and modest local economic activity;
(iii) encourage biodiversity stewardship and conservation management on private land; and
(iv) avoid dispersed urban-style expansion within a sensitive rural coastal landscape.

Accordingly, subject to environmental authorisation conditions and implementation of mitigation measures, the activity may be regarded as generally in line with the intent of the Provincial Spatial Development Framework.

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 SPATIAL TRANSITIONS PROMOTED BY THE WESTERN CAPE PROVINCIAL SPATIAL DEVELOPMENT FRAMEWORK (PSDF). (SOURCE: WESTERN CAPE GOVERNMENT, PSDF)

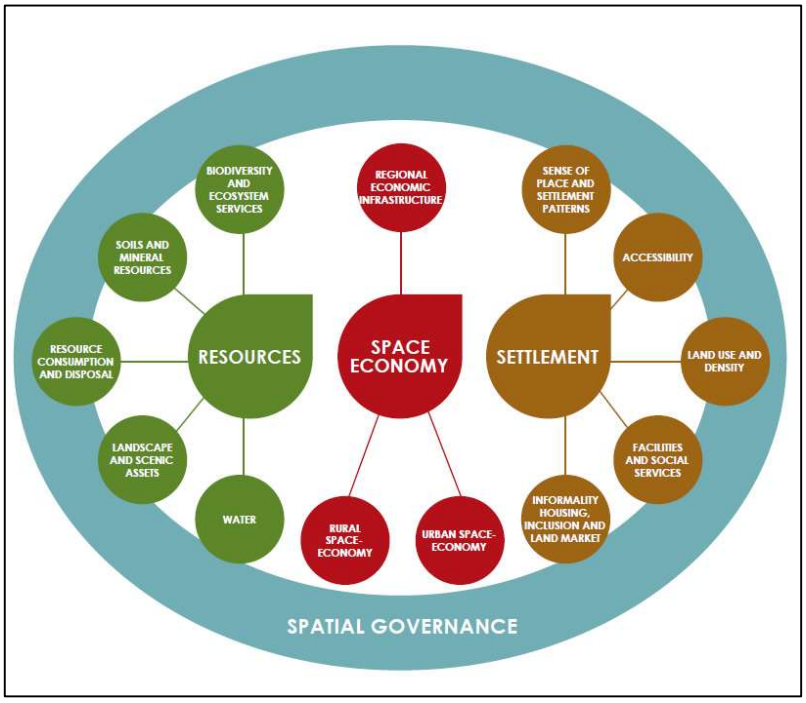


FIGURE 13: CONCEPTUAL DIAGRAM ILLUSTRATING THE PSDF'S THREE SPATIAL THEMES: RESOURCES, SPACE ECONOMY, AND SETTLEMENT, WITHIN A SPATIAL GOVERNANCE FRAMEWORK.
(SOURCE: WESTERN CAPE GOVERNMENT, PSDF)

The proposed development may be interpreted within this transition framework as moving toward conservation-oriented land management, compact development form, and low-intensity land use within a constrained coastal environment. It supports the Resources theme through protection of the majority of the property, contributes modestly to the Space Economy, and is aligned with the Settlement theme through concentration of development within a defined footprint rather than dispersed expansion.

The property is situated outside of the Urban Edge

The subject property, Portion 79 of Farm Ruygte Valley No. 205, is situated outside the Sedgefield Urban Edge within the Groenvlei rural area of the Knysna Municipal Area.

Properties within this rural coastal landscape are generally larger land units, many measuring approximately 5 hectares, and are predominantly zoned Agriculture Zone I, Open Space, or similar low-intensity rural categories in terms of the Knysna Zoning Scheme Regulations (1992). The area is characterised by a combination of undeveloped land, private conservation properties, scattered low-density rural residential use, and limited agricultural activity.

Several adjoining properties have been incorporated into the Lake Pleasant Private Nature Reserve and associated conservation areas, reinforcing the ecological and conservation character of the broader landscape.

The subject property is currently zoned Agriculture Zone I, which permits agricultural activities and one dwelling house as a primary land-use right, subject to compliance with applicable legislation, title deed restrictions, and municipal approvals.

Proposed Rezoning to Open Space III

Given the environmental sensitivity of the site and its limited agricultural potential, as indicated in the available specialist studies, the Applicant proposes that the property be rezoned to Open Space III (Nature Conservation Area).

Such rezoning would formalise the long-term conservation intent of the property, strengthen protection of its natural, scenic and biodiversity attributes, and create an appropriate planning framework for limited conservation-compatible development within a controlled footprint.

Approximately 97.3% of the property is proposed to remain in a natural or rehabilitated state, with development confined to an area of approximately 1 375 m².

Development Parameters for Open Space III

In terms of the Knysna Zoning Scheme Regulations (1992), land zoned Open Space III may be subject to municipal controls and approval requirements, which may include:

(a) submission of an Environmental Management Plan or equivalent environmental controls where required;
(b) land-use restrictions and development parameters informed by conservation objectives and site sensitivity;
(c) provision for a dwelling house where permitted under the applicable scheme provisions;
(d) consent uses for tourism-related or accommodation activities, where approved; and
(e) approval of a Site Development Plan indicating structures, access arrangements and services.

Planning Motivation

The Applicant intends to exercise the existing primary land-use entitlement through the construction of a single dwelling house, with additional accommodation units proposed as part of the broader long-term land-use concept, subject to separate planning approvals.

To implement the full proposal, the Applicant intends to pursue the necessary municipal land-use applications, which may include:

- rezoning of the property to Open Space III (Nature Conservation Area); and
- consent use approval, if required, for three low-intensity accommodation units.

While these units may be described as tourist accommodation for planning purposes, the Applicant currently indicates that they are intended primarily for use by the landowners, family members, and guests.

The Environmental Impact Assessment process assesses environmental acceptability only. It does not confer land-use rights, amend zoning, or predetermine the outcome of any municipal planning application.

An environmental authorisation process is required due to the presence of mapped environmental sensitivities, including Critical Biodiversity Areas, coastal triggers, indigenous vegetation and associated constraints, and to determine whether the proposed development can be accommodated subject to mitigation.
Spatial Planning Alignment

The proposed planning approach is broadly aligned with the Western Cape Provincial Spatial Development Framework and the Knysna Spatial Development Framework in that it supports:

- protection of environmentally sensitive landscapes;
- avoidance of fragmented urban sprawl in rural areas;
- compact and appropriately scaled development outside the urban edge; and
- conservation-compatible land use supported by private stewardship.

Conclusion
The proposal therefore supports sustainable land use, biodiversity protection, and private conservation stewardship while retaining the broader rural and scenic spatial character of the area.

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 Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Knysna Local Municipality provide the strategic policy framework guiding land-use decision-making, infrastructure planning, service delivery, environmental management, and long-term spatial development within the municipal area. A key consideration in assessing the proposed development is whether approval of the application would undermine or compromise the intent, integrity, or objectives of these approved municipal planning instruments.

Spatial Development Framework (SDF)
The subject property, Portion 79 of Farm Ruygte Valley No. 205, is situated east of the Sedgefield Urban Edge within a rural coastal landscape. In terms of the Knysna Spatial Development Framework (SDF, 2020), the broader area is characterised by environmental sensitivity, scenic value, low-density rural land use, biodiversity importance, and conservation potential.

The SDF generally promotes:

- protection of sensitive natural environments;
- containment of urban sprawl;
- appropriately scaled development outside the urban edge;
- biodiversity stewardship and landscape protection; and
- sustainable tourism and rural economic opportunities where compatible with environmental constraints.

The proposed development is of limited scale and comprises a compact residential node with associated access and ancillary infrastructure, while approximately 97.3% of the property is proposed to remain natural or rehabilitated.

The Applicant further proposes rezoning of the property from Agriculture Zone I to Open Space III (Nature Conservation Area), subject to separate municipal processes. Such an approach would strengthen the conservation function of the property while allowing a tightly controlled development envelope.

The proposal is therefore considered broadly aligned with the spatial intent of the Knysna SDF in that it supports conservation-oriented land use with limited low-impact development rather than urban-style expansion.

Integrated Development Plan (IDP)

The Knysna Local Municipality Integrated Development Plan (IDP) is the municipality's principal strategic planning instrument and guides service delivery, economic development, environmental management, infrastructure prioritisation, and community development.

Relevant objectives commonly reflected in the IDP include:

- sustainable use and management of environmental resources;
- support for tourism and local economic development;
- responsible infrastructure planning;
- resilience and climate-responsive development; and
- good governance and public participation.

The proposed development is considered broadly supportive of these objectives in that it:

- promotes private investment in land stewardship and rehabilitation;
- may generate temporary construction employment and local procurement opportunities;
- proposes low-demand servicing systems such as solar power, rainwater harvesting and on-site wastewater solutions; and
- retains the majority of the property in a natural state.

Strategic Planning Implications

The subject property is located in Ward 1 within an area characterised by:

- low-density rural properties;
- conservation and private nature reserve land uses;
- limited municipal service infrastructure; and
- a scenic coastal landscape requiring careful management.

The proposed development remains consistent with this context by:

- maintaining a low development intensity;
- confining development to a compact footprint (approximately 1 375 m^2);
- avoiding reliance on major municipal bulk infrastructure;
- retaining the broader rural character of the area; and
- supporting conservation-compatible land management.

Conclusion

Approval of the proposed development is not expected to compromise the integrity of the Knysna Local Municipality's approved IDP or SDF.

On the contrary, subject to all required environmental and municipal approvals, the proposal is considered broadly supportive of the strategic intent of these instruments by promoting conservation-oriented land use, sustainable rural development, limited low-impact economic activity, and retention of environmental assets outside the urban edge.

The proposed development may therefore be regarded as generally consistent with municipal planning objectives, spatial policy directives, and long-term sustainability goals applicable to the Knysna municipal area.

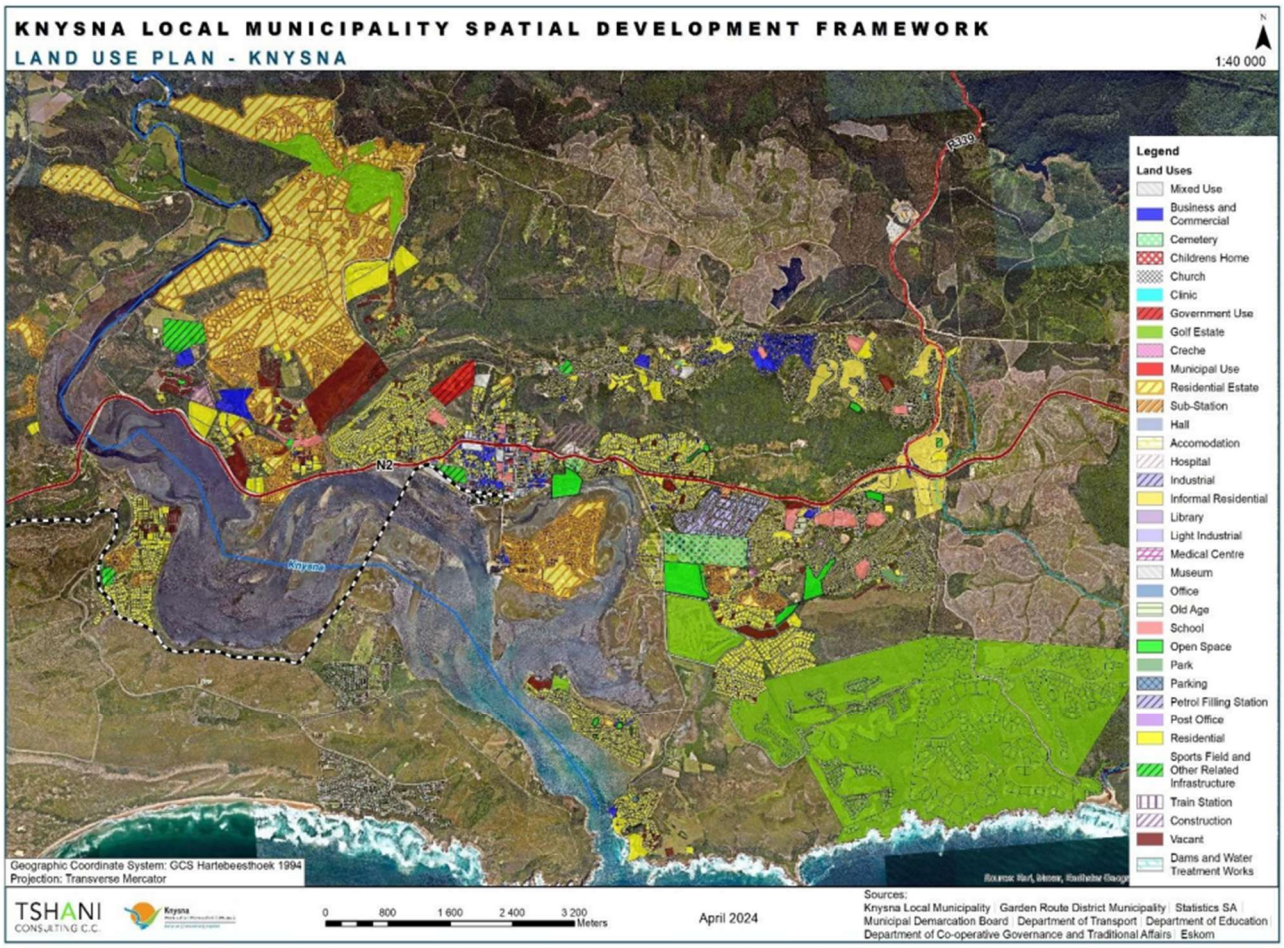


***FIGURE 14**: KNYSNA LOCAL MUNICIPALITY SPATIAL DEVELOPMENT FRAMEWORK (SDF) – LAND USE PLAN, ILLUSTRATING THE LOCATION OF PORTION 79 OF FARM RUYGTE VALLEY NO. 205 RELATIVE TO THE SEDGEFIELD URBAN EDGE AND SURROUNDING RURAL AND CONSERVATION AREAS. (SOURCE: KNYSNA LOCAL MUNICIPALITY SDF, 2020)*

Approved Structure Plan of the Municipality

The Knysna Local Municipality no longer relies on a standalone "Structure Plan" in the traditional planning sense. In terms of the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013) ("SPLUMA"), the strategic spatial planning role historically performed by structure plans is now primarily undertaken through the Municipal Spatial Development Framework (SDF), read together with applicable land-use schemes and related municipal planning instruments.

The Knysna Spatial Development Framework (SDF, 2020) therefore constitutes the Municipality's principal approved spatial structuring instrument, providing strategic guidance on land use, settlement patterns, environmental management, infrastructure planning, rural development, and economic growth across the municipal area.

Spatial Context of the Subject Property

Portion 79 of Farm Ruygte Valley No. 205 is situated outside the Sedgefield Urban Edge within the Groenvlei rural coastal landscape.

In terms of the broader spatial logic of the approved SDF, this area is characterised by:

- rural and low-density land use patterns;
- environmental sensitivity and biodiversity importance;
- scenic landscape value;
- conservation and nature-based tourism potential; and
- limited bulk municipal infrastructure availability.

The SDF generally directs that development in such areas should be:

- limited in scale;
- environmentally responsive;
- compatible with landscape and biodiversity objectives;
- appropriately serviced; and
- structured so as not to promote urban sprawl or fragmented settlement patterns.

Alignment of the Proposal

The proposed development comprises a compact, low-intensity development node with the majority of the property (approximately 97.3%) remaining in a natural or rehabilitated state.

The Applicant further proposes rezoning of the property from Agriculture Zone I to Open Space III (Nature Conservation Area), subject to separate municipal approval processes. This planning approach would strengthen the conservation function of the property while allowing a tightly controlled development footprint.

Where additional accommodation units are proposed, these would remain subject to the necessary municipal planning approvals, including any consent use process required by the Municipality.

The proposal is considered broadly aligned with the intent of the municipal spatial framework in that it:

- retains the dominant rural and conservation character of the site;
- confines development to a compact footprint of approximately 1 375 m²;
- avoids dispersed settlement across the property;
- supports private environmental stewardship and rehabilitation;
- relies on low-demand or off-grid servicing systems; and
- may support modest low-impact tourism or accommodation opportunities, subject to planning approval.

Tourism and Rural Economy Considerations

The Knysna municipal area recognises tourism, particularly nature-based and low-intensity tourism, as an important component of the local economy. Appropriately scaled accommodation in environmentally sensitive areas may be supported where ecological integrity, scenic quality, and infrastructure constraints are adequately addressed.

The proposed development is modest in scale and does not represent a resort, estate, or urban-style expansion.

Conclusion

Although no separate traditional municipal Structure Plan applies, the proposal has been assessed against the current approved municipal spatial planning framework as embodied in the Knysna Spatial Development Framework.

Subject to all required environmental and municipal approvals, the proposed development is not expected to compromise the integrity of the municipal spatial structure.

On the contrary, the proposal is considered broadly supportive of conservation-led land use, limited low-impact rural development, and retention of the environmental character of the Groenvlei coastal landscape.
Accordingly, the activity may be regarded as generally consistent with the Municipality's approved spatial planning framework.

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 Environmental Management Framework (EMF) provides strategic spatial and environmental guidance for development within the district and is intended to support informed and sustainable decision-making in environmentally sensitive landscapes. The EMF recognises biodiversity priority areas, landscape sensitivity, rural settlement pressures, and the importance of maintaining ecological systems and scenic character outside the urban edge.

The EMF identifies Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) as important spatial informants and promotes a precautionary approach to development in rural areas, with emphasis on biodiversity protection, landscape integrity, infrastructure efficiency, and appropriately scaled land use.

The EMF further notes that rural development outside the urban edge should generally remain low in density, with density considerations influenced by landscape sensitivity, carrying capacity, infrastructure limitations, and site-specific environmental constraints.

Site Context

Portion 79 of Farm Ruygte Valley No. 205 measures approximately 5.1576 hectares and is situated outside the Sedgefield Urban Edge within a sensitive coastal landscape characterised by biodiversity value, scenic qualities, and low-density rural land use.

The property contains mapped biodiversity sensitivities and coastal constraints, which have informed the environmental assessment and layout refinement process.

Nature of the Proposal

The proposal comprises:

- one primary dwelling house; and
- three additional small low-intensity accommodation units, together with associated access, parking and ancillary infrastructure.

These units are clustered within a single compact development node and do not represent a subdivision of the property or dispersed settlement across the site.

The accommodation component is ancillary to the broader land-use concept and remains subject to separate municipal planning approvals where applicable.

Density and Settlement Pattern Considerations

While the EMF provides broad rural density guidance, the present application has been assessed on the basis of:

- the compact clustered footprint;
- retention of the majority of the site in a natural state;
- the absence of subdivision;
- off-grid or low-demand servicing systems;
- site-specific environmental constraints; and
- proposed long-term conservation management of the balance of the property.

The proposal, therefore, does not create a fragmented or township-style settlement pattern.

Environmental Footprint and Conservation Outcome

The total development footprint is approximately 1 375 m², representing approximately 2.7% of the total site area. Approximately 97.3% of the property is proposed to remain in a natural or rehabilitated condition, thereby maintaining the broader landscape character, ecological permeability, and open-space function of the site.

The Applicant further proposes rezoning of the property to Open Space III (Nature Conservation Area), subject to separate municipal approval processes. This would strengthen long-term conservation management and reduce the likelihood of future incompatible land-use intensification.

Landscape and Visual Considerations

The broader Garden Route coastal landscape is environmentally and visually sensitive. Available specialist input indicates that visual impacts can be reduced through compact clustering, vegetation retention where feasible, muted finishes, and careful siting.

Given the limited scale of the proposal and concentration of development within one node, the project is not expected to materially alter the wider landscape character if mitigation measures are implemented.

Conclusion on EMF Alignment

Approval of the proposed development is not expected to compromise the integrity of the Garden Route EMF or the environmental management priorities applicable to the area.

Subject to all required approvals and mitigation measures, the proposal is considered broadly supportive of EMF objectives in that it:

- limits development intensity outside the urban edge;
- avoids dispersed settlement patterns;
- retains the majority of the site in a natural state;
- supports biodiversity stewardship and rehabilitation;
- promotes conservation-compatible land use; and
- utilises low-demand servicing infrastructure.

Accordingly, the proposed activity may be regarded as generally consistent with the intent of the Garden Route Environmental Management Framework and justifiable in terms of sustainability considerations.

WESTERN CAPE RURAL AREAS GUIDELINES (DEA&DP, 2019)

The Western Cape Rural Areas Guidelines (DEA&DP, 2019) provide a strategic framework for land-use planning and management outside the urban edge, with the objective of balancing biodiversity conservation, rural livelihoods, landscape protection, and appropriate economic activity. The Guidelines form part of the implementation toolkit of the Western Cape Provincial Spatial Development Framework (PSDF) and guide sustainable development within environmentally sensitive rural landscapes.

The Guidelines generally promote low-impact, biodiversity-sensitive land uses that are compatible with natural systems, particularly in areas of ecological importance, scenic sensitivity, and rural landscape value. They also encourage appropriate economic activity that does not undermine environmental integrity or the rural spatial character of an area.

Nature-Based Tourism and Rural Accommodation

The Rural Areas Guidelines recognise that eco-tourism, rural accommodation, and nature-based land uses may be appropriate in rural areas where such activities are:

- limited in scale;
- sensitively designed and sited;
- compatible with surrounding environmental conditions;
- appropriately serviced; and
- managed so as not to compromise ecological systems, scenic quality, or rural character.

These principles are relevant to Portion 79 of Farm Ruygte Valley No. 205, which forms part of a broader coastal conservation landscape adjoining private conservation properties and protected natural areas.

The proposed development comprises a compact low-intensity residential node, including one primary dwelling and three additional small accommodation units, together with associated access and ancillary infrastructure. The accommodation component remains subject to the relevant planning approvals where required.

Visual and Landscape Integration

The Guidelines support development that applies environmentally responsive design principles and integrates with the receiving landscape.

Available visual specialist input indicates that visual impacts can be reduced through:

- compact clustering of structures;
- vegetation retention where feasible;
- muted colours and non-reflective materials;
- low-profile built form; and
- careful siting in relation to topography.

The proposed use of lightweight construction materials and a limited footprint may further reduce excavation and landform disturbance.

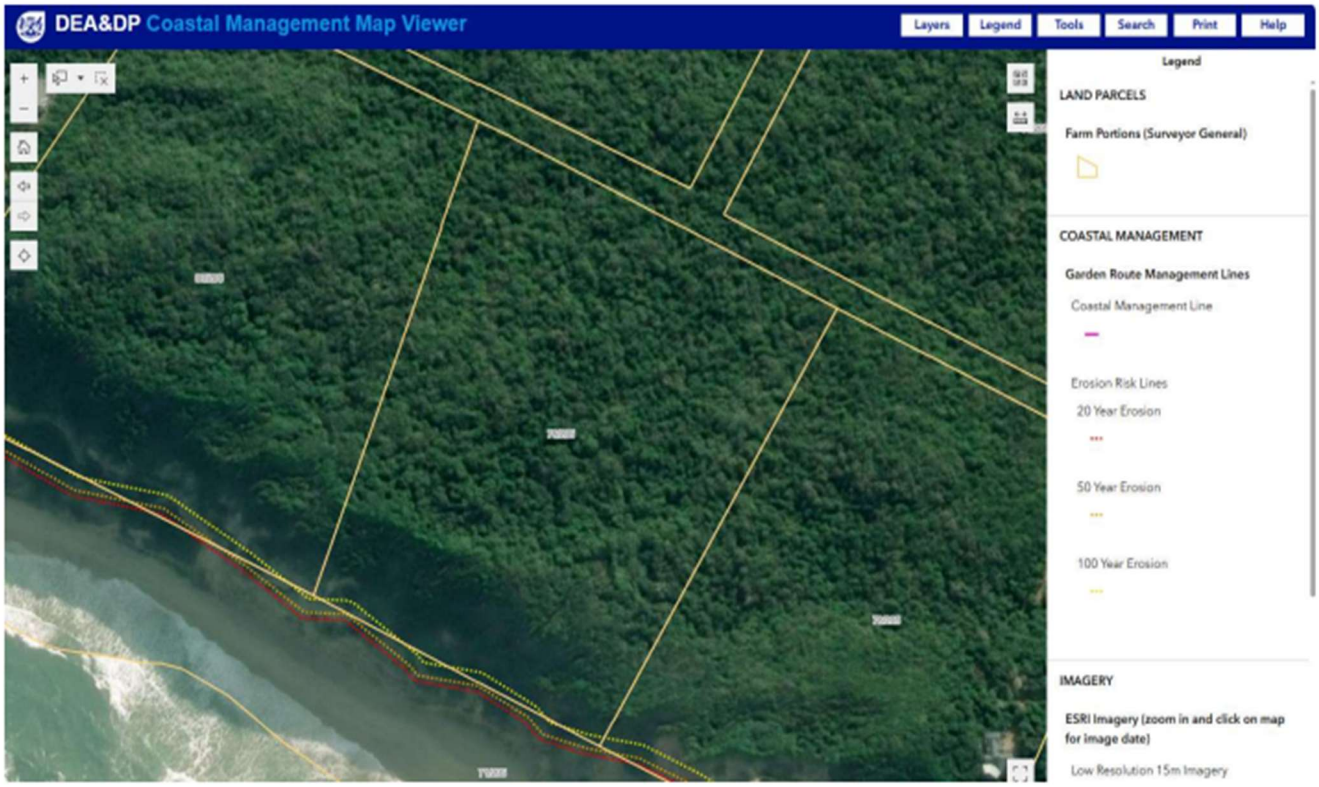


FIGURE 15: THE DEA&DP COASTAL MANAGEMENT MAP VIEWER IDENTIFIES THE 20-, 50-, AND 100-YEAR COASTAL EROSION RISK LINES APPLICABLE TO THE SITE

Coastal management and erosion risk

The Western Cape Rural Areas Guidelines place emphasis on the protection of coastal resources and compliance with coastal management legislation and planning controls.

Portions of the property fall within the broader 100-metre High Water Mark trigger area. This has been considered through the environmental assessment process together with available specialist investigations, constraints mapping, and applicable coastal datasets.

Available geotechnical and environmental inputs indicate that the preferred development footprint is located in a comparatively lower-risk portion of the site relative to identified higher-risk coastal edge areas, subject to implementation of mitigation measures and detailed design controls.

Integration with Site Constraints

Environmental constraints have been translated into site-specific planning controls through the Site Constraints Map and broader assessment process, which considered:

- the 100 m High Water Mark trigger area;
- coastal process constraints;
- topographical and geotechnical considerations;
- mapped Critical Biodiversity Areas; and
- the refined preferred development footprint.

This demonstrates a constraints-led planning approach in which environmental limits informed the layout process.

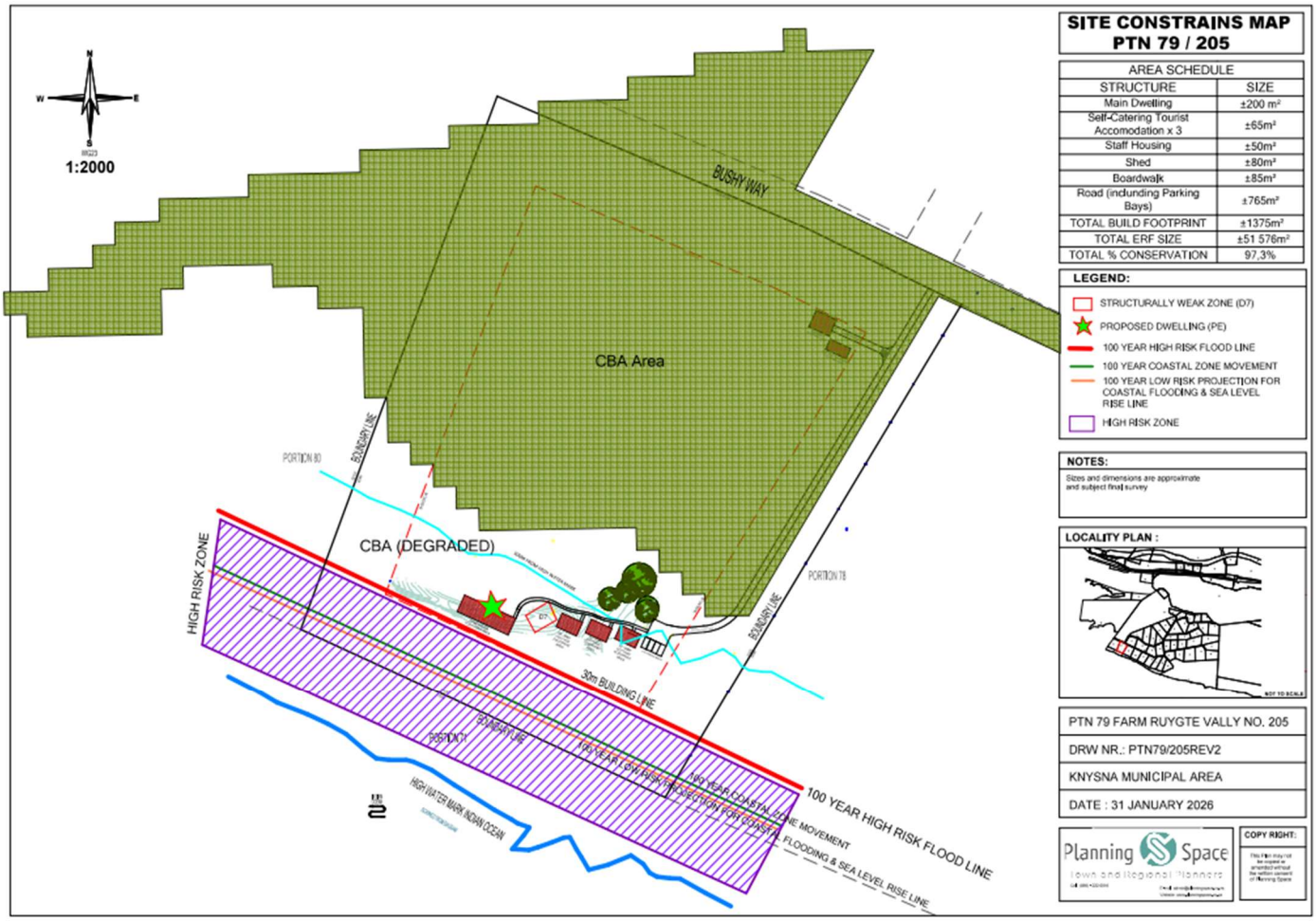


FIGURE 16: UPDATED SITE CONSTRAINTS MAP SHOWING VEGETATION TYPES (CBA1, CBA2), SLOPE CONTOURS, ACCESS ROUTES, AND PROPOSED DEVELOPMENT AREA ON PORTION 79 OF FARM RUYGTE VALLEY NO. 205, SEDGEFIELD.

SOURCE: APPENDIX B1 – SITE CONSTRAINTS MAP (2026).

Alignment with Rural Conservation Objectives

The proposed development is considered broadly aligned with the Western Cape Rural Areas Guidelines in that it:

- retains approximately 97.3% of the property in a natural or rehabilitated state;

- confines development to a single compact low-impact node;
- allows for alien invasive species clearing and rehabilitation measures;
- proposes low-demand or off-grid servicing systems; and
- supports conservation-compatible land use within a sensitive coastal landscape.

Conclusion

Approval of the proposed development is not expected to compromise the intent of the Western Cape Rural Areas Guidelines or applicable rural conservation priorities.

Subject to all required approvals and implementation of mitigation measures, the proposal is considered broadly supportive of provincial rural planning policy by promoting conservation-led land use, protecting environmental resources, limiting development intensity, and enabling appropriately scaled low-impact use outside the urban edge.

The proposed development may therefore be regarded as generally consistent with the Western Cape's rural planning and conservation objectives, as well as the broader intent of the Garden Route Environmental Management Framework and related policy instruments.

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

The Knysna Municipality Standard By-law on Municipal Land Use Planning, 2016, governs land-use and development applications within the municipal area and provides the legislative framework for municipal planning decisions. In terms of the By-law, applications must be assessed with reference to planning, environmental, engineering, governance, and public-interest considerations to ensure lawful, sustainable, and spatially appropriate development.

In evaluating land-use applications, the Municipality may consider, inter alia:

- the desirability of the proposed utilisation of land;
- impacts on municipal engineering services and infrastructure;
- alignment with the Integrated Development Plan (IDP) and Municipal Spatial Development Framework (SDF);
- consistency with the Provincial Spatial Development Framework (PSDF);
- applicable national and provincial planning policy;
- matters referred to in Section 42 of SPLUMA; and
- the principles contained in the Western Cape Land Use Planning Act (LUPA).

The planning assessment below is informed by the available town planning inputs and the environmental assessment process.

Spatial Planning and Land Use Management Act, 2013 (SPLUMA) Development Principles

Section 7 of SPLUMA sets out development principles that must guide spatial planning, land-use management, and development decisions. The proposed development on Portion 79 of Farm Ruygte Valley No. 205 has been considered against these principles as follows.

Spatial Justice

Spatial justice seeks to address historical spatial inequalities and promote equitable access to land, resources, and opportunities.

The subject property is privately owned and the proposal does not involve exclusionary high-intensity land use, gated expansion, or spatially disruptive subdivision. The development remains limited in scale and does not remove public rights of access to coastal resources.

The proposed conservation-oriented land use, together with retention of the majority of the property in a natural state, supports broader public environmental interests.

Spatial Sustainability

Spatial sustainability is promoted through land-use planning that balances environmental protection, social benefit, and economic viability.

The proposal includes a compact development footprint of approximately 1 375 m², representing roughly 2.7% of the total site area, with approximately 97.3% of the property proposed to remain natural or rehabilitated.

The Applicant's intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, may further strengthen biodiversity stewardship and long-term environmental management.

Low-demand servicing systems such as solar power, rainwater harvesting, and on-site wastewater management reduce pressure on municipal infrastructure and support sustainable rural land use.

Spatial Efficiency

Spatial efficiency is promoted through prudent use of land and infrastructure.
The proposal clusters development into a single compact node rather than dispersing structures across the property. This reduces infrastructure spread, access requirements, and cumulative disturbance.

The proposal is further intended to rely substantially on self-sufficient service systems, thereby limiting demand for new municipal engineering services.

Spatial Resilience

Spatial resilience relates to the capacity of settlements and land uses to respond to environmental, climatic, and economic risks.

The proposed layout has been informed by available environmental and engineering inputs, including biodiversity, coastal, topographical, and geotechnical considerations.

The preferred footprint seeks to locate development in the comparatively lower-risk portion of the site relative to identified coastal edge and steeper slope constraints, subject to final design and mitigation measures.
Use of off-grid systems and retention of natural landscape areas may further contribute to long-term resilience.

Good Administration

The principle of good administration requires transparent, lawful, coordinated and informed decision-making.
The application has been subject to environmental assessment procedures, specialist input, and public participation in accordance with applicable legislation.

Municipal planning approvals, if pursued, will remain subject to separate statutory processes, allowing coordinated decision-making between environmental and planning authorities.

Conclusion

The proposed development is considered broadly consistent with the intent of the Knysna Municipality Standard By-law on Municipal Land Use Planning, 2016, and the development principles contained in SPLUMA and LUPA.

Subject to all required approvals, the proposal represents a conservation-oriented and limited-scale land-use outcome that supports spatial sustainability, efficiency, and resilience while remaining aligned with broader municipal, provincial, and national planning frameworks.

Accordingly, the application may be regarded as generally supportable from a municipal land-use planning perspective.

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.)

Guideline Context

In terms of the Guideline on Need and Desirability, "need" considers whether the proposed development is appropriate in timing and broader policy context, while "desirability" considers whether the proposed land use is suitable for the specific location.

These considerations are typically informed by relevant planning and environmental instruments, including:

- the Knysna Spatial Development Framework (SDF);
- the Garden Route Environmental Management Framework (EMF);
- the Western Cape Provincial Spatial Development Framework (PSDF);
- the Knysna Integrated Development Plan (IDP);
- the principles of the National Environmental Management Act, 1998 (NEMA); and
- the Spatial Planning and Land Use Management Act, 2013 (SPLUMA).

Need

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 comprises a primary dwelling house, associated infrastructure, and additional small low-intensity accommodation units forming part of the broader land-use concept, subject to the necessary planning approvals where applicable.

At a site-specific level, there is a legitimate need for the landowner to make reasonable use of privately owned land, including the exercise of existing residential land-use entitlements, while managing the property in a responsible and conservation-oriented manner.

The proposal also responds to broader policy objectives that support:

- appropriately scaled rural development outside the urban edge;
- biodiversity stewardship on private land;
- rehabilitation of degraded landscapes;
- low-impact land use compatible with environmental sensitivity; and
- sustainable resource use through off-grid or low-demand systems.

Available specialist studies indicate that the site has environmental sensitivity and limited agricultural potential, supporting the rationale for a conservation-oriented rather than intensive productive land use.

The Applicant's intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, may further secure long-term conservation management over the majority of the property.

From a timing perspective, the proposal arises within a broader policy context increasingly focused on biodiversity protection, climate resilience, sustainable rural economies, and responsible land stewardship.

Desirability

Desirability concerns whether the site is appropriate for the proposed activity, having regard to surrounding land uses, environmental constraints, and planning policy.

The property occurs within a rural coastal landscape characterised by:

- low-density rural holdings;
- private conservation areas;

- scenic landscape value; and
- biodiversity sensitivity.

The proposed development is of limited scale and is clustered into a compact node rather than dispersed across the site. Available environmental and engineering inputs indicate that, subject to mitigation and detailed design, the site can accommodate limited development within a constrained footprint.

The proposed land use is considered broadly compatible with surrounding land uses, which include rural residential properties, conservation areas, and protected natural landscapes.

The proposal further seeks to retain approximately 97.3% of the property in a natural or rehabilitated state, with disturbance confined to approximately 1 375 m².

Low-demand servicing systems such as solar power, rainwater harvesting, and on-site wastewater management further support suitability in a rural area outside the urban edge.

Societal Priority Considerations

The proposal is not considered a strategic national infrastructure priority or essential public facility. However, societal priority in this context is broader than public infrastructure alone and includes sustainable land use, conservation stewardship, local economic contribution, and responsible rural development.

In this regard, the proposal may contribute positively through:

- private investment in environmental management and rehabilitation;
- temporary construction employment and local procurement;
- modest support to the local rural and visitor economy;
- protection of ecological assets through conservation-oriented land use; and
- avoidance of higher-impact land use alternatives.

Conclusion

The proposed development is not a strategic public necessity in the conventional sense, but it is considered to respond to legitimate local and site-specific needs.

The activity enables reasonable private land use while supporting conservation management, maintaining a low development intensity, and aligning broadly with applicable planning and environmental policy.

Given the limited footprint, conservation-oriented approach, and compatibility with the surrounding rural context, the proposed activity may be regarded as both needed and desirable at the local level, and not inconsistent with broader societal sustainability priorities.

Guideline Context

There is currently no municipal electrical infrastructure serving Portion 79 of Farm Ruygte Valley No. 205 or the adjacent road reserve. Given the rural location of the property, the absence of bulk municipal services, and the environmental sensitivity of the surrounding landscape, extension of conventional grid-based services is not considered practical or desirable.

The proposed development will therefore make use of predominantly off-grid utility systems, including renewable energy generation, rainwater harvesting, and on-site wastewater management.

Solar Power System

Type and System Configuration

The proposed electricity supply will comprise an off-grid solar photovoltaic (PV) system designed to meet the anticipated operational demand of the development.

Solar generation will supply daytime electrical loads, with surplus energy stored in battery systems for use during evening and low-sunlight periods.

The system will operate as a self-contained residential micro-grid and may be expanded in future, if required, through additional PV modules, inverter capacity, or battery storage.

Plant Location

Solar panels are proposed as roof-mounted systems on the main dwelling and the additional accommodation units.
Roof-mounted installation:

- avoids unnecessary ground disturbance;
- reduces visual impact;
- utilises existing built surfaces; and
- minimises vegetation clearance.

Plant Capacity

The proposed photovoltaic installation is expected to have an indicative generation capacity of approximately 15 kWp, subject to final engineering design.

Daily electricity demand is currently estimated at up to approximately 30 kWh/day, depending on occupancy patterns, appliance selection, and seasonal usage.

Energy Storage

A sealed Lithium Iron Phosphate ($LiFePO_4$) battery system is proposed.
This technology offers:

- long service life;
- improved thermal stability;
- high operational safety;
- rapid charging capability; and
- suitability for off-grid residential applications.

Battery capacity will be confirmed during final design based on actual load calculations.

Area and Access Lighting

Internal access and pathway lighting will comprise low-intensity, low-level bollard luminaires or equivalent fittings.

These may include:

- solar-powered units;
- motion sensors;
- shielded fittings; and
- low-glare design.

This approach reduces light pollution, limits disturbance to fauna, and supports dark-sky principles appropriate to the rural coastal environment.

Environmental Impact and Mitigation

The internal electrical distribution network and utility services will be designed to integrate with the site and surrounding landscape.

All associated infrastructure, including cabling, inverters, battery housings and ancillary equipment, will be:

- low-profile where feasible;
- visually recessive in colour and finish;
- located adjacent to buildings or disturbed areas where practicable; and
- installed to minimise vegetation disturbance.

Service routes will, where feasible, follow existing disturbed areas, boardwalk alignments, or access routes.

All installation activities will be subject to the Environmental Management Programme (EMPr), including rehabilitation and monitoring requirements.

Energy Efficiency Measures

Energy efficiency principles will be incorporated into the design and operational phases of the development.

These include:

- LED lighting;
- energy-efficient appliances;
- solar water heating or equivalent efficient systems where feasible;
- passive building orientation and ventilation;
- insulation and thermal performance measures; and
- demand-side management to reduce peak consumption.

These measures reduce total energy demand and optimise the size of the renewable energy system required.

Water Reticulation

Municipal bulk water services are not available to the property.

Domestic water demand is proposed to be supplied primarily through rainwater harvesting systems installed at each building, with storage tanks located on site.

Collected roof runoff will be stored for domestic use, subject to treatment and quality controls where required.

Supplementary water solutions may be implemented if necessary and subject to all applicable approvals.

This approach reduces reliance on municipal infrastructure and supports water conservation objectives.

Fire Risk

Given the rural location and surrounding vegetation context, fire risk management is an important planning consideration.

Fire safety measures will be incorporated into the final design and operational management of the site, including:

- emergency vehicle access;
- defendable space around structures where appropriate;
- water storage for firefighting where required;
- fire-resistant materials where feasible; and
- compliance with local authority fire requirements.

Sewer Reticulation

Municipal bulk sewer infrastructure is not available in the area.

Wastewater will therefore be managed through sealed conservancy tanks or other approved on-site systems, subject to municipal and environmental approval requirements.

Effluent will be removed by an appropriately authorised service provider and disposed of at a lawful treatment or disposal facility.
All wastewater systems will be designed to prevent leakage, pollution, and impacts on surrounding soil, groundwater, or ecological systems.

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

Municipal Infrastructure Planning

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 is situated outside the Sedgefield urban edge within a rural coastal landscape where municipal bulk engineering services are limited and where conventional urban service extension is not generally anticipated in the short- to medium-term planning horizon.

The site falls outside the primary serviced development envelope of the Municipality and the proposal has therefore been designed to minimise reliance on municipal infrastructure.

The development is intended to operate predominantly through off-grid or low-demand service systems. Subject to final detailed design and relevant approvals:

- electricity will be supplied primarily through a solar photovoltaic system with battery storage;
- domestic water demand will be met primarily through rainwater harvesting and on-site storage systems;
- wastewater will be managed through sealed conservancy tanks or other approved on-site systems; and
- stormwater will be managed on-site through appropriate drainage and erosion-control measures.

No conventional connection to municipal bulk electricity, water, sewer or stormwater reticulation networks is presently proposed.

Implications for Municipal Infrastructure Planning

Because the proposed development is designed to function with limited dependence on municipal bulk services, it is not expected to place material additional demand on existing or planned municipal infrastructure.

Accordingly:

- no significant additional burden on municipal electricity, water or sewer networks is anticipated;
- no substantial reprioritisation of municipal capital investment is expected;
- no meaningful diversion of resources from higher-priority service delivery areas is foreseen; and
- long-term municipal operational and maintenance obligations are expected to be limited.

The proposal is therefore unlikely to materially affect the timing, sequencing, or placement of municipal infrastructure rollout to existing settlements or planned growth nodes.

Access Infrastructure

Vehicular access is proposed via existing public or servitude-based routes, including Groenvlei Beach Road and the Public Servitude Road (Bushy Way), subject to lawful access rights and any approvals that may be required.
Any access upgrades, maintenance, or site-specific improvements necessary to facilitate construction or operation are expected to be undertaken at the Applicant's cost, unless otherwise agreed with the relevant authority.
The proposal is therefore not expected to generate significant municipal road infrastructure obligations.

Opportunity Cost Considerations

Opportunity cost in municipal infrastructure planning generally relates to whether approval of a development diverts scarce public resources away from higher-priority areas requiring housing, sanitation, roads, or community facilities.

Given the limited scale of the proposal and its intended low-demand servicing model, the development is not expected to create a material opportunity cost for the Municipality.

Conclusion

The proposed development is considered broadly compatible with the Municipality's infrastructure planning context. Its low-density and predominantly off-grid servicing model is intended to ensure functional self-sufficiency while minimising demand on municipal engineering services.

Subject to all required approvals, the proposal is not expected to undermine municipal infrastructure priorities or create significant additional service liabilities.

The activity may therefore be regarded as generally consistent with sustainable rural infrastructure planning principles.

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

National Programme Alignment

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 is a privately initiated, site-specific land-use proposal comprising a primary dwelling house, associated infrastructure, and additional low-intensity accommodation components as part of the broader development concept.

The proposal does not form part of a national government programme, strategic state intervention, or nationally coordinated infrastructure initiative.

It is not identified as a component of:

- the National Development Plan (NDP);
- Strategic Integrated Projects (SIPs) under the Infrastructure Development Act;
- a national housing delivery programme;
- a national tourism infrastructure programme;
- a national public utility rollout; or
- any similar state-led programme addressing a matter of national priority.

The application is therefore not driven by a national imperative in the conventional sense, but rather by private land-use and conservation objectives at a local scale.

Broader National Policy Consistency

Although not part of a national programme, the proposal may be considered broadly consistent with national policy principles that support:

- sustainable land use and environmental stewardship;
- biodiversity protection and rehabilitation;
- climate-responsive and resource-efficient development;
- responsible rural development; and
- lawful spatial planning and land-use management.

These principles are reflected in, inter alia:

- the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- the Spatial Planning and Land Use Management Act, 2013 (Act No. 16 of 2013);
- the National Biodiversity Framework; and
- broader national sustainability and climate resilience policy directions.

Scale and Strategic Importance

The project is limited in scale and localised in nature. It does not constitute strategic national infrastructure, major public works, regional economic infrastructure, or a development required to address a national service delivery backlog.

Its impacts and benefits are primarily local and site-specific.

Conclusion

The proposed development is not part of a national programme to address an issue of national concern or importance. It is a private site-specific proposal to be assessed on its own environmental, planning, and sustainability merits.

However, the proposal is considered broadly aligned with national legislative and policy principles promoting sustainable development, biodiversity stewardship, and responsible land-use management.

Accordingly, while not a national priority project, it is not inconsistent with broader national development and environmental objectives.

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.)

The suitability of Portion 79 of Farm Ruygte Valley No. 205 for the proposed land use must be assessed with reference to the site's physical characteristics, environmental constraints, surrounding land uses, access arrangements, servicing context, and broader planning policy framework.

Overall, while the site is environmentally sensitive and requires careful management, a number of location factors are considered to favour a limited, low-intensity and conservation-compatible land use, subject to strict mitigation and approval conditions.

Private Ownership and Low-Intensity Use

The property is privately owned and the proposal comprises a compact development node including:

- one primary dwelling house;
- associated ancillary infrastructure; and
- three additional small accommodation units forming part of the broader land-use concept, subject to the relevant planning approvals.

The scale of the proposal is limited relative to the overall size of the property and the broader site sensitivity.
The intended use is substantially lower in intensity than urban, resort, estate, or intensive agricultural alternatives and is therefore more compatible with the rural coastal context.

Existing Access and Road Infrastructure

The property benefits from established access via existing public and servitude-based road networks, including Groenvlei Beach Road, the Groenvlei Divisional Road (DR1594), and the Bushy Way servitude route, subject to lawful rights and any approvals required.
No major new public road construction is proposed.
The availability of existing access routes supports the practical suitability of the location for limited development.

Conservation Landscape Context

The property forms part of a broader rural coastal landscape containing private conservation areas, natural vegetation, and protected environmental features.

The Applicant's stated intention to pursue rezoning of the property to Open Space III (Nature Conservation Area), subject to separate municipal approval, may strengthen the long-term conservation role of the site while allowing a tightly controlled development envelope.

This location, therefore, lends itself more readily to conservation-oriented land use than to intensive urban expansion or higher-impact alternatives.

Environmental and Physical Suitability

Environmental sensitivity is present on the site and has required a constraints-led planning approach.

Available specialist studies and site assessments indicate that the preferred development footprint has been refined to reduce interaction, where feasible, with:

- higher biodiversity sensitivity areas;
- indigenous forest patches;
- steeper slopes;
- coastal process constraints; and
- other mapped environmental limitations.

The proposed footprint is concentrated within a relatively limited portion of the site.

Available geotechnical input indicates that development may be feasible within the preferred footprint, subject to appropriate engineering design, drainage controls, and construction management.

Alignment with Planning Frameworks

The property is situated outside the Sedgefield urban edge within an area where low-density rural land use, conservation functions, and carefully controlled development are generally more appropriate than urban-style expansion.

The proposal is considered broadly aligned with:

- the Knysna Spatial Development Framework (SDF);
- the Garden Route Environmental Management Framework (EMF);
- the Western Cape Provincial Spatial Development Framework (PSDF); and
- provincial rural planning guidelines.

Visual and Social Context

The broader area is valued for its scenic coastal and rural landscape character.

For this reason, any development must remain limited in scale and visually sensitive.

Available visual specialist input indicates that visual impacts can be reduced through:

- compact clustering of structures;
- vegetation retention where feasible;
- muted colours and materials;
- careful siting; and
- low-profile design responses.

The limited scale of the proposal also reduces the likelihood of substantial social or neighbourhood conflict compared with more intensive alternatives.

Servicing Suitability

The rural location and limited municipal bulk infrastructure availability favour a low-demand servicing model.

The proposal is intended to rely substantially on:

- solar power generation;
- rainwater harvesting;
- on-site wastewater systems; and
- minimal demand on municipal infrastructure.

This servicing approach is generally appropriate to a rural site outside the urban edge.

Conclusion

Location factors are considered to conditionally favour the proposed land use, provided the development remains limited in scale and all environmental mitigation measures are implemented.

The site's rural setting, existing access, conservation context, ability to accommodate a compact footprint, and compatibility with off-grid servicing all support a low-intensity conservation-oriented land use more readily than higher-impact alternatives.

However, this suitability is dependent on strict environmental controls, detailed design sensitivity, and compliance with all required approvals.

Accordingly, the proposed activity may be regarded as contextually appropriate at this location, subject to conditions.

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

The proposed development is considered to represent the Best Practicable Environmental Option (BPEO), or preferred reasonable development option, for Portion 79 of Farm Ruygte Valley No. 205, Sedgefield, having regard to the environmental sensitivity of the site, limited land capability, long-term sustainability objectives, and the reasonable exercise of existing land-use rights.
This conclusion is informed by the environmental assessment process and available specialist inputs, including biodiversity, agricultural, visual, planning, and geotechnical investigations.

Site Capability and Existing Land Use Potential
Available specialist studies indicate that the property has limited agricultural capability due to factors including sandy soils, topographical constraints, environmental sensitivity, and vegetation conservation value.
The site, therefore, appears more suited to low-intensity conservation-oriented land use than to intensive agricultural production or higher-impact rural development.

Development of the preferred footprint is not expected to result in the loss of significant viable agricultural land.

Conservation-Oriented Land Use Outcome
The proposal combines limited private residential use with long-term environmental stewardship.
The Applicant intends to pursue rezoning of the property to Open Space III (Nature Conservation Area), subject to separate municipal approval processes.

Approximately 97.3% of the 5.1576 ha property is proposed to remain in a natural or rehabilitated condition, with development confined to an area of approximately 1 375 m².
This approach would allow:

- alien invasive vegetation control;
- rehabilitation of disturbed areas;
- retention of open space and habitat;
- low development intensity; and
- long-term conservation management.

Constraints-Led Layout Selection
The preferred footprint has been refined through a constraints-led planning process informed by available environmental and engineering inputs.

The layout seeks, where feasible, to reduce interaction with:

- higher biodiversity sensitivity areas;
- indigenous forest patches;
- steeper slopes;
- coastal risk constraints; and
- visually sensitive areas.

The proposal further incorporates compact clustering of structures rather than dispersed development across the property.

Low Impact Servicing and Design

The development is intended to operate substantially through off-grid or low-demand systems, including:

- solar energy generation;
- rainwater harvesting;
- on-site wastewater systems; and
- limited municipal infrastructure dependence.

Low-impact construction methods and environmentally responsive design principles are also proposed to reduce disturbance.

Comparison with Other Reasonable Alternatives

Alternative land-use scenarios were considered through the broader need, desirability, and site capability assessment.

Intensive Agriculture or Expanded Productive Use

Likely to require greater vegetation transformation, water demand, earthworks, and ecological disturbance.

Subdivision or Higher-Density Development

Would likely increase fragmentation, access infrastructure, servicing demand, and cumulative environmental impacts.

Full No-Go / No Development Alternative

Would avoid direct development impacts but may not necessarily secure active rehabilitation, invasive species management, or formal long-term conservation controls.

Preferred Limited Development Alternative

The proposed clustered conservation-oriented residential model seeks to balance:

- limited lawful use of private land;
- conservation management;
- reduced footprint disturbance; and
- long-term sustainability outcomes.

Conclusion

Based on the reasonable alternatives considered, the proposed development is regarded as the best practicable environmental option currently identified for the site, subject to implementation of mitigation measures and approval conditions.

It is preferred because it:

- limits disturbance to a compact footprint;
- retains the majority of the property in a natural state;
- supports biodiversity stewardship;
- avoids more intensive land-use outcomes;
- minimises infrastructure demand; and
- allows reasonable private use of the property.

Accordingly, the proposal may be regarded as the most environmentally responsible and sustainable practicable land-use option presently available for Portion 79 of Farm Ruygte Valley No. 205.

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

Balance of Benefits and Impacts

Based on the findings of the environmental assessment process, the anticipated benefits of the proposed low-intensity development and associated long-term conservation management on Portion 79 of Farm Ruygte Valley No. 205 are considered likely to outweigh the potential negative impacts, provided that all mitigation measures and approval conditions are effectively implemented.

The proposed total development footprint is approximately 1 375 m², representing approximately 2.7% of the total property extent of 5.1576 ha.

Accordingly, approximately 97.3% of the property is proposed to remain in a natural or rehabilitated condition.
The Applicant further intends to pursue rezoning of the property to Open Space III (Nature Conservation Area), subject to separate municipal approval processes, which may strengthen long-term conservation management of the site.

Key Benefits

Long-Term Conservation Outcome

The proposed planning approach would retain the majority of the site under a conservation-oriented land use rather than more intensive alternatives.

Potential benefits include:

- retention of natural open space;
- reduced likelihood of future inappropriate intensification;
- stronger management oversight; and
- improved long-term biodiversity stewardship.

Environmental Stewardship and Rehabilitation

The Applicant has indicated commitments to:

- alien invasive species clearing;
- rehabilitation of disturbed areas;
- erosion control; and
- ongoing environmental management.

These measures may improve portions of the site currently affected by invasive species or past disturbance.

Sustainable Low-Demand Development

The proposal is intended to operate substantially through off-grid or low-demand systems, including:

- solar power generation;
- rainwater harvesting;
- on-site wastewater management; and
- reduced dependence on municipal infrastructure.

This supports sustainable resource use in a rural location outside the urban edge.

Limited Scale of Development

The proposed footprint remains relatively small in relation to the overall property size and is clustered into a single compact node rather than dispersed across the site.
This reduces fragmentation and infrastructure spread.

Planning and Policy Alignment

The proposal is considered broadly aligned with the intent of applicable planning instruments promoting:

- conservation-compatible rural land use;

- controlled development outside the urban edge;
- environmental stewardship; and
- sustainable rural development.

Limited Agricultural Opportunity Cost

Available agricultural input indicates limited agricultural capability, suggesting that the proposal is unlikely to result in the loss of significant productive farmland.

Potential Negative Impacts

Potential impacts associated with the development include:

- vegetation disturbance within the approved footprint;
- temporary dust and noise during construction;
- visual impacts if not carefully managed;
- earthworks-related erosion risk;
- increased human activity in a sensitive landscape; and
- cumulative impacts if poorly controlled.

Mitigation Measures

These impacts are expected to be reduced through implementation of the EMPr and approval conditions, including:

- demarcation of no-go areas;
- erosion and stormwater management controls;
- vegetation protection and rehabilitation;
- dust suppression measures;
- restricted construction hours;
- environmentally sensitive design controls;
- alien invasive species management; and
- Environmental Control Officer (ECO) monitoring.

Overall Impact Balance

While some negative impacts will occur, these are primarily site-specific and largely associated with construction and land disturbance within a limited footprint.

Subject to mitigation, such impacts are considered capable of being reduced to acceptable levels.

The principal long-term outcome of the proposal is a low-intensity land use with the majority of the site retained in a natural state and managed under a conservation-oriented framework.

Conclusion

The proposed development is considered likely to deliver environmental, planning, and land management benefits that outweigh the anticipated negative impacts, subject to strict implementation of mitigation measures and all approval conditions.

The proposal provides for:

- limited lawful use of private land;
- retention of approximately 97.3% of the site in a natural state;
- improved stewardship and rehabilitation potential;
- reduced infrastructure demand; and
- avoidance of more intensive land-use alternatives.

Accordingly, the overall balance of impacts is considered positive to acceptable.

Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?

The proposed development is not expected to create an undesirable planning or environmental precedent within the Knysna Municipal Area, provided that approval is considered on the specific facts of this application and subject to appropriate conditions.

The proposal is highly site-specific and has been informed by the unique characteristics of Portion 79 of Farm Ruygte Valley No. 205, including its environmental sensitivities, coastal context, topography, existing access arrangements, and the Applicant's stated conservation-oriented land-use approach.

The development comprises a limited and compact node rather than:

- subdivision of the property;
- dispersed settlement across the site;
- estate-style development;
- resort-scale tourism infrastructure; or
- incremental urban expansion.

Site-Specific Nature of the Application

Any approval granted in terms of environmental legislation or municipal planning legislation would apply to this specific property and proposal only.

It would remain subject to:

- environmental authorisation conditions;
- implementation of the Environmental Management Programme (EMPr);
- building plan approval;
- any rezoning or consent use approvals required by the Municipality; and
- compliance monitoring and enforcement provisions.

Future applications elsewhere in the municipal area would still need to be assessed independently on their own merits, with reference to:

- zoning rights;
- environmental sensitivity;
- municipal planning policy;
- infrastructure capacity;
- specialist studies; and
- public participation outcomes.

An approval for this application would therefore not create an automatic entitlement for similar developments elsewhere.

Nature of the Additional Accommodation Component

While the proposal includes additional accommodation units, these remain limited in scale and form part of the broader low-intensity land-use concept.

Any planning reference to tourism accommodation relates to land-use categorisation and municipal regulatory requirements, rather than the establishment of a large-scale tourism destination or resort development.

The proposal, therefore, does not introduce a new high-impact tourism precedent in the area.

Conservation-Oriented Rezoning

The Applicant's stated intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, would generally constrain rather than expand future development potential.

Such zoning typically prioritises conservation objectives and controlled land use, and would not support unrestricted intensification without further applications and approvals.

Existing Character of the Area

The broader Groenvlei rural landscape already contains a mix of:

- private conservation properties;
- natural open space;
- protected environmental areas; and
- low-density rural residential land uses.

The proposal is therefore broadly consistent with the prevailing land-use character rather than introducing an entirely foreign or incompatible typology.

Conclusion

The proposed development is considered controlled, limited in scale, and highly site-specific.

It is not expected to establish an undesirable precedent for:

- higher-density development;
- urban sprawl;
- subdivision-led expansion;
- resort-scale tourism growth; or
- widespread relaxation of planning or environmental controls.

Any future proposals in the local municipality would remain subject to their own statutory assessment processes.

Accordingly, the proposed activity is not considered likely to set a negative precedent within the Knysna Municipal Area.

Will any person's rights be negatively affected by the proposed activity/ies?

Based on the findings of the environmental assessment process, the proposed development is not expected to result in any unlawful, material, or unreasonable infringement of the rights of other persons, provided that all mitigation measures, approval conditions, and applicable legal requirements are complied with.

The proposed activity does not remove or extinguish neighbouring landowners' existing ownership rights, lawful land-use rights, or any registered access rights.

The proposal is of limited scale and comprises a low-intensity development footprint that is intended to remain compatible with the surrounding rural, conservation, and low-density residential context.

Potential Rights Considerations Assessed

Potential effects on the rights and interests of others may relate to:

- visual amenity;
- noise during construction;
- traffic and access movements;
- enjoyment of neighbouring property;
- environmental quality;
- public participation rights; and

- lawful access arrangements.

These matters have been considered through the environmental assessment and public participation process.

Amenity and Neighbouring Properties

The proposed development footprint is relatively limited and clustered into a compact node.

Available specialist input indicates that impacts may be reduced through:

- careful siting of structures;
- vegetation retention where feasible;
- muted finishes and materials;
- management of construction impacts; and
- low-intensity ongoing use.

Accordingly, significant long-term nuisance impacts on neighbouring properties are not anticipated.

Construction Phase Impacts

Temporary construction-related impacts such as noise, dust, vehicle movement, and activity disturbance may occur. These impacts will be short-term and are expected to be managed through the Environmental Management Programme (EMPr), including:

- restricted working hours where required;
- dust suppression;
- traffic management;
- waste control;
- rehabilitation of disturbed areas; and
- Environmental Control Officer (ECO) monitoring.

Access Rights

The proposal does not seek to unlawfully restrict public roads, servitude rights, or existing lawful access rights of other parties.

Any use of existing access routes remains subject to applicable legal rights and approvals.

Constitutional Environmental Rights

Section 24 of the Constitution provides that everyone has the right to an environment that is not harmful to health or well-being.

Subject to compliance with environmental authorisation conditions, the EMPr, and applicable legislation, the proposed development is not expected to result in impacts of such magnitude as to unlawfully compromise this right.

Conclusion

While some persons may oppose the proposal or perceive impacts, the development is not expected to negatively affect any person's rights in a material or unlawful manner, provided all mitigation and legal requirements are implemented.

The proposal remains subject to regulatory oversight, approval conditions, and enforcement mechanisms designed to protect the rights and interests of affected persons.

Accordingly, no significant rights-based impediment to the proposed activity has been identified through the assessment process.

What will the benefits be to society in general and to the local communities?

The proposed development is expected to provide a range of localised social, environmental, and economic benefits, while its broader societal benefits are primarily linked to sustainable land management, environmental stewardship, and modest support to the local rural economy.

Given the limited scale of the proposal, benefits are expected to be proportionate and local rather than regionally transformative.

Benefits to Local Communities

Employment Creation

During the construction phase, the project is likely to create temporary employment opportunities for local residents, including skilled, semi-skilled, and general labour positions.

Additional opportunities may arise through the use of local:

- contractors;
- plant operators;
- transport providers;
- building suppliers;
- maintenance services; and
- professional support services.

While temporary in nature, these benefits may contribute modestly to the local economy of Sedgefield, Knysna, and surrounding areas.

Local Procurement and Economic Circulation

The procurement of goods and services during construction and operation may result in local expenditure within the surrounding community.

This may include:

- building materials;
- fuel and transport services;
- landscaping and rehabilitation inputs;
- accommodation and catering for workers or specialists where required; and
- ongoing property management services.

Such spending can assist small businesses and local service providers.

Skills Transfer and Capacity Building

The project may indirectly support skills development through exposure to:

- environmentally sensitive construction methods;
- erosion and stormwater management practices;
- alien invasive species clearing;
- rehabilitation techniques;
- renewable energy systems; and
- rural property management.

Although modest in scale, these forms of practical experience may provide local skills value.

Environmental Stewardship Benefits

The proposal includes a conservation-oriented land-use model under which the majority of the property is intended to remain in a natural or rehabilitated state.

The Applicant's stated intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, may strengthen long-term conservation management of the site.

Potential environmental benefits include:

- alien invasive vegetation clearing;
- rehabilitation of disturbed areas;
- retention of open space habitat;
- improved land management oversight; and
- support for ecological connectivity within the broader landscape.

These outcomes contribute to broader public interests in biodiversity protection and ecosystem resilience.

Compatibility with Rural Community Well-being

The proposed development is of low intensity and limited scale relative to the size of the property.

It is therefore not expected to generate substantial additional:

- traffic volumes;
- noise levels;
- service demand; or
- urban-type pressure on the surrounding rural area.

This supports continued rural amenity and compatibility with the existing character of the Groenvlei area.

Broader Societal Benefits

At a wider scale, the project may contribute to societal objectives such as:

- responsible private land stewardship;
- sustainable rural land use;
- reduced dependence on municipal services through off-grid systems;
- protection of scenic and environmental assets; and
- support for the Garden Route's nature-based identity and visitor economy.

While individually modest, such developments can cumulatively support sustainable regional development patterns when properly managed.

Conclusion

The proposed development is expected to provide modest but meaningful benefits to both society generally and the local community.

These benefits include:

- temporary employment and local procurement;
- environmental rehabilitation and stewardship;
- support for biodiversity conservation;
- sustainable low-impact land use; and
- compatibility with the surrounding rural community context.

Accordingly, the proposal is considered capable of generating positive local and societal outcomes, subject to implementation of all mitigation and approval conditions.

Any other need and desirability considerations related to the proposed activity?

In terms of the Guideline on Need and Desirability, additional considerations may include whether the proposed activity is appropriate at this point in time, whether it responds to prevailing planning and environmental priorities, whether it constitutes an efficient use of land, and whether it represents a suitable long-term outcome for the site when compared with other reasonable alternatives.

Need Considerations

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 arises from the legitimate need to make reasonable and lawful use of privately owned land while recognising the environmental sensitivity of the property.

The proposal seeks to combine limited residential use with long-term conservation-oriented management rather than pursuing more intensive or potentially less compatible land uses.

Available specialist studies indicate that the property has:

- limited agricultural capability;
- biodiversity sensitivity;
- scenic landscape value; and
- a constrained coastal setting.

Accordingly, the site appears more suited to carefully controlled low-intensity use than to intensive agriculture, subdivision, or urban-style expansion.

A further need consideration is the increasing importance of private land stewardship in supporting biodiversity conservation, invasive species control, and landscape management in areas where public conservation resources may be limited.

The proposal may therefore contribute to broader land management objectives through private investment in environmental care.

Timing and Policy Context

The proposal is considered to arise within a policy environment that increasingly supports:

- sustainable rural land use;
- biodiversity protection;
- climate resilience;
- low-impact development outside the urban edge; and
- efficient use of existing private landholdings.

These themes are reflected in applicable municipal, provincial, and regional planning instruments, including the Knysna Spatial Development Framework, Western Cape Provincial Spatial Development Framework, Garden Route Environmental Management Framework, and rural planning guidelines.

Desirability Considerations

Desirability relates to whether the proposed land use is appropriate for this specific site and whether it offers a preferable long-term outcome.

The property is located within a rural conservation landscape where low-density, carefully managed development is generally more appropriate than urban expansion or higher-intensity alternatives.

The proposal has been structured around a compact footprint of approximately 1 375 m², with approximately 97.3% of the property intended to remain in a natural or rehabilitated state.

This assists in maintaining:

- open space character;
- ecological function;
- scenic quality; and
- low settlement intensity.

The proposed development is also intended to rely substantially on off-grid or low-demand servicing systems, reducing pressure on municipal infrastructure.

Long-Term Land Use Outcome

The Applicant's stated intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, is a further desirability consideration.

Such an approach may:

- strengthen long-term conservation management;
- discourage inappropriate intensification;
- retain rural character; and
- ensure future land-use changes remain subject to planning control.

This may represent a more desirable long-term planning outcome than retaining conventional agricultural zoning with uncertain future use patterns.

Compatibility with Surrounding Uses

The surrounding area is characterised by:

- private conservation properties;
- natural open space;
- protected environmental areas; and
- low-density rural residential holdings.

The proposal is limited in scale and broadly compatible with this context.

It does not introduce industrial, commercial, urban township, or resort-scale development.

Conclusion

Additional need and desirability considerations support the proposal, subject to all required approvals and mitigation measures.

The development:

- enables reasonable use of privately owned land;
- supports conservation stewardship;
- aligns broadly with current planning policy themes;
- retains the majority of the site in a natural state;
- avoids more intensive land-use alternatives; and
- remains compatible with the surrounding rural coastal landscape.

Accordingly, the proposed activity may be regarded as a generally appropriate, policy-responsive, and environmentally responsible long-term land-use option for the site.

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

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 has been planned, assessed, and motivated in accordance with the general objectives of Integrated Environmental Management (IEM) as set out in Section 23 of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

<u>These objectives have been addressed as follows:</u>

(a) Integration of Environmental Management Principles (Section 2 of NEMA)

The principles of environmental management contained in Section 2 of NEMA have been integrated into all aspects of the assessment and decision-making process.

This is reflected in:

- the adoption of a precautionary and risk-averse approach;
- the prioritisation of environmental protection and biodiversity conservation;
- the limitation of development to a compact footprint; and
- the promotion of sustainable, low-impact land use.

The proposed rezoning to Open Space III (Nature Conservation Area), together with low-intensity development and off-grid servicing, demonstrates that environmental considerations have been central to the planning and design of the proposal.

(b) Identification, Prediction, and Evaluation of Impacts, Risks, and Alternatives

Potential environmental, socio-economic, visual, and biophysical impacts have been identified, assessed, and evaluated through the Basic Assessment process and associated specialist inputs.

These include:

- Terrestrial Biodiversity Assessment;
- Preliminary Geotechnical and Geomatic Report;
- Visual Compliance Statement; and
- Town Planning Report.

The assessment has considered:

- site-specific constraints;
- potential risks and cumulative impacts;
- feasible alternatives; and
- appropriate mitigation measures.

This has been undertaken with the objective of minimising negative impacts, maximising potential benefits, and ensuring alignment with the principles of NEMA.

(c) Consideration of Environmental Effects Prior to Decision-Making

Environmental considerations have informed the development proposal prior to any implementation.

The Site Development Plan has been shaped by:

- Critical Biodiversity Areas;
- coastal and environmental constraints;
- slope and geotechnical conditions; and
- visual sensitivity.

Development has been confined to a limited and less constrained portion of the site, ensuring that environmental impacts are considered and addressed before irreversible decisions are made.

(d) Public Participation

Public participation has been undertaken in accordance with the Environmental Impact Assessment Regulations, 2014 (as amended).

Interested and Affected Parties (I&APs) have been:

- identified and notified;
- provided with access to project information; and
- afforded the opportunity to comment on the proposed development.

All comments received have been recorded, considered, and responded to within the Comments and Responses Report, ensuring transparency and procedural fairness in the decision-making process.

(e) Consideration of Environmental Attributes in Decision-Making

Key environmental attributes of the site have informed the assessment and design of the development.

These include:

- biodiversity sensitivity and ecological connectivity;
- scenic and landscape value;
- coastal processes and constraints; and
- geotechnical and topographical conditions.

These factors have directly influenced:

- the location of the development footprint;
- the scale and layout of structures; and
- the proposed long-term land-use and management approach.

(f) Application of Appropriate Environmental Management Tools

Appropriate environmental management tools have been identified and incorporated into the project to ensure compliance with NEMA principles.

These include:

- implementation of an Environmental Management Programme (EMPr);
- appointment of an Environmental Control Officer (ECO);
- adherence to specialist mitigation measures;
- monitoring during construction and operation; and
- rehabilitation of disturbed areas.

These mechanisms provide for ongoing environmental management throughout the lifecycle of the development.

Conclusion

The proposed development has been informed by the principles and objectives of Integrated Environmental Management as set out in Section 23 of NEMA.

Through the integration of environmental considerations into planning, assessment of impacts and alternatives, structured public participation, and the application of appropriate management measures, the proposal reflects a precautionary and sustainability-based approach to development.

Accordingly, the development is considered to be generally consistent with the objectives of Integrated Environmental Management, subject to the implementation of mitigation measures and compliance with all approval conditions.

Consideration of Section 63 of the National Environmental Management: Integrated Coastal Management Act (NEM: ICMA)

Consideration of Section 63 of the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008)

Section 63 of the National Environmental Management: Integrated Coastal Management Act, 2008 (NEM: ICMA), requires that decision-making affecting coastal land and coastal processes take into account the interests of coastal protection, public access, environmental sustainability, risk avoidance, and the responsible management of coastal public property and adjacent coastal areas.

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 has accordingly been assessed with reference to the coastal context of the site, including proximity to the coast, mapped coastal risk indicators, public access considerations, dune sensitivity, and long-term sustainability.

Coastal Public Property and Public Access

The proposed activity is located on privately owned land and does not propose development within coastal public property itself.

No gates, walls, barriers, or structures are proposed that are intended to unlawfully obstruct existing public access routes to coastal public property.

Existing lawful public access arrangements, including surrounding public roads and servitude routes, are not proposed to be extinguished through this application.

Coastal Protection and Coastal Processes

The proposal does not include shoreline hardening works, revetments, seawalls, groynes, or similar coastal engineering structures.

The assessment process considered available coastal risk mapping, geotechnical input, topographical constraints, and environmental sensitivities in refining the preferred footprint.

The proposed development footprint has been positioned in the comparatively lower-risk portion of the property relative to mapped higher-risk coastal edge constraints, subject to detailed design and implementation of mitigation measures.

Dune and Vegetation Stability

The proposal seeks to limit disturbance through:

- a compact development footprint;
- controlled access arrangements;
- retention of vegetation where feasible;
- rehabilitation of disturbed areas; and
- erosion control measures.

These measures are intended to reduce the risk of destabilisation of the surrounding dune and slope systems.

Sustainable Coastal Land Use

Approximately 97.3% of the property is proposed to remain in a natural or rehabilitated state, with development concentrated within an area of approximately 1 375 m².

The Applicant has further indicated an intention to pursue rezoning of the property to Open Space III (Nature Conservation Area), subject to separate municipal approval processes.
This would support a long-term conservation-oriented management outcome over the majority of the site.

Conclusion

Having regard to the available information, the proposed development is not expected to materially undermine the objectives of Section 63 of NEM: ICMA, provided all mitigation measures and approval conditions are implemented.
The proposal:

- avoids direct development within coastal public property;
- does not rely on shoreline hardening structures;
- seeks to minimise disturbance within a sensitive coastal setting;
- retains the majority of the property in a natural state; and
- supports a conservation-oriented land-use outcome.

Accordingly, the proposed activity may be regarded as generally compatible with sustainable coastal management principles contemplated in Section 63 of NEM: ICMA.

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 –

Aspect	Preferred Alternative (Updated Constraints Layout)	Alternative 1 (Previous Constraints Layout)	No-Go Alternative
Property / Location	The activity is proposed on Portion 79 of Farm Ruygte Valley No. 205, Sedgefield. A separate property alternative is not considered reasonable, as the application relates to the exercise of existing land-use rights and proposed land-use changes specific to this property. The preferred layout has been informed by the updated Site Constraints Map and refined specialist input.	The activity would occur on the same property, but in accordance with the previous layout configuration. This alternative represents an earlier design response that did not fully optimise the avoidance of identified environmental and geotechnical constraints.	No development would occur. The property would remain in its current undeveloped state.
Type of Activity	The proposed development comprises a main dwelling (±200 m²), three small self-contained units (±65 m² each), staff	Same activity type and general land-use intent as the preferred alternative, but with a different	No construction or land development would occur.

	accommodation (±50 m²), an equipment shed (±80 m²), and associated parking and access infrastructure. Total building footprint is approximately 525 m². The access road is approximately 220 m long and 3 m wide, terminating in a parking area of approximately 765 m². Total development footprint is approximately 1 375 m², representing approximately 2.7% of the site, with approximately 97.3% remaining natural or rehabilitated.	spatial arrangement and a less optimal response to identified constraints. The previous layout intersected areas now avoided in the preferred design.	
Design / Layout	Compact, clustered layout informed by the updated Site Constraints Map, biodiversity sensitivity, visual considerations, and geotechnical limitations. The revised layout avoids the D7 structurally weak zone and further refines the development envelope. Development is concentrated within degraded CBA2 areas and avoids CBA1 areas, steeper slopes, forested areas, and mapped higher-risk coastal constraint areas where feasible.	The previous layout represented an earlier constraints response and did not fully avoid the D7 structurally weak zone. While environmentally informed, it is considered less favourable than the preferred alternative in terms of risk avoidance and engineering suitability.	No layout or design intervention would occur. Existing site conditions would remain unchanged.
Technology to be Used	The development is intended to operate predominantly through off-grid systems utilising solar photovoltaic micro-generation, battery storage, rainwater harvesting, and on-site wastewater management via conservancy tanks or other approved systems. The approach is appropriate to a low-intensity conservation-compatible development.	Same general servicing approach as the preferred alternative.	No infrastructure or utility systems would be installed.
Operational Aspect	Intended for private family and guest accommodation, together with long-term land stewardship including alien invasive vegetation control and rehabilitation. Environmental authorisation relates to environmental acceptability, while municipal land-use controls remain separately applicable.	Same general operational intent as the preferred alternative.	No formal conservation management commitments associated with the proposal would arise. Existing invasive vegetation and unmanaged degradation may persist.
Option of Not Implementing the Activity	Not applicable to this column.	Not applicable to this column.	Avoids direct construction-related impacts, but does not realise the potential benefits associated with rehabilitation, conservation-oriented land management, or the proposed planning controls.
Overall Assessment	**Preferred Alternative.** Considered the best practicable environmental option presently identified, as it refines the	**Not Preferred.** Technically feasible, but environmentally and geotechnically less favourable	**Not Preferred Overall.** Beneficial in avoiding direct development

	footprint, improves avoidance of geotechnical constraints, supports conservation outcomes, and maintains a compact low-impact development node.	than the updated preferred layout.	impacts, but does not meet the identified need and desirability objectives or secure the proposed stewardship outcomes.

(I) Details of the Alternatives Considered:

Details of the Alternatives Considered

In accordance with the Environmental Impact Assessment Regulations, 2014 (as amended), reasonable and feasible alternatives to the proposed activity have been identified and considered.

Given that the proposal relates to the lawful use of a privately owned property, the exercise of existing land-use rights, and a site-specific development concept linked to Portion 79 of Farm Ruygte Valley No. 205, the range of practicable alternatives is inherently limited.
The alternatives considered are set out below.

Site Alternative

No alternative sites were considered.

The proposed development is site-specific and relates to Portion 79 of Farm Ruygte Valley No. 205, which is privately owned by the Applicant. The application seeks to exercise lawful existing land-use rights associated with this specific property while aligning future land use with the ecological characteristics and conservation value of the site.
As the proposal is linked to the ownership, location, planning context, and environmental characteristics of this property, no other reasonable and feasible site alternatives were identified that would meet the same purpose.

The site was selected based on:

- private ownership by the Applicant, making relocation impractical and unreasonable;
- lawful access via an existing public servitude road (Bushy Way);
- its location outside the urban edge within a conservation-oriented rural landscape;
- limited agricultural potential, as indicated by specialist input; and
- the presence of portions of degraded Critical Biodiversity Area 2 (CBA2) capable of accommodating limited low-impact development.

Due to the ecological sensitivity of the broader property, fragmentation by biodiversity constraints, coastal limitations, and surrounding conservation land uses, the site is not considered suitable for intensive or high-impact development.

Activity Alternative

The preferred activity involves a low-intensity residential development together with the long-term conservation-oriented management of the majority of the site.

The proposed development comprises:

- a main dwelling (±200 m²);
- three small self-contained units (±65 m² each);
- staff accommodation (±50 m²);
- an equipment shed (±80 m²); and
- associated access, parking, and boardwalk infrastructure.

The total building footprint is approximately 525 m².

The access road is approximately 220 m long and 3 m wide, terminating in a parking area of approximately 765 m². The total development footprint, including buildings, access road, parking, and boardwalks, is approximately 1 375 m², representing approximately 2.7% of the site area, with approximately 97.3% of the property remaining in a natural or rehabilitated state.

The Applicant's stated intention is private residential occupation together with private family and guest accommodation.

From a planning perspective, the proposed rezoning and consent-use framework may accommodate additional units subject to separate municipal processes. This planning mechanism does not alter the environmental impacts assessed in this application, but provides an appropriate land-use control framework should such approvals be granted.

No alternative higher-impact activities (such as resort development, subdivision, intensive agriculture, industrial use, or dense residential development) were considered reasonable due to:

- the ecological sensitivity of the site;
- the location within a coastal conservation landscape;
- planning limitations outside the urban edge; and
- the objective of maintaining a low-intensity land-use outcome.

The proposed activity is therefore considered the preferred and most practicable land-use option currently identified for the site.

Layout and Design Alternatives

Two layout alternatives were assessed:

- Alternative 1: Original Constraints Layout
- Preferred Alternative: Updated Constraints Layout

Alternative 1 represented an earlier configuration informed by preliminary constraints mapping.

Following further specialist review and refinement, the layout was amended to improve avoidance of identified constraints, including the D7 structurally weak zone and other environmentally sensitive areas.

The preferred layout was selected based on improved avoidance, where feasible, of:

- Critical Biodiversity Area 1 (CBA1);
- indigenous forest and protected vegetation areas;
- steeper slopes and erosion-prone terrain;
- structurally weak zones; and
- mapped coastal risk constraint areas.

The preferred layout concentrates development within the comparatively least-sensitive portion of the site, informed by available specialist input and updated constraints mapping.

The selected layout:

- limits disturbance to approximately 1 375 m²;
- reduces interaction with environmentally sensitive areas;
- enables clustered development to reduce fragmentation; and

- supports low-impact design and construction methods.

The revised configuration is considered a measurable environmental improvement over Alternative 1 and is therefore the preferred layout alternative.

No-Go Alternative

The No-Go Alternative would result in no development taking place.

This option would be environmentally beneficial in avoiding direct construction-related disturbance and short-term development impacts.

However, it would also likely result in:

- no development of lawful residential use rights on the property;
- no formal conservation-oriented planning controls associated with the proposal;
- no project-linked rehabilitation commitments;
- no structured long-term stewardship obligations linked to the application; and
- loss of the opportunity to realise a low-intensity conservation-compatible land-use outcome.

While the No-Go Alternative remains a legitimate option, it is not considered the preferred overall outcome when balancing environmental protection, reasonable land use, and long-term management potential.

Comparative Assessment of Alternatives

The alternatives were comparatively considered with reference to:

- environmental sensitivity;
- technical feasibility;
- planning compatibility;
- ability to meet the purpose of the application;
- infrastructure implications; and
- long-term sustainability.

Based on this assessment, the preferred updated layout and low-intensity activity alternative are considered the best practicable environmental option presently identified for the site.

Conclusion

The proposed development has been informed by the consideration of reasonable and feasible alternatives.

Given the site-specific nature of the application, no alternative property sites were considered reasonable. The preferred activity and updated layout are considered superior to earlier layout options and more appropriate than higher-impact land-use scenarios.

Accordingly, the preferred alternative is considered the most suitable balance between environmental protection, lawful land use, and long-term conservation-oriented management for Portion 79 of Farm Ruygte Valley No. 205.

Preferred Alternative

The Applicant intends to reside permanently on Portion 79 of Farm Ruygte Valley No. 205 and proposes the construction of a single primary dwelling house of approximately 200 m², which constitutes a primary land-use right in terms of the Knysna Zoning Scheme Regulations (1992) under Agriculture Zone I.

In addition to the main residence, the proposal includes three small self-contained units of approximately 65 m² each. For land-use planning purposes, these units may require approval under the applicable municipal planning framework and are described within the broader application as additional accommodation units. The Applicant's stated intention is private residential occupation together with private family and guest accommodation.

The development further includes staff accommodation (approximately 50 m²) and a storage shed (approximately 80 m²) intended to support on-site management, conservation activities, and property maintenance.

Access to the development area is proposed via a gravel access road approximately 220 m in length and not exceeding 3 m in width, located generally along the eastern boundary of the property. The access road terminates in a parking area accommodating four parking bays with a total area of approximately 765 m².

Pedestrian movement between the parking area and the dwelling / associated structures is proposed via elevated timber boardwalks or similar low-impact pathways intended to minimise soil compaction and reduce disturbance to indigenous vegetation.

All proposed structures are clustered within the preferred development node in accordance with the updated layout reflected on the revised Site Constraints Map.

The preferred alternative was refined through a constraints-led planning process to improve avoidance of identified limitations, including the D7 structurally weak zone, and to reduce interaction, where feasible, with environmentally sensitive areas.

The preferred footprint seeks to avoid or minimise impacts on:

- Critical Biodiversity Area 1 (CBA1) areas;
- indigenous forest and sensitive vegetation;
- steeper slopes;
- erosion-prone terrain;
- mapped coastal constraint areas; and
- areas potentially vulnerable to coastal processes such as erosion, storm surge, and long-term shoreline movement.

Given the property's proximity to the coast and location within a sensitive coastal landscape, the proposal has also been informed by the principles of the National Environmental Management: Integrated Coastal Management Act, 2008 (NEM: ICMA).

No development within coastal public property, no shoreline hardening works, seawalls, revetments, groynes, jetties, or marine infrastructure are proposed.

The activity does not involve abstraction from the marine environment, discharge to the sea, disturbance below the high-water mark, or direct impacts on marine ecosystems.

The compact inland footprint and retention of surrounding vegetation are intended to reduce runoff, erosion risk, and indirect impacts on adjacent coastal and marine environments.

Available specialist input indicates that the site has limited agricultural capability and that its principal long-term value lies in its ecological, scenic, coastal, and conservation attributes.

The remainder of the property is intended to remain in a natural or rehabilitated condition, supported through environmental management measures, alien invasive vegetation control, and rehabilitation actions in accordance with specialist recommendations and the Environmental Management Programme (EMPr).

The total building footprint is approximately 525 m².

The total development footprint, including buildings, access road, parking area, and boardwalks, is approximately 1 375 m², representing approximately 2.7% of the total 5.1576 ha property.

Accordingly, approximately 97.3% of the site is expected to remain in a natural or rehabilitated state.

The amended preferred layout increases the overall footprint from approximately 1 175 m² (previous layout) to approximately 1 375 m² in order to improve avoidance of the D7 geotechnical constraint while retaining a compact clustered development envelope.

The preferred alternative, therefore, represents a low-intensity, conservation-compatible residential development informed by iterative design refinement, coastal sensitivity considerations, and updated specialist input.

The layout is considered an environmental improvement over the previous alternative by better responding to terrestrial, geotechnical, visual, and coastal constraints while maintaining limited development intensity and supporting long-term stewardship of the property.

The proposal is also considered broadly consistent with the intent of the Knysna Spatial Development Framework, Western Cape Provincial Spatial Development Framework, Garden Route Environmental Management Framework, applicable rural planning guidelines, and sustainable coastal management principles.

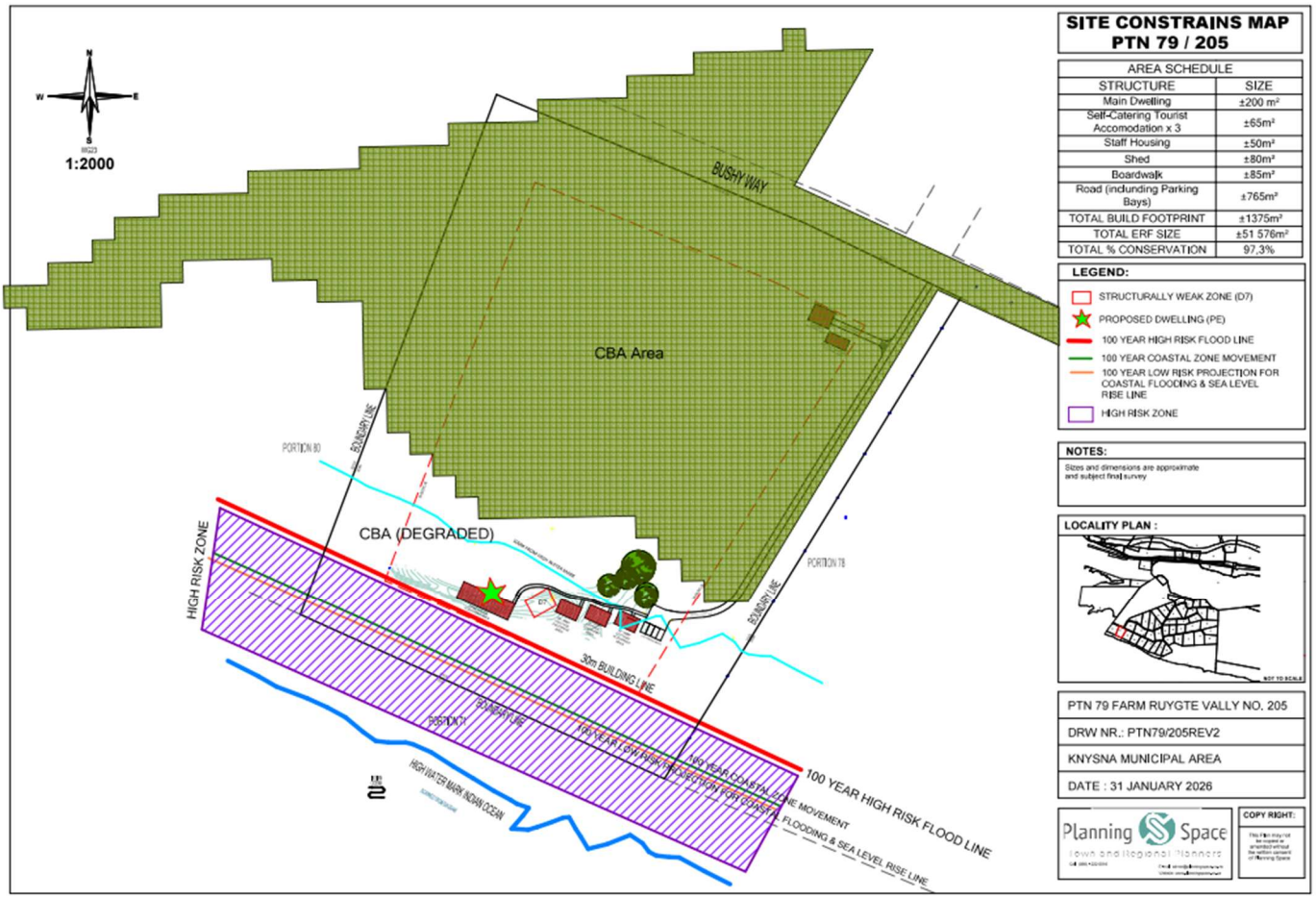


FIGURE 17: UPDATED SITE CONSTRAINTS MAP SHOWING VEGETATION TYPES (CBA1, CBA2), SLOPE CONTOURS, ACCESS ROUTES, AND PROPOSED DEVELOPMENT AREA ON PORTION 79 OF FARM RUYGTE VALLEY NO. 205, SEDGEFIELD. SOURCE: APPENDIX B1 – SITE CONSTRAINTS MAP (2026).

FIGURE 18: EXAMPLE OF BUILDING MATERIAL AND STRUCTURE

Electricity

There is currently no municipal electrical infrastructure present on the property or within the adjacent road reserve. Given the rural location of Portion 79 of Farm Ruygte Valley No. 205, the absence of bulk services, and the environmentally sensitive coastal setting, the proposed development is intended to operate predominantly off-grid through a stand-alone renewable energy system.
This approach is compatible with the low-intensity conservation-oriented character of the area and avoids reliance on municipal electrical infrastructure.

Solar Plant – Type and System
The proposed electricity supply will comprise an off-grid solar photovoltaic (PV) system designed to meet the anticipated operational demand of the private residential dwelling and associated additional accommodation units. Electricity will be generated during daylight hours, with surplus energy stored within an on-site battery system for use during evening periods and low-generation conditions.
The system will function as a self-contained residential micro-grid.
Should future energy demand vary, the system may be optimised through adjustments to inverter capacity, battery storage, or panel efficiency, subject to detailed design, without materially changing the off-grid nature or environmental footprint of the development.

Plant Location
Solar panels are proposed as roof-mounted installations on the main dwelling and additional units.
Roof-mounted installation:

- utilises existing built surfaces;
- avoids unnecessary ground disturbance;
- limits vegetation clearance;
- reduces visual intrusion relative to ground-mounted systems; and
- supports integration with the architectural design.

This approach is particularly appropriate within a scenic coastal landscape where additional free-standing utility structures should be minimised.

Plant Capacity

The proposed photovoltaic installation is expected to have an indicative generation capacity of approximately 15 kWp, subject to final engineering design.

Estimated peak electricity demand is anticipated to be approximately 30 kWh/day, depending on occupancy levels, appliance use, and seasonal demand.

The proposed system is considered adequate for low-intensity residential use when combined with battery storage and energy-efficiency measures.

Energy Storage

A sealed Lithium Iron Phosphate ($LiFePO_4$) battery storage system is proposed.

This technology offers:

- long operational lifespan;
- improved thermal stability;
- high charging efficiency;
- low maintenance requirements; and
- suitability for off-grid residential applications.

Battery capacity will be confirmed during final design based on actual load calculations.

Area and Access Lighting

The access road, parking area, and pedestrian pathways may be illuminated using low-intensity, low-level lighting such as bollard luminaires or equivalent fittings.

Where feasible, these may be independently solar powered and motion activated.

Lighting design will seek to:

- minimise light spill;
- reduce energy consumption;
- avoid unnecessary disturbance to nocturnal fauna;
- retain dark-sky qualities of the rural coastal landscape; and
- ensure safe pedestrian and vehicular movement.

Environmental Considerations

All electrical infrastructure, including panels, batteries, cabling, and associated equipment, will be located within or adjacent to the approved development footprint.

No electrical infrastructure is proposed within coastal public property, dune frontage areas, or marine environments.

The proposed system is not expected to create material impacts on coastal processes, public access, or surrounding ecological systems, subject to implementation of the Environmental Management Programme (EMPr).

Conclusion

The proposed off-grid solar energy system represents an appropriate and sustainable servicing solution for the site. It avoids demand on municipal electricity infrastructure, minimises disturbance within a sensitive coastal landscape, supports renewable energy use, and remains compatible with the low-intensity conservation-oriented nature of the proposed development.

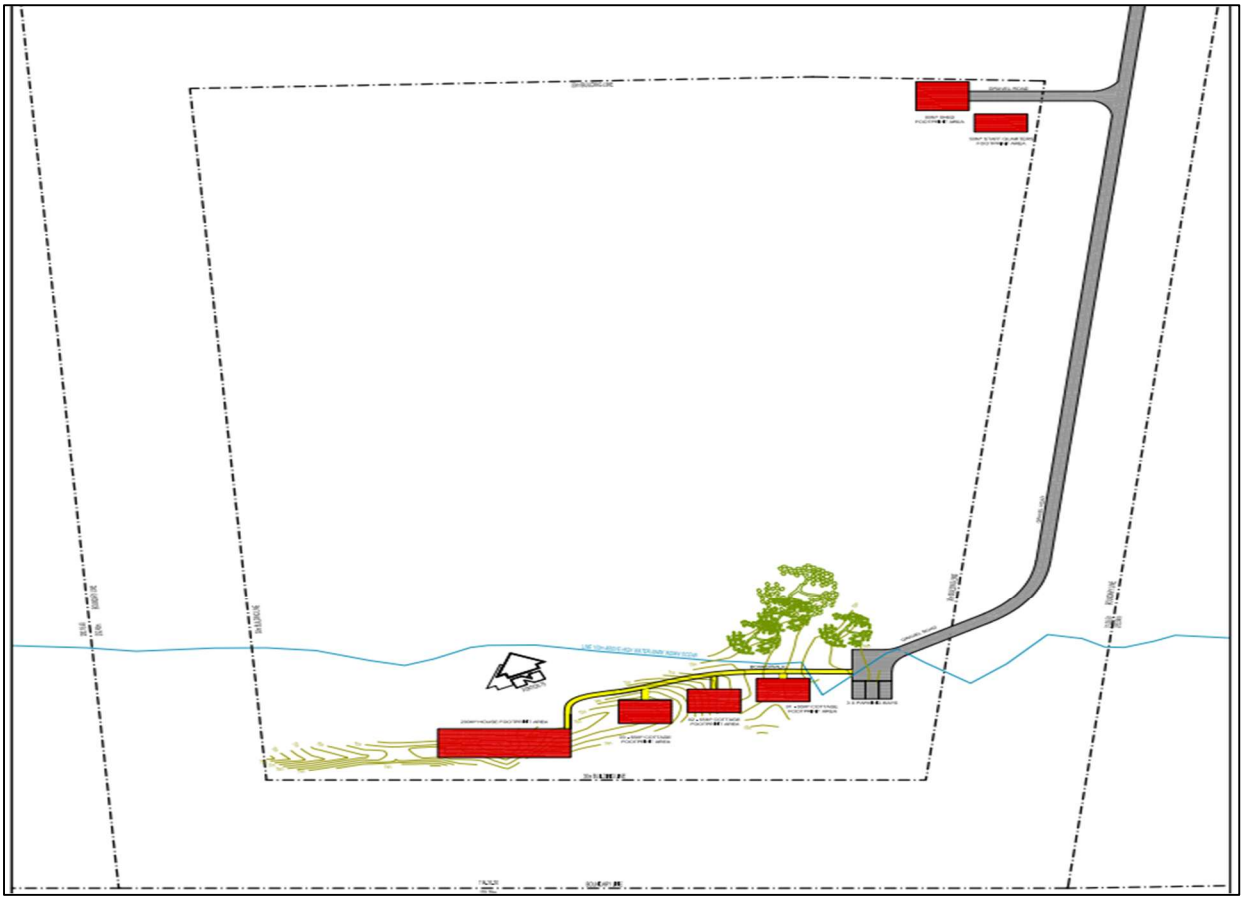


FIGURE 19: PREFERRED ALTERNATIVE SDP

Alternative 1 – Previous Layout (Not Preferred)

Alternative 1 represents the earlier development layout as reflected on the previous Site Constraints Map. This alternative was considered a reasonable and feasible option during the planning process and was capable of accommodating the proposed development from a general access and engineering perspective.

Following updated specialist input, refined constraints mapping, and further geotechnical review, the layout was amended to improve environmental and technical avoidance. Alternative 1 is therefore retained as an assessed alternative but is not the preferred option.

The Applicant intends to reside permanently on Portion 79 of Farm Ruygte Valley No. 205 and proposes the construction of a single primary dwelling house of approximately 200 m², which constitutes a primary land-use right in terms of the Knysna Zoning Scheme Regulations (1992) under Agriculture Zone I.

In addition to the main residence, Alternative 1 includes three small self-contained units of approximately 65 m² each. For planning purposes, these units form part of the broader accommodation component of the proposal. The Applicant's stated intention remains private residential occupation together with private family and guest accommodation.

The development further includes staff accommodation (approximately 50 m²) and a storage shed (approximately 80 m²) intended to support land management, conservation activities, and property maintenance.

Access under Alternative 1 would be provided via a gravel access road of approximately 200 m in length and not exceeding 3 m in width, generally aligned along the eastern portion of the property.

The access road would terminate in a parking area of approximately 660 m², from which elevated timber boardwalks or similar low-impact pathways would provide pedestrian access to the dwelling and associated structures.

This design reduces direct vehicular penetration into the site, but results in a slightly less efficient circulation arrangement than the preferred alternative.

All structures under Alternative 1 were clustered within the southern portion of the property and positioned to avoid, where feasible:

- Critical Biodiversity Area 1 (CBA1) areas;
- indigenous forest patches;
- steeper slopes; and
- mapped coastal constraint areas identified at the time.

However, subsequent refinement of constraints mapping identified the presence of the D7 structurally weak zone partially intersecting the original layout envelope.

While development in this area may potentially be engineered, it would introduce:

- a greater degree of geotechnical risk;
- increased reliance on structural intervention;
- potentially higher construction complexity; and
- reduced precautionary avoidance relative to the preferred layout.

Available specialist input further indicates that the property has limited agricultural capability and that its principal long-term value lies in its ecological, scenic, coastal, and conservation attributes.

As with the preferred alternative, the balance of the property would remain available for conservation-oriented management, alien invasive vegetation clearing, and rehabilitation measures in accordance with specialist recommendations and the Environmental Management Programme (EMPr).

The total development footprint under Alternative 1 is approximately 1 175 m², comprising approximately 525 m² of building coverage together with approximately 650 m² of access, parking, and circulation infrastructure.

This represents a relatively small proportion of the 5.1576 ha property, with the majority of the site remaining in a natural or rehabilitated condition.

Reasons Alternative 1 is Not Preferred

Alternative 1 is not preferred for the following reasons:

- it partially overlaps with the structurally weak D7 zone identified through updated geotechnical review;
- it relies more heavily on engineering mitigation to achieve long-term stability;
- it provides a less efficient spatial relationship between access, parking, and the building cluster;
- it offers a lower degree of environmental and geotechnical avoidance than the refined preferred alternative; and
- it is comparatively less precautionary in a sensitive coastal setting.

Conclusion

While Alternative 1 remains a technically feasible option, the updated preferred alternative is considered superior.

The preferred alternative improves avoidance of geotechnical constraints, reduces long-term development risk, better responds to environmental sensitivities, and reflects a more precautionary and risk-averse outcome consistent with the principles of NEMA.

Accordingly, Alternative 1 is assessed as a reasonable alternative but is **not preferred**.

While Alternative 1 remains technically feasible, the updated preferred alternative achieves improved avoidance of geotechnical constraints, reduces long-term risk, and represents a more precautionary, risk-averse outcome consistent with NEMA principles.

FIGURE 20: EXAMPLE OF BUILDING MATERIAL AND STRUCTURE

Electricity (Applicable to Alternative 1)

There is currently no municipal electrical infrastructure present on the property or within the adjacent road reserve. Under Alternative 1, the development would similarly operate predominantly off-grid through a stand-alone solar power system designed to meet on-site electricity demand.
Accordingly, no material demand would be placed on municipal electrical infrastructure.
The electricity servicing approach under Alternative 1 would be substantially the same as that proposed for the preferred alternative and would include:

- roof-mounted solar photovoltaic panels;
- battery storage (such as Lithium Iron Phosphate technology or equivalent);
- self-contained off-grid micro-grid operation; and
- low-intensity, energy-efficient external lighting, potentially motion-activated and/or solar powered.

Alternative 1, therefore, does not differ materially from the preferred alternative in respect of electricity infrastructure, servicing philosophy, or operational sustainability.

Comparative Assessment of Alternatives and Identification of the Preferred Alternative

Both the preferred alternative and Alternative 1 comprise low-intensity, clustered residential development options located within the same general portion of Portion 79 of Farm Ruygte Valley No. 205.
In both cases:

- the proposed footprint remains limited relative to the total property size;
- the majority of the site remains natural or rehabilitated;
- off-grid servicing is proposed; and
- a conservation-oriented land-use outcome is pursued.

The alternatives are therefore broadly similar in overall intent, scale, and long-term land-use character.
The principal distinction between the alternatives relates to the degree of avoidance of identified geotechnical and environmental constraints.

The amended preferred layout increases the footprint from approximately 1 175 m² (Alternative 1) to approximately 1 375 m² in order to improve avoidance of the identified D7 geotechnical constraint, while still maintaining a compact clustered development envelope.

Alternative 1

Alternative 1 reflects the earlier layout configuration informed by the initial constraints mapping.
While this layout sought to avoid:

- Critical Biodiversity Area 1 (CBA1) areas;
- indigenous forest;
- steeper slopes; and
- coastal sensitivity areas identified at the time,

updated specialist review identified that a portion of the Alternative 1 footprint intersected the structurally weak D7 zone.
Although development within such an area may potentially be engineered, it could introduce:

- avoidable long-term stability risk;
- increased dependence on engineering intervention;
- potentially higher maintenance requirements; and
- reduced precautionary avoidance.

Preferred Alternative

The preferred alternative represents a refinement of the earlier layout following updated constraints mapping and specialist input.
The revised footprint has been repositioned to improve avoidance of the D7 structurally weak zone while maintaining the same low-intensity clustered development philosophy.
This adjustment improves:

- geotechnical suitability;
- long-term resilience;
- reduction of avoidable risk;
- alignment with specialist recommendations; and
- consistency with the precautionary principles of NEMA.

Development Intensity

Importantly, the preferred alternative does not materially increase the intensity of development.
Although the revised disturbance area increases to approximately 1 375 m², this remains approximately 2.7% of the total 5.1576 ha property.
Approximately 97.3% of the site is therefore expected to remain in a natural or rehabilitated state.

Overall Comparative Findings

From an environmental and planning perspective, the preferred alternative achieves:

- improved avoidance of geotechnical constraints;
- reduced reliance on structural mitigation;

- better long-term risk management;
- continued protection of the majority of the property;
- retention of low-intensity land use; and
- a more defensible precautionary outcome.

Both alternatives are broadly policy compatible; however, the preferred alternative is considered the more responsible and sustainable option because it removes a known risk rather than relying on engineering responses to accommodate it.

Identification of the Preferred Alternative

Accordingly, the preferred alternative is identified as the Best Practicable Environmental Option (BPEO) presently identified for the site.

It achieves substantially the same development and conservation objectives as Alternative 1, while offering superior geotechnical suitability, improved resilience, and stronger alignment with risk-averse environmental planning principles.

The No-Go Alternative

The No-Go Alternative would entail Portion 79 of Farm Ruygte Valley No. 205 remaining in its current undeveloped state, with no proposed construction or associated land-use change taking place.

Under this option, no dwelling house or associated infrastructure linked to the present proposal would be established.

Potential Benefits of the No-Go Alternative

The No-Go Alternative would avoid direct construction-related impacts such as:

- vegetation disturbance within the footprint area;
- temporary noise and dust;
- construction traffic; and
- short-term site disturbance.

Limitations of the No-Go Alternative

However, the No-Go Alternative would also not realise the potential benefits associated with the proposal, including:

- lawful exercise of existing residential development rights;
- structured rehabilitation linked to the project;
- long-term stewardship investment by the owner;
- low-intensity productive use of private land; and
- the Applicant's intended conservation-oriented planning outcome.

Available specialist input indicates limited agricultural capability, meaning the site is not strongly suited to productive agricultural expansion.

The No-Go Alternative would therefore largely retain the status quo.

Alien invasive vegetation control would remain a legal obligation irrespective of development, but no project-linked management framework or funding mechanism would arise from the proposal itself.

Overall Finding on No-Go

While the No-Go Alternative remains a legitimate option and is beneficial in avoiding direct development impacts, it is not considered the preferred overall outcome when balancing:

- environmental management opportunities;
- reasonable private land use;
- rehabilitation potential; and
- long-term stewardship.

Conclusion

Having considered the reasonable and feasible alternatives, the preferred development alternative—characterised by a compact footprint, avoidance of identified constraints, off-grid servicing, and conservation-oriented land management—is considered the most appropriate option presently identified.

It provides an appropriate balance between:

- ecological protection;
- sustainable rural land use;
- lawful occupation of private land; and
- long-term environmental stewardship within a sensitive coastal landscape.

Section H

1. Details of the public participation process undertaken in terms of Regulation 41 of the regulations, including copies, 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 consent of the landowner or person in control of the land to undertake such activity on that land	The proponent (applicant) is the landowner and therefore consent is not required.
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 the 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.	(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 municipal councillors of the ward in which the site and alternative site are situated and any organisation of ratepayers that represents 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.	(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 submissions made in terms of these Regulations;	(i) CX Newspaper, a local free newspaper, will be used to advertise. Please refer to a copy of the advert in **Appendix E.**
(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 subject 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;	Refer to **Appendix E**.

(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.	
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) 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); 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.	Refer to **Appendix E.**
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 and the Amended Draft BAR were 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	N/A

management 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, Draft and Amended Draft Basic Assessment Report. A list of key stakeholders for this process is included in the table below. This will be updated in the Amended Draft Basic Assessment Report, if required:

STATE DEPARTMENTS			
Name	**Contact / Directorate**	**Postal Address**	**Website**
Western Cape Department of Agriculture	Directorate: Land Use & Soil Management	Private Bag X1, Elsenburg, 7607	Website
Department of Agriculture, Land Reform and Rural Development (DALRRD)	National	Private Bag X120, Pretoria, 0001	Website
Western Cape Department of Economic Development and Tourism (DEDAT)	Directorate: Tourism	P.O. Box 979, Cape Town, 8000	Website
Western Cape Department of Environmental Affairs and Development Planning (DEA&DP)	EIA Directorate	Private Bag X6509, George, 6530	Website
Western Cape Department of Health	District Office	Private Bag X6592, George, 6530	Website
Department of Water and Sanitation (DWS)	Gouritz Water Management Area	Private Bag X16, Sanlamhof, 7532	Website
Department of Transport and Public Works (Western Cape)	Roads & Infrastructure	Private Bag X617, Oudtshoorn, 6620	Website
South African National Roads Agency SOC Ltd (SANRAL)	Land & Environment	Private Bag X19, Bellville, 7535	Website

ORGANS OF STATE			
Name	**Contact / Directorate**	**Postal Address**	**Website**
CapeNature	Conservation Stewardship	Private Bag X6546, George, 6530	Website
Heritage Western Cape	Heritage Management	Private Bag X9067, Cape Town, 8000	Website
South African National Parks (SANParks)	Garden Route Region	P.O. Box 3542, Knysna, 6570	Website
Eskom – Land and Rights	Western Cape	P.O. Box 222, Brackenfell, 7561	Website

NON-GOVERNMENTAL ORGANISATIONS (NGOs)			
Name	**Contact**	**Postal Address**	**Website**
Knysna Ratepayers Association	Chairperson	P.O. Box 2475, Knysna, 6570	Website
Knysna Catchment Management Forum	Chairperson	P.O. Box …, Knysna, 6570	Website

MUNICIPALITY			
Name	**Contact / Directorate**	**Postal Address**	**Website**
Knysna Municipality – Environmental Management	Environmental Management Unit	P.O. Box 21, Knysna, 6570	Website
Knysna Municipality – Town Planning	Planning Department	P.O. Box 21, Knysna, 6570	Website
Ward 1 Councillor – Knysna Municipality	Councillor	P.O. Box 21, Knysna, 6570	Website

PUBLIC / INTERESTED AND AFFECTED PARTIES		
Erf / Property	**Contact Person**	**Postal Address**
Adjacent and surrounding landowners	Various	As per the I&AP Register

Availability of the Draft Basic Assessment Report

In accordance with Regulation 41 of the Environmental Impact Assessment Regulations, 2014 (as amended), the Amended Draft Basic Assessment Report (DBAR) will be made available for an additional public participation process of not less than thirty (30) days, following material amendments to the project description, layout, and supporting specialist inputs.

The original Draft Basic Assessment Report was previously made available to registered Interested and Affected Parties (I&APs), and public notices advertising its availability were placed in the local newspaper. Following the receipt of comments and a detailed review of the Draft BAR, it was determined that substantive revisions were required. These revisions necessitate the re-issuance of the report for further public participation in terms of Regulation 41.

All registered and identified I&APs will be notified of the availability of the Amended Draft Basic Assessment Report for review and comment. The Amended DBAR will be made available electronically on the Eco Route Environmental Consultancy website (www.ecoroute.co.za) for the full 30-day comment period.

Notification of the availability of the Amended DBAR will be undertaken through:

- Direct written notification to all registered I&APs; and
- Reference to the previously placed newspaper notices, which indicated that project documentation would be made available electronically.

Extension Request and Acknowledgement by the Competent Authority

A notification in terms of Regulation 19(1)(b) of the EIA Regulations, 2014 (as amended), was submitted to the Department of Forestry, Fisheries and the Environment (DFFE) to allow for the re-issuance of the amended report and the implementation of an additional public participation process.

The Department confirmed receipt of the Regulation 19(1)(b) notification on 21 January 2026 and further confirmed that the revised report must be subjected to an additional public participation process of at least 30 days, in accordance with Regulation 41.

The Amended Draft Basic Assessment Report will therefore be made available in compliance with the Department's confirmation and the applicable regulatory requirements.

Proof of all notifications, correspondence with the competent authority, and the availability of the Amended DBAR will be included in the Final Basic Assessment Report submitted to the Department for decision-making.

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, is described below:

Authority / I&AP (Theme)	Previous Comment(s) Received	Latest Comment(s) Received (Amended Draft BAR)	Summary of Latest Comment	Response / Outcome	BAR Section(s) Amended / Addressed
CapeNature (Biodiversity / Conservation)	Confirmed the site falls within mapped CBA1, CBA2 and ESA areas and requested avoidance of sensitive habitat, rehabilitation commitments, and conservation management.	Noted revised layout and reduced footprint. Continued emphasis on ecological protection, no-go areas, alien clearing, and long-term stewardship.	Supports footprint reduction but still requires biodiversity safeguards and long-term conservation management.	The revised preferred layout avoids mapped CBA1 and indigenous forest areas, with development confined to degraded CBA2 portions. Approximately 97.3% of the site remains natural or rehabilitated. Applicant intends to pursue Open Space III rezoning, subject to separate approval.	Receiving Environment – Biodiversity; Constraints Map; Preferred Alternative; Need & Desirability; EMPr
SANParks (Protected Environment / Coastal / Visual Context)	Raised concern regarding proximity to Coastal Public Property, conservation landscape sensitivity, visual impacts, and alternative northern development node options.	Reiterated that the Wilderness Protected Environment context requires fuller consideration. Requested stronger treatment of approvals, biodiversity compatibility, and coastal risk issues.	Protected Environment status and coastal sensitivity remain key unresolved concerns.	BAR updated to further address Protected Environment context, Section 63 ICMA, coastal risk considerations, and site-specific motivation. No development within Coastal Public Property proposed.	Protected Environment Context; Coastal Processes; Section 63 ICMA; Alternatives; Need & Desirability
Breede-Olifants CMA / Water Authorities (Water Resources)	Requested confirmation of watercourses, drainage lines, and whether section 21 water uses may be triggered.	No substantive additional objection received. Continued expectation of lawful servicing and stormwater management.	No new objection; expects compliant water and stormwater management.	Based on available specialist input, no mapped watercourses or wetlands occur within the footprint. Rainwater harvesting and sealed conservancy systems proposed.	Water Resources; Infrastructure & Services; EMPr

Department of Agriculture (Agricultural Potential)	Requested confirmation of agricultural viability and implications of rezoning away from Agriculture Zone I.	No substantive additional objection received.	No new concerns raised.	Specialist input records limited agricultural capability due to soils, slopes, and environmental constraints. No loss of productive agricultural land anticipated.	Agricultural Potential; Planning Context; Need & Desirability
Knysna Municipality (Planning / Infrastructure / SDF)	Queried consistency with the Knysna SDF, infrastructure burden, lawful access, and whether proposal may create precedent.	Continued need for planning clarity regarding existing rights, rezoning, and separate approvals.	Seeks clarity on planning rights and municipal processes.	BAR clarifies one dwelling is an existing right under Agriculture Zone I; any additional rights remain subject to separate municipal approvals. Development is off-grid and site specific.	Planning Context; Land-Use Rights; Infrastructure; Precedent Assessment
Directorate Biodiversity Conservation	Raised concern regarding dune sensitivity, protected trees, invasive species obligations, and biodiversity-sensitive design.	Supported revised layout avoiding higher sensitivity areas. Requested milkwood permitting where applicable, invasive species management, no-go area demarcation, and Open Space III rezoning prior to implementation.	Generally supportive of revised layout, subject to permits and biodiversity controls.	Permit requirements for protected trees acknowledged. Alien invasive management, no-go areas, and conservation measures included in BAR / EMPr.	Biodiversity Assessment; EMPr; Constraints Map; Preferred Alternative
Protected Areas Planning & Management Effectiveness	Requested consideration of protected area context, cumulative impacts, and compatibility with surrounding conservation objectives.	Supported reduced footprint and conservation intent, but stated that SCC verification, Protected Environment issues, and coastal erosion specialist information required fuller treatment.	Supports reduction but still seeks stronger specialist and protected area justification.	BAR strengthened regarding Protected Environment context, SCC commitments, and coastal risk considerations.	Protected Environment Context; SCC Measures; Coastal Processes
VRM Africa / Visual Specialist I&AP	Objected to omission of earlier LVIA material and challenged visual findings, viewshed assumptions,	Repeated objections regarding visibility from Groenvlei Beach, ridgeline development, cumulative precedent, and	Continues to dispute low visual impact conclusion and	BAR records objections. Previous visual material related to earlier layout. Current preferred layout revised through updated constraints	Visual Impact Assessment; Alternatives;

	slope interpretation, and precedent concerns.	alleged exclusion of prior specialist material.	adequacy of visual studies.	mapping and specialist input. Visual impacts remain manageable subject to controls.	Comments & Responses
Local Residents / Neighbours	Raised concerns regarding visual impact, privacy, traffic, rural character, environmental sensitivity, and future intensification.	Continued concerns regarding tourism creep, precedent, and cumulative development pressure.	Concerned that approval could lead to future intensification and character change.	Development remains compact (±1 375 m²), clustered, and low intensity, with majority of site remaining natural. Future rights require separate approvals.	Need & Desirability; Visual Impact; Preferred Alternative; Precedent
Latest Public Comment Received (Tourism / Zoning Clarity)	Earlier comments queried whether additional units implied commercial tourism use.	Requested explicit clarification on whether rezoning would authorise tourism or commercial operations.	Wants certainty that approval does not automatically allow tourism business rights.	BAR clarifies environmental assessment is based on physical footprint and impacts. Any future commercial tourism rights require separate municipal approvals.	Project Description; Land-Use Rights; Need & Desirability
General Public Participation Inputs	Requested proper notification, transparency, report access, and fair opportunity to participate.	Requested that all latest comments be properly recorded and reflected in the Final BAR.	Seeks transparent close-out of PPP process.	Multiple rounds of PPP undertaken, including Amended Draft BAR circulation. All comments captured in updated Comments & Responses Report.	Public Participation Process; Comments & Responses Report

2. Site Description and Environmental Attributes

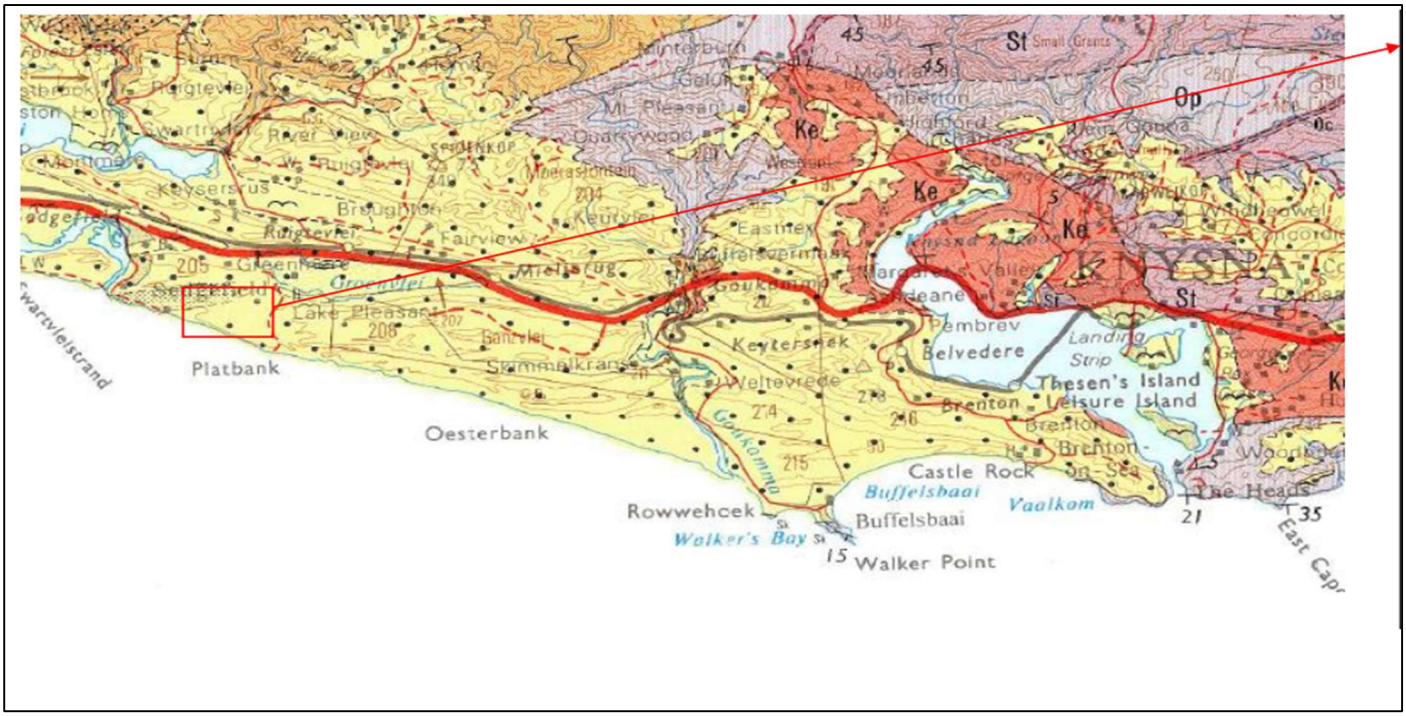
Geographical and Physical Aspects

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

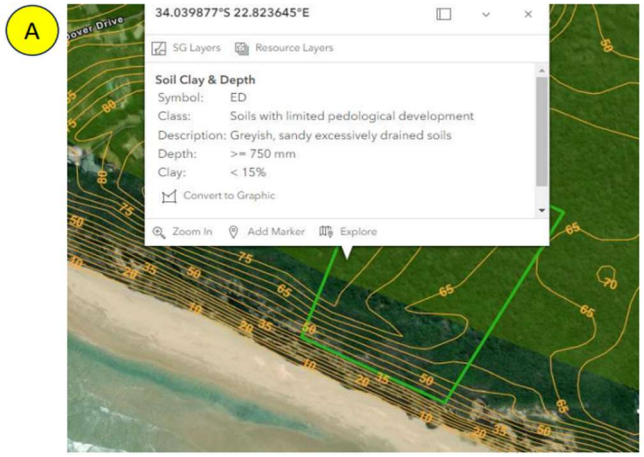
covered in coastal shrubs. This segment spans from the 75-meter contour down to sea level, exhibiting slope angles between 26 and 70 degrees over a distance of 50 meters. The stretch from the lookout to the coastal zone is identified as a high-risk area due to the pronounced steepness of the slopes.

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)

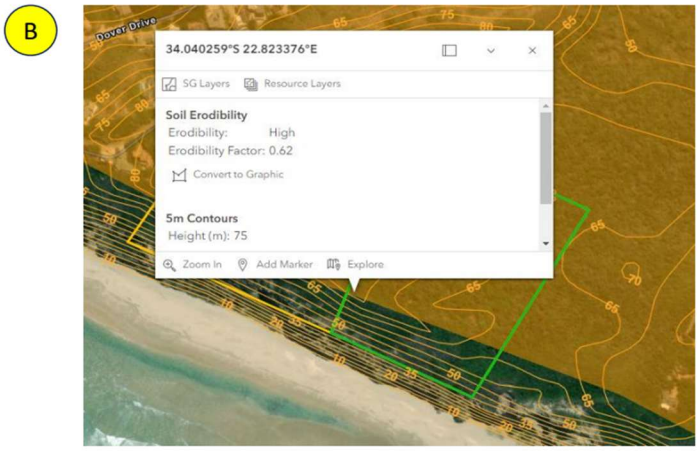
The region is characterised by coastal sand dunes, which are underlain by fossilized dunes. The area features a layer of soft and semi-consolidated materials that overspans a peninsula sandstone formation, which exhibits an east-west orientation and dips at an angle of 45 degrees to the south, at depths 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.



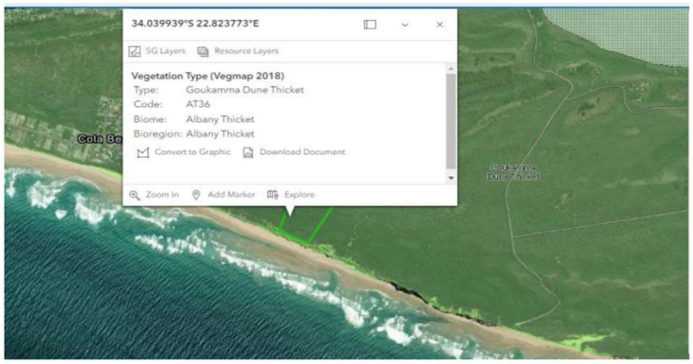
B Field observations: Soil is highly erodible in this area and loosely packed.

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 coarse to medium-grained, predominantly organic-rich to sandy from the top to the bottom layers. Grainsize changed gradually from coarse 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 15 to 135cm, with a slight moisture increase at 150cm.

<u>Vegetation</u>

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 stabilisation 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),

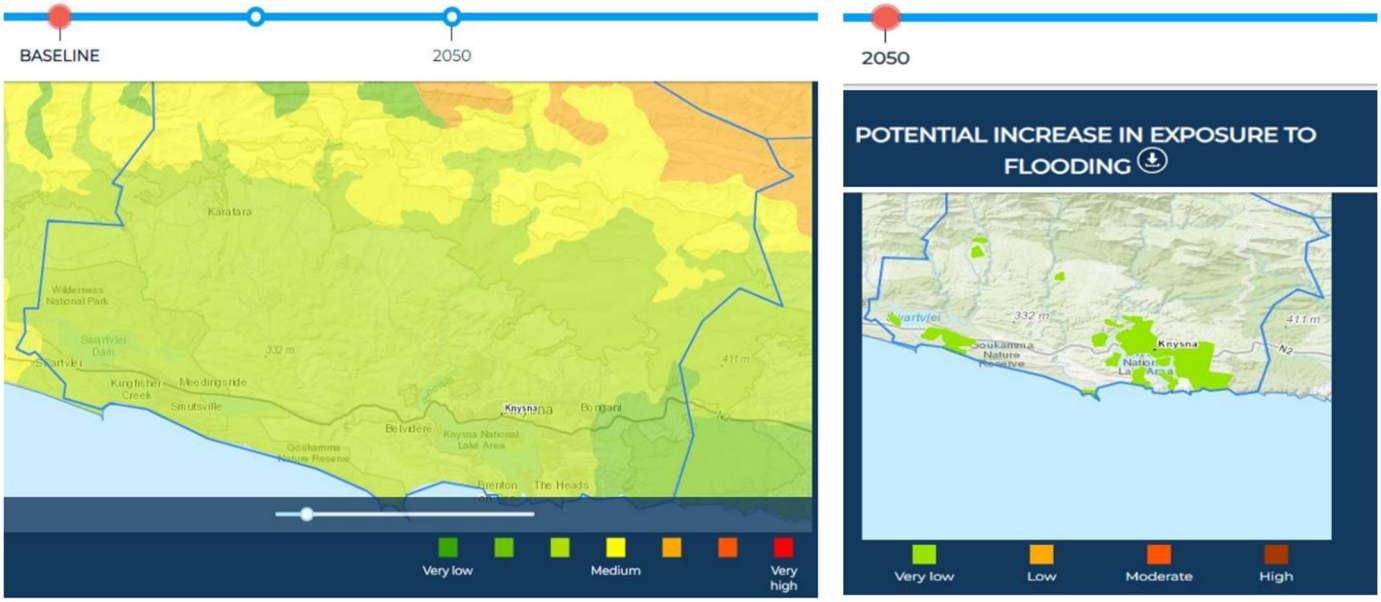
2024 satellite image: Well established coastal forest (Albany thicket), gradually tapering from the 65m contour towards the 30m coastal zone to shrubs

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.

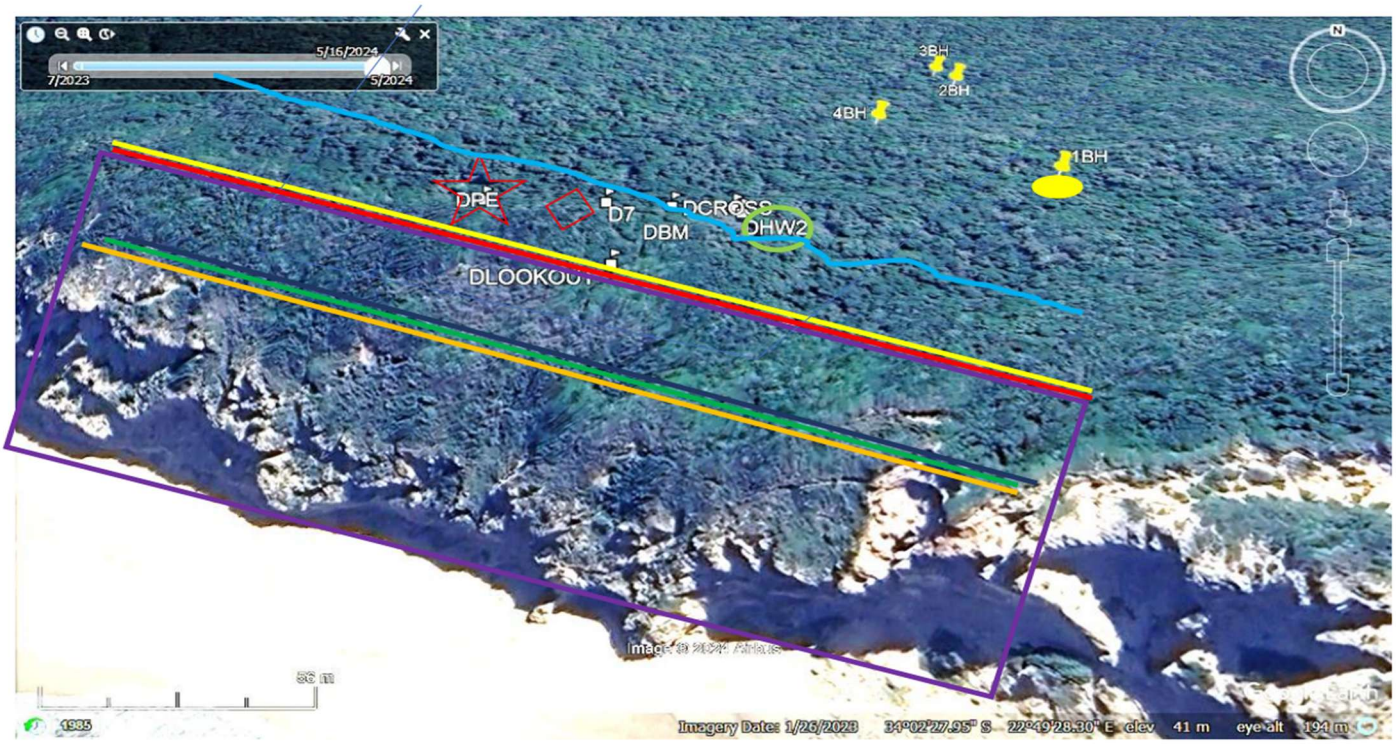


COASTAL FLOODING (CSIR): BASELINE (CURRENT) AND PROJECTED (2050) EXPOSURE TO FLOODING INDICATE THAT THE PROPERTY IS CURRENTLY LOCATED IN A LOW-RISK AREA AND IN 2050 IN A VERY LOW-RISK AREA FOR COASTAL FLOODING.

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-year 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 the 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) overlap. The building line (red) and the high-risk projection of 100-year coastal flooding (yellow line) overlap.



SUMMARY IMAGE OF EXCLUSION ZONES FOR THE PROPOSED ERECTION OF STRUCTURES. TERRAIN VIEW: 3D FEATURES ENABLED

Observation Summary

Geologically: A structurally weak area is located in position D7. Do not place weight-bearing structures in this position, or design structures around it. Position PE is far enough, but be aware not to place excessive weight-bearing pillars in 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 the weight of 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 are 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 are 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 are not located on position D7. It is located 15m north (inland) of the 100-year high-risk projection zone.

The borderline, 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 of 100-year coastal flooding overlap.

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.

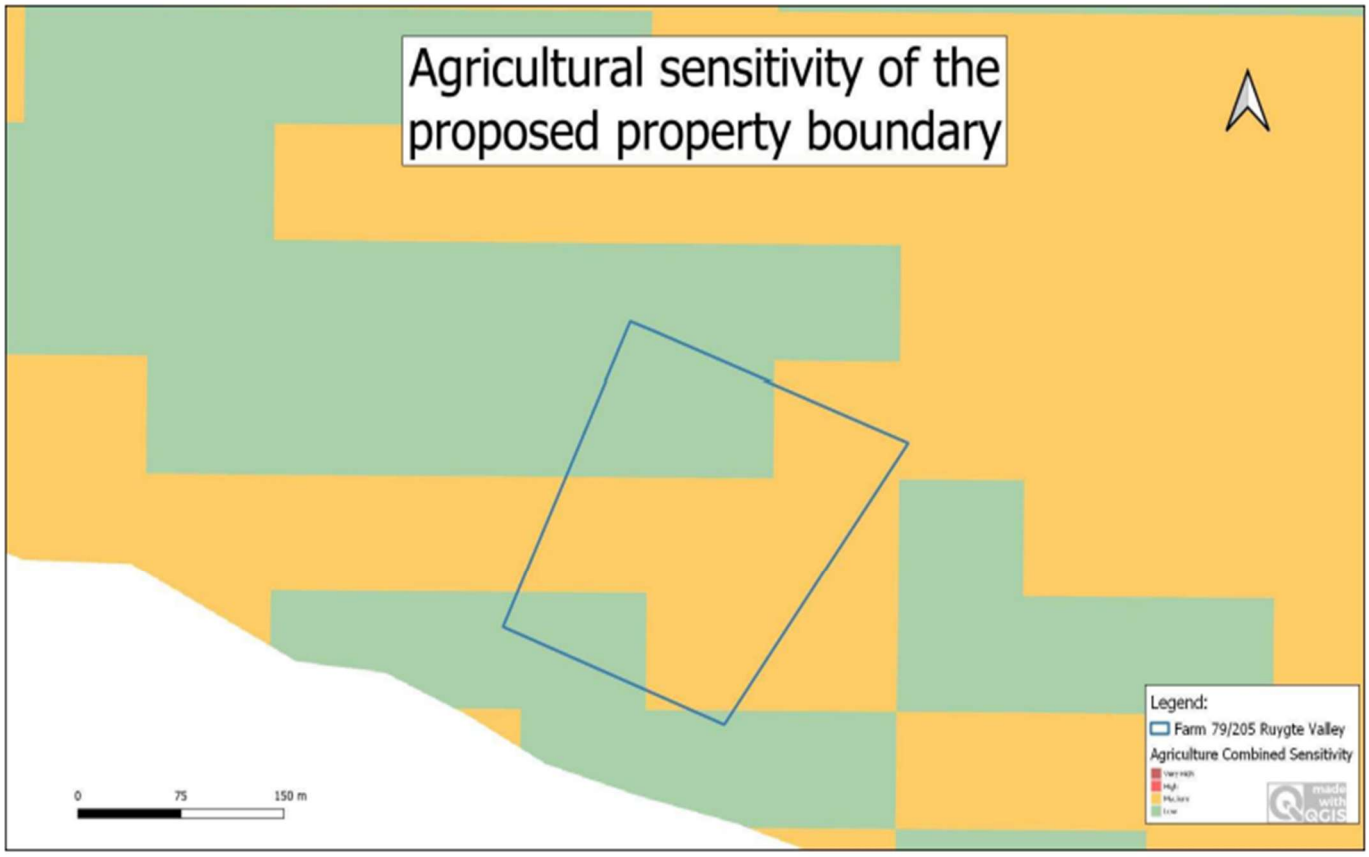
The proposed project is for accommodation on portion 79 of farm 205 Ruygte Valley. The project will consist of one house with a footprint of 400m², three cottages at 80m² each, a boardwalk connecting the four units, 6 parking bays for the four units, an 80m² shed, and a 50m2 cottage as staff quarters.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

The project is likely to require agricultural approval (or at least comment from the 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 coarse, modelled data, which is not accurate at the 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 to 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 the 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 utilised 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 the 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 utilised 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.

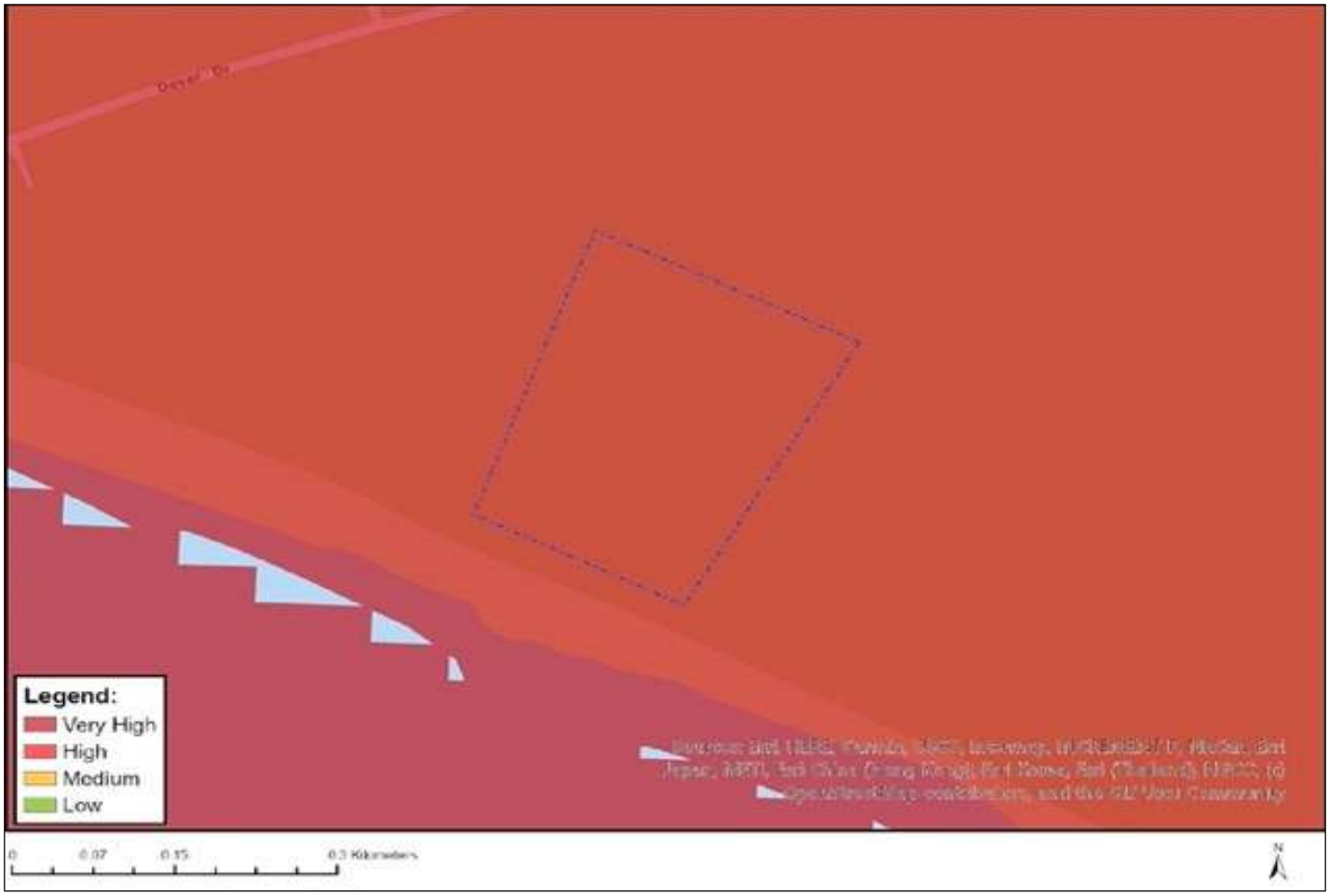
Figure 1: Location of the site near Sedgefield.

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 Sub catchment
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, and 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 of 500–700 mm yr-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 complexed 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

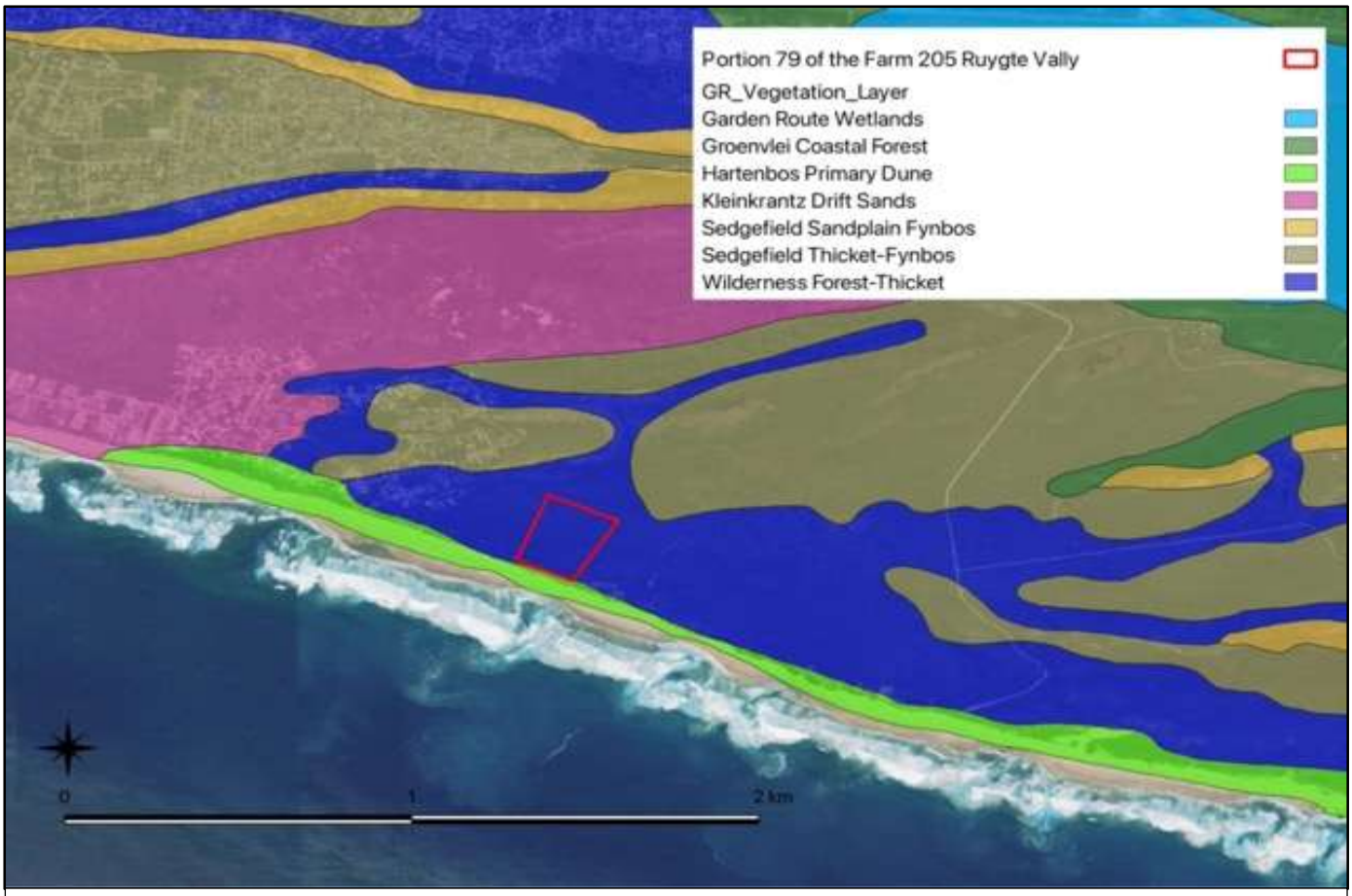


FIGURE 3: VEGETATION TYPES ACCORDING TO THE GARDEN ROUTE INITIATIVE VEGETATION MAP.

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) emphasise 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 the 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 separated 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 in 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 of 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 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*, which 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 the 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 the 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 broad 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 the 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 the 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 erodible 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 the 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 the 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 these areas have for current and future conservation. Although relatively small in extent, the proposed development will form part of a cumulative trend that will lead to possible 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 that 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 the 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 the 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.

Note: The specialist assessments were undertaken on the basis of site sensitivity, reasonable worst-case development envelopes, and earlier layout iterations, as required by the EIA Regulations. Impact ratings, therefore, reflect the inherent sensitivity of the receiving environment and the potential consequences of development within a coastal forest, dune, and near-shore marine-influenced system, including associated terrestrial habitats, fauna, and botanical features.

Particular consideration was given to biodiversity pattern and process, Species of Conservation Concern (SCC) vegetation, protected flora, animal movement corridors, avifauna, reptiles, small mammals, invertebrates, and the ecological linkages between inland habitat, dune vegetation, estuarine/coastal processes, and the adjacent marine environment.

The final preferred layout presented in this BAR represents a reduced-impact outcome informed directly by these specialist recommendations through footprint reduction, clustering of infrastructure, avoidance of CBA1 areas, indigenous forest areas, sensitive faunal habitat, SCC plant habitat where feasible, movement corridors, and higher coastal risk zones, together with minimisation of lighting and disturbance effects that may affect nocturnal and mobile species.

In response to comments received during the public participation process, the BAR confirms that pre-construction walk-downs and site verification by a suitably qualified specialist may be required, where necessary, to identify any confirmed Species of Conservation Concern (SCC) vegetation or protected plant species within the final disturbance footprint. Should SCC flora be identified, micro-siting, avoidance buffers, rescue/translocation (where legally permissible), and permitting requirements will be implemented in accordance with applicable legislation and specialist recommendations.

The proposal does not include marine infrastructure, shoreline hardening, development below the high-water mark, or direct disturbance of Coastal Public Property. Potential indirect effects on the marine environment, including runoff, erosion, sediment mobilisation, noise, lighting spill, and habitat disturbance, are addressed through the preferred siting, stormwater controls, rehabilitation measures, and Environmental Management Programme.

The BAR does not amend or reinterpret specialist findings, but demonstrates how the proposed development has been progressively refined to ensure that identified terrestrial, botanical, faunal, coastal, and marine-related impacts are avoided where possible and otherwise reduced to acceptable levels through mitigation, operational controls, and long-term conservation commitments.

Sensitivity Maps

FIGURE 21: SANBI ORIGINAL ECOSYSTEM STATUS INDICATING GOUKAMMA DUNE THICKET

FIGURE 22: SANBI REMAINING ECOSYSTEM STATUS STILL INCLUDING GOUKAMMA DUNE THICKET

FIGURE 23: WESTERN CAPE BIODIVERSITY SPATIAL PLAN (2017) PROTECTED AREAS (CBA 1 AND CBA 2)

FIGURE 24: PORTIONS OF PORTION 79/205 AND PORTIONS OF THE PROPOSED DEVELOPMENT FOOTPRINT FALL WITHIN 100 METRES OF THE HIGH-WATER MARK.

Initial Visual Statement

Paul Buchholz was appointed to undertake the Initial Visual Impact Statement for the proposed development on Portion 79 of Farm Ruygte Valley No. 205, situated near Sedgefield, within the Knysna Municipal Area of the Western Cape. The objective of this assessment is to provide an initial appraisal of the visual and aesthetic sensitivity of the receiving environment, to inform the environmental assessment and conceptual design of the proposed development.

Visual, scenic, and cultural landscape components represent a finite and valuable resource that significantly influences the sense of place and environmental quality. The visual assessment forms part of the iterative design process to ensure that the project integrates sensitively within its setting and minimises potential visual intrusion.

Scope and Methodology

The visual assessment approach is informed by local and international best-practice methodologies, including:

- The Provincial Guideline for Involving Visual and Aesthetic Specialists in EIA Processes (DEA&DP, 2005);
- The Landscape Institute and IEMA Guidelines for Landscape and Visual Impact Assessment; and
- US Bureau of Land Management Visual Resource Management Framework.

The assessment considers both quantitative factors (e.g. visibility, viewsheds, and elevation) and qualitative factors (e.g. aesthetic value, sense of place, and landscape harmony). Key tasks included:

- Characterisation of the existing landscape and visual setting;
- Identification of key viewpoints and visual receptors;
- Description of the proposed project elements and their visual form;
- Determination of visual sensitivity and modification levels; and
- Preliminary mitigation and design recommendations.

Site Context and Landscape Character

The property measures approximately 5.21 hectares and is located on a stabilised coastal dune overlooking the Indian Ocean, approximately 700m east of Cola Beach and south of Groenvlei Lake. The site forms part of a predominantly natural coastal landscape characterised by:

- Dense coastal thicket and dune fynbos vegetation;
- Steep dune slopes and elevated topography reaching approximately 70m above sea level;
- Minimal existing built infrastructure; and
- High scenic quality due to panoramic ocean and mountain views.

The landscape's visual integrity is high, with strong natural character and limited human disturbance.

Visual Sensitivity and Potential Impact

Visual sensitivity is considered moderate to high due to the site's natural character and proximity to the coastal edge. However, several mitigating factors reduce the potential impact:

- The dense vegetation cover and elevated topography provide effective visual screening.
- The site is not visible from the N2, Groenvlei Road, or Lake Pleasant due to natural screening; and
- Views from Groenvlei Beach and coastal areas are obstructed by dune cliffs and vegetation.

Preliminary observations indicate that the proposed development footprint (approximately 0.02% of the site area) can be accommodated with minimal visual intrusion if design mitigation principles are applied.

Mitigation and Design Recommendations

To ensure minimal visual disturbance and maintain the natural aesthetic quality, the following measures are recommended:

- Retain and integrate existing vegetation as natural screening elements;
- Utilise lightweight structures and natural materials (timber, steel, glass, and stone);
- Apply earth-toned colour palettes compatible with the dune and thicket environment;
- Restrict night lighting through low-intensity, motion-sensor solar lights; and
- Implement vegetation rehabilitation post-construction to restore disturbed areas.

Assumptions and Limitations

Visual perception is inherently subjective and influenced by the viewer's context. This initial statement is based on available site data, field observations, and preliminary design information. A comprehensive Visual Impact Assessment (VIA) will follow once detailed design plans and elevations become available, incorporating photomontages and quantitative visibility modelling.

Conclusion

The proposed development, as currently conceptualised, is visually compatible with its natural coastal setting. With the application of appropriate design, placement, and material mitigation, the project's potential visual impact is expected to be low and manageable. The site demonstrates sufficient Visual Absorption Capacity (VAC) to integrate small-scale, eco-sensitive structures without detracting from the area's scenic character.

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.

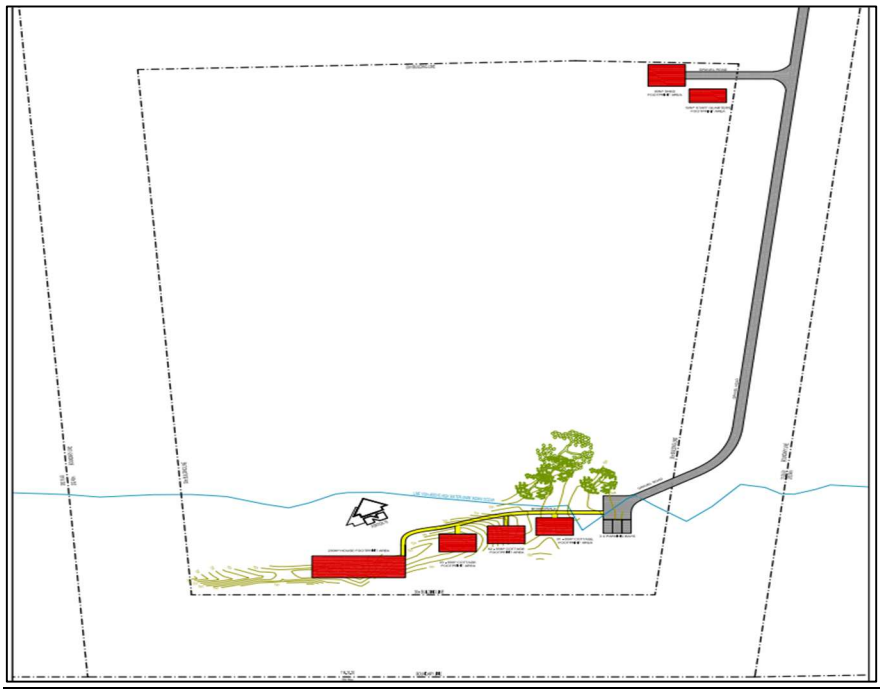
This Visual Compliance Statement will address the following objectives:

- 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 be 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 is important and will facilitate quicker recovery, post-construction, which 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 detailed design should have mitigation measures 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 minimising 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 minimising disruption to the local environment and community.

VRM VISUAL ASSESSMENT

Visual Resource Management Africa (VRMA) was appointed to conduct a Visual Impact Assessment (VIA) for the proposed development on Portion 79 of Farm Ruygte Valley No. 205, within the Knysna Municipality, Western Cape. The assessment applied the BLM (U.S. Bureau of Land Management) Visual Resource Management (VRM) methodology, which classifies landscapes according to scenic quality, viewer sensitivity, and distance zones to determine appropriate development thresholds.

Methodology and Study Approach

The VIA was undertaken according to the VRM framework, which evaluates:

- Scenic Quality (landform, vegetation, water, colour, cultural modifications, and scarcity value);
- Viewer Sensitivity (proximity of receptors, viewer numbers, frequency, and concern); and
- Distance Zones (foreground, middleground, background).

The objective was to assess whether the proposed development could be visually absorbed within the landscape without causing significant alteration to its character or aesthetic quality.

Site Description (as assessed by VRMA)

The report describes the site as a "high coastal cliff-edge property immediately above Groenvlei Beach," characterised by:

“Active erosion along the southern boundary with significant dune movement and a high scenic quality typical of the coastal cliff landscape.” (VRM Africa, 2024: Section 2)

It further notes:

“The proposed structures are located on the crest of the dune ridge and are likely to intrude on the skyline as viewed from the beach and sea.”
(VRM Africa, 2024: Section 3.1)

According to VRMA, the site is directly visible from Groenvlei Beach, forming part of the immediate coastal viewshed frequented by local recreational users.

Scenic Quality and Sensitivity

The VRMA study classified the site as having “High Scenic Quality and High Viewer Sensitivity”, corresponding to VRM Class II (High Visual Sensitivity).

It emphasised that:

“The area possesses exceptional scenic value within the Garden Route coastal corridor, defined by the combination of steep dune cliffs, indigenous vegetation, and expansive ocean views.”
(VRM Africa, 2024: Section 3.2)

Viewer sensitivity was rated High, as beachgoers, local residents, and visitors were considered primary receptors with sustained visual exposure.

Identified Visual Impacts

The VIA identified twelve key visual risks, including:

- Skyline intrusion from elevated buildings positioned on the dune crest;
- Increased visual contrast against the natural landform and vegetation;
- Linear scarring due to the proposed access road alignment through Goukamma Dune Thicket (CBA) vegetation;
- Loss of visual integrity from vegetation clearance and cut-and-fill operations; and
- High potential for night-time light pollution due to the elevated location.

The report concluded:

“The proposed development will significantly alter the landscape character of the coastal cliff and result in a visual contrast inconsistent with the surrounding natural landform. The impact is considered high in magnitude and permanent in duration.”
(VRM Africa, 2024: Section 4.1)

VRMA Recommendations

VRMA recommended that the site be considered unsuitable for development, stating:

“This location should be classified as a Fatal Flaw from a visual perspective. Relocation of the footprint behind the dune crest, where visual containment can be achieved, is strongly recommended.”
(VRM Africa, 2024: Section 4.3)

Mitigation measures such as natural materials, vegetation buffers, and low lighting were noted, but VRMA concluded these would not sufficiently reduce the visual intrusion given the exposed coastal position of the assessed site.

Correction and Clarification

Following submission of the VRM Africa report, subsequent geospatial verification (Eco Route Environmental Consultancy, 2025) confirmed that the site assessed by VRMA does not correspond to the actual Portion 79 of Farm Ruygte Valley No. 205 under this Basic Assessment process.

Correct Site Description

The correct project site:

- Lies inland from the coastal cliff, approximately 700 m east of Cola Beach,
- Occupies stabilised consolidated dunes at elevations of 65–75 m above sea level,
- Is covered by dense Goukamma Strandveld and coastal thicket vegetation,
- Has no direct visual exposure to Groenvlei Beach or the N2, and
- Lies behind the dune ridge, not on an active cliff edge.

The actual development footprint, covering ±1 175 m² (0.02% of the property), will be screened by vegetation and topography, and will not result in skyline intrusion or beach visibility.

Revised Visual Findings

Subsequent visual specialists – Outline Landscape Architects (2025) and Paul Buchholz (2025) – both confirmed that:

- The site has High Visual Absorption Capacity (VAC) due to dense vegetation and complex terrain;
- No visual exposure exists from the beach, Groenvlei Lake, or public roads;
- The project's architectural scale, materials, and siting are consistent with low visual sensitivity; and
- The expected residual visual impact significance is Low with standard mitigation.

Conclusion

While the VRM Africa assessment (2024) provides a useful methodological context, it was conducted on an incorrect coastal parcel and is therefore not applicable to the actual Portion 79 under consideration.

For the purposes of the draft Basic Assessment Report:

- The findings of the VRMA report are superseded.
- The correct visual sensitivity classification for the actual site is Low, and
- The proposed development is visually compatible with the natural coastal landscape when mitigation is implemented.

Civil and Structural Engineering Confirmation

The report was prepared by a professionally registered civil and structural engineer in support of the Environmental Impact Assessment for the proposed residential development on Erf 79/205, Ruygte Valley, Cola Beach, Sedgefield. The purpose of the report was to confirm the engineering suitability of the site and to identify design and construction

measures required to ensure safe and sustainable development in a coastal dune environment, in accordance with NEMA, the Integrated Coastal Management Act (ICMA), and applicable SANS standards.

Site Conditions and Findings

The site forms part of a coastal dune system comprising recent aeolian sands and semi-consolidated fossil dunes typical of the Garden Route coastline.

Key findings include:

- Soil conditions: Loose to medium-dense fine sands with good drainage characteristics, but high erodibility and low natural bearing capacity.
- Topography: Steep coastal slopes descending toward the sea.
- Stability: A geotechnical investigation identified structurally weak zones in parts of the site; however, the preferred development footprint (Location PE) avoids these areas and lies outside the mapped 100-year coastal flood and erosion hazard lines.
- Hydrology and coastal context: The site is located within 100 m of the High-Water Mark, triggering coastal assessment requirements. However, the preferred footprint is positioned in a lower-risk portion of the 100 m HWM trigger area, informed by the constraints-led layout and specialist inputs. With appropriate stormwater, erosion-control and foundation measures, hydrological and coastal stability risks are considered manageable.

From an engineering perspective, the site is suitable for the proposed development, provided that the recommended design and construction controls are implemented.

Recommended Design and Construction Controls

The report prescribes the following measures:

1. Dune stability verification: Formal slope analysis in accordance with SANS 1936-2:2012 prior to construction.
2. Foundation design: Raft, deepened strip or piled foundations anchored in competent material, including a minimum 1.5 m compacted perimeter zone (95% Mod AASHTO).
3. Stormwater management: Non-concentrated discharge, infiltration-based systems, and compliance with SANS 1200 DA.
4. Erosion control: Use of geotextiles, bioengineering solutions and immediate revegetation with indigenous dune species.
5. Engineering supervision: Continuous oversight, compaction testing and certification by an ECSA-registered engineer.
6. Post-construction monitoring: Annual stability and drainage inspections for a minimum of two years after completion.

Professional Confirmation

The engineer confirms that the proposed residential footprint (Location PE):

- Lies within the 100 m High-Water Mark trigger area, but outside the mapped 100-year flood and erosion hazard zones;
- Is geotechnically and structurally suitable for residential development;
- Will not compromise dune stability or natural coastal processes when developed in accordance with the prescribed controls; and
- Presents no unacceptable engineering or structural risk when constructed under the specified conditions.

Conclusion

The civil and structural engineering assessment concludes that the site is fit for development, subject to compliance with the recommended foundation, erosion-control, and monitoring measures. The project aligns with the principles of sustainable coastal development, ensures structural safety, and upholds the intent of NEMA and ICMA.

Professional Opinion:

"Erf 79/205, Ruygte Valley, Cola Beach, is suitable for the proposed residential construction, subject to implementation of the prescribed engineering measures." — Marius C. van Coller Pr. Eng (ECSA No. 20060275)

Heritage

Sections 38(1)(a) and 38(1)(c)(i) of the National Heritage Resources Act (Act 25 of 1999) are applicable to the proposed development. A Notification of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC), which confirmed that no further heritage assessment is required in terms of Section 38 of the Act.

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 reflected in its Integrated Development Plan (IDP), places emphasis on inclusive economic growth, employment creation, skills development, improved quality of life, and the sustainable management of natural, scenic, and cultural resources. A key component of this vision is the protection of the

environmental assets that underpin the municipal economy, while enabling appropriate forms of development that are compatible with the area's environmental carrying capacity.

The Knysna Spatial Development Framework (SDF, 2020) and associated economic strategies identify sectors such as finance and business services, wholesale and retail trade, and the accommodation and tourism economy as important contributors to the municipal economy. Tourism is particularly significant where it is nature-based, landscape-sensitive, and aligned with the conservation qualities for which the Garden Route is widely recognised.

While the construction sector is not generally regarded as a primary long-term economic base sector, it continues to play an important supporting role through temporary employment creation, procurement opportunities, and local multiplier effects associated with small-scale residential and infrastructure development.

Against this policy context, the proposed development on Portion 79 of Farm Ruygte Valley No. 205 is expected to make a modest but positive contribution to the local economy through:

- short-term construction employment opportunities;
- use of local contractors, suppliers, and service providers where feasible;
- ongoing property maintenance and land management activity;
- private investment in environmental rehabilitation and stewardship; and
- retention of the scenic and ecological qualities that support the broader tourism economy.

The proposed land-use framework includes provision for additional accommodation units within the broader planning application context. However, the Applicant has stated that these units are presently intended for private family and guest use. Any future commercial tourism rights, if sought, would remain subject to separate statutory planning approvals.

The proposal is further aligned with municipal policy objectives in that it supports conservation-compatible land use outside the urban edge, retains the majority of the property in a natural or rehabilitated state, and avoids reliance on municipal bulk infrastructure through off-grid servicing measures.

No direct marine or coastal public infrastructure demand arises from the proposal, while the scenic coastal landscape and environmental assets that contribute to the local tourism economy are intended to be maintained through the compact footprint and conservation-oriented management approach.

Accordingly, the development is considered broadly consistent with municipal economic and spatial policy objectives by supporting modest local economic activity, private environmental stewardship, and sustainable low-intensity land use without creating material infrastructure burdens or inappropriate development precedent.
development.

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 proposed development has been deliberately sited within a previously degraded CBA2 area that is heavily invaded by *Acacia cyclops*, thereby avoiding direct disturbance to CBA1 Milkwood Forest and intact indigenous vegetation, as confirmed in the Terrestrial Biodiversity Assessment (Appendix D4). The preferred alternative footprint is limited to approximately 1 375 m², which includes the dwelling, access road, parking area and boardwalk infrastructure (refer to the updated Constraints Map and SDP).

While vegetation clearing and construction activities will result in localised and temporary disturbance, these impacts are confined to already transformed areas and do not affect high-sensitivity habitats. The implementation of the Alien Invasive Management Plan and rehabilitation of Goukamma Strandveld are expected to result in an overall improvement in habitat condition and ecological functionality.Temporary disturbance to fauna, including reptiles, avifauna and small mammals, may occur during construction but is expected to be localised and manageable.

Notwithstanding the above, construction-related activities may cause short-term habitat fragmentation and disturbance, particularly when considered in combination with existing residential development in the surrounding area (e.g., a residence approximately 250 m east of the site, as noted in the Visual Compliance Statement, Appendix D1, Page 10).

Cumulative Effects: At a local scale, the cumulative effect of the proposed development, when viewed alongside existing low-density rural residences, is considered low, given the small footprint, clustered layout and avoidance of CBA1 areas. However, at a broader landscape scale, incremental loss of natural vegetation associated with future developments—particularly if not similarly constrained to degraded areas—could reduce long-term biodiversity resilience.

The Terrestrial Biodiversity Assessment concludes that, provided development is restricted to degraded CBA2 areas and is accompanied by active rehabilitation and alien invasive control, the proposal is likely to result in a net positive ecological outcome over the medium to long term.

Mitigation Measures:

- To minimise impacts and enhance ecological benefits, the following mitigation measures will be implemented:
- Full implementation and ongoing monitoring of the Alien Invasive Management Plan, including systematic removal of *Acacia cyclops* and follow-up control.
- Salvage and replanting of indigenous vegetation within disturbed areas where feasible, as recommended in the Visual Compliance Statement (Appendix D1, Page 11).

- Restriction of all construction activities to the approved development footprint, with no encroachment into CBA1 or forest areas.
- Rehabilitation of all temporarily disturbed areas using locally indigenous species characteristic of the Goukamma Strandveld.
- Enforcement of municipal and provincial biodiversity management requirements. No biodiversity offsets are required for this development due to the limited footprint and net conservation gain, as confirmed in the Terrestrial Biodiversity Assessment.

Coastal Stability and Erosion

Impact: The Preliminary Geotechnical and Geomatic Report (Appendix D2, pp. 27, 36 and 38) identifies cyclic coastal dune erosion of approximately 4–6 m between 2005 and 2024, with a projected inland retreat of approximately ±30 m by 2100, based on historical shoreline movement and sea-level-rise scenarios.

The updated Constraints Map consolidates key spatial constraints relevant to coastal stability and erosion risk, including:

- the 100 m High-Water Mark (HWM) inland trigger zone;
- mapped low- and high-risk coastal erosion and flood lines; and
- areas of potentially unstable or erodible dune soils.

The proposed development footprint is located within the broader 100 m HWM trigger zone; however, the preferred development area is situated on elevated terrain well above the 40 m contour, as reflected on the Constraints Map and confirmed in the Preliminary Geotechnical and Geomatic Report. Importantly, the HWM line depicted on available mapping products is indicative in nature and not a gazetted or legislatively approved development setback line, but rather a planning and regulatory trigger used to identify areas requiring risk-informed assessment.

In accordance with the Integrated Coastal Management Act (ICMA), development within the HWM requires careful risk-based assessment and mitigation, provided that site-specific coastal risk has been assessed and appropriate mitigation measures are implemented. The purpose of the trigger area is therefore to guide informed, risk-averse decision-making, rather than to function as an absolute exclusion zone.

As shown on the updated Constraints Map, the preferred development footprint is positioned outside mapped high-risk coastal erosion and flood zones, and landward of site-specific erosion and flood-risk thresholds identified through specialist assessment. The layout avoids areas of active dune migration, steep instability and projected inundation and represents the lowest-risk location within a constrained coastal setting.

No permanent structures are proposed within areas identified as having unacceptable long-term erosion or flooding risk. The Coastal Protection Zone (CPZ) context has been acknowledged, and the development footprint has been refined through a constraints-led site selection process to minimise coastal stability impacts. The earlier layout reflected on the previous Constraints Map is retained as Alternative 1, whereas the revised layout (preferred alternative) is informed by updated constraints mapping and specialist inputs.

If development were to be positioned closer to the shoreline or within mapped erosion-prone areas (as illustrated by the higher-risk scenario assessed in Appendix D2), additional stress could be exerted on the erodible dune system. These higher-risk options were therefore excluded during layout refinement.

The Civil and Structural Engineering Confirmation (Appendix D5) confirms that the proposed development is technically feasible, provided that final foundation design, slope stabilisation and stormwater management measures

are informed by detailed, ECSA-certified engineering input. The Letter from Dr E. Spicer (Rock Hounds Pty Ltd, 10 September 2025) (Appendix D6) further confirms that the geotechnical investigation provides first-level baseline data only and must be supplemented by detailed, site-specific investigations at the building-plan stage, particularly given the sensitivity of the coastal dune system and the need to maintain vegetated dune stability.

Cumulative Effects: At a local scale, cumulative coastal stability impacts are assessed as low, given that the development footprint is small (±**1 375 m²**), confined to a degraded portion of the site, and located outside mapped erosion-risk zones as shown on the updated Constraints Map. At a broader coastal scale, incremental disturbance from multiple coastal developments could contribute to accelerated dune erosion under projected sea-level rise (Appendix D2). The constraints-led approach is therefore critical to ensure development remains risk-averse and avoids encroachment into high-risk areas.

Mitigation and Management Measures (secured through layout, constraints mapping, and the EMPr):

- All permanent structures are confined to the approved footprint within the 100 m HWM trigger area and are located outside mapped erosion- and flood-risk zones.
- Final foundation, slope-stabilisation and stormwater designs shall be prepared and certified by an ECSA-registered professional engineer.
- A minimum 1.5 m compacted foundation zone shall be implemented around all external walls to enhance structural stability.
- Indigenous dune-stabilising vegetation with root systems ≥600 mm shall be retained where possible and reinstated in disturbed areas.
- A detailed geotechnical investigation shall be undertaken at the final design stage in accordance with Appendix D6.
- All disturbed areas shall be rehabilitated immediately post-construction using locally indigenous Goukamma Strandveld vegetation.
- No expansion of the development footprint beyond the approved layout within the 100 m HWM trigger area shall be permitted without updated coastal and geotechnical assessments and further authorisation, if required.

<u>Coastal Flooding</u>

Impact: The Preliminary Geotechnical and Geomatic Report (Appendix D2, pp. 18 and 33) indicates that the site is currently subject to a low flood risk, with very low risk projected up to 2050. The 100-year high-risk coastal flooding projection extends landward toward the Lookout Point area by approximately 2100.

As confirmed on the updated Constraints Map, the proposed development footprint is located within the broader 100 m HWM trigger area but is positioned on elevated terrain above the 40 m contour and outside mapped high-risk coastal erosion and flood zones. The HWM line does not represent a legislated prohibition on development but indicates an area requiring risk-informed assessment and mitigation.

The limited footprint (±**1 375 m²**) and clustered layout ensure that the development does not obstruct natural drainage pathways, nor does it materially increase flood susceptibility on site. Given the small scale of development and its elevated placement, direct flood risk associated with the proposed development is assessed as negligible.

At a broader scale, incremental coastal development—if not guided by constraints mapping and risk-informed siting—could cumulatively influence runoff patterns and coastal hydrology over the long term. In this context, the proposed development's constraints-led siting, elevated position and off-grid design reduce its contribution to cumulative

hydrological change. The incorporation of rainwater harvesting systems further mitigates surface runoff and reduces pressure on the natural drainage regime (Town Planning Report, Appendix D5, p. 11).

Cumulative Effect: Cumulative coastal flood risk may increase toward 2100 if multiple developments within the coastal zone are not consistently located and designed in accordance with coastal risk mapping and setback principles. The proposed development's elevated position, limited footprint and avoidance of flood-risk zones ensure that its contribution to cumulative coastal flood risk remains very low.

Mitigation and Management Measures:

- All permanent structures are sited in accordance with the updated Constraints Map, outside mapped high-risk coastal flood and erosion zones.
- Final design and layout are informed by the Preliminary Geotechnical and Geomatic Report, with confirmation that development remains above the 40 m contour.
- Buildings shall incorporate flood-resilient and slope-appropriate design measures, including controlled stormwater dispersion.
- Off-grid rainwater harvesting systems shall be maintained to limit surface runoff.
- Future development within the coastal zone should continue to be regulated through coastal constraints mapping to prevent cumulative flood-risk escalation.

Social Impacts

Impact: The proposed development comprises a private residential dwelling with three additional units for private family and guest accommodation. While a tourism-compatible land-use framework is applied for planning and rezoning alignment purposes, this does not alter the private residential nature of the proposed use. The scale, layout and intensity of the development are consistent with the low-density coastal and conservation character of the Groenvlei area (Town Planning Report, Appendix D5, p. 8).

Public access to Groenvlei Beach via Bushy Way and Groenvlei Beach Road will remain intact and unrestricted. No fencing, signage or landscaping associated with the development will impede traditional coastal access.

Short-term construction activities may result in temporary, localised disruption to access along existing routes. These impacts are expected to be minor and reversible and may contribute marginally to cumulative pressure on access routes already used by nearby residential and tourism-compatible development(s) (Visual Compliance Statement, Appendix D1, p. 6).

Cumulative Effect: Incremental residential or tourism-related development along the coastal corridor could influence community perceptions regarding accessibility or exclusivity if not carefully managed at a municipal level.

Mitigation and Management Measures:

- Engage neighbouring landowners and community representatives prior to and during construction to manage temporary access disruptions.
- Ensure Bushy Way and Groenvlei Beach Road remain publicly accessible at all times.
- Prohibit any physical or visual barriers that could imply restriction of public coastal access.
- Implement construction management measures to minimise disruption to existing road users.

Aesthetic and Lifestyle Impacts

(Your content is fine — only one key edit: keep "high VAC" and update footprint references if any occur later.)

Cumulative Effect: While proposed private development has a negligible individual visual impact, incremental residential and tourism-compatible development(s) along the coastal ridge could, over time, alter the tranquil character of the Sedgefield coastal landscape if future developments are not consistently guided by constraints-led siting, scale control and sensitive architectural design.

Mitigation Measures:

- Engage neighbouring landowners and community representatives prior to and during construction to manage temporary access disruptions.
- Ensure Bushy Way and Groenvlei Beach Road remain publicly accessible at all times.
- Prohibit any physical or visual barriers that could imply restriction of public coastal access.
- Implement construction management measures to minimise disruption to existing road users.

Economic Impacts

Impact: Although the land-use application includes a tourism-compatible zoning framework for planning purposes, the proposed cottages are intended for private family and guest accommodation. Economic impacts are therefore limited primarily to the construction phase, during which approximately 5–10 temporary employment opportunities are expected to be created for local skilled and unskilled labour.

Indirect economic benefits will accrue to local suppliers and service providers through the procurement of materials, transport, and construction services (Town Planning Report, Appendix D5, pp. 7–8). Whether utilised for private accommodation or low-intensity, tourism-compatible use, the small scale of the development ensures that it will not compete with or displace existing tourism enterprises in the area, such as Lake Pleasant Resort, nor will it materially alter the tourism carrying capacity of the Groenvlei coastal corridor.

Cumulative Effect: While the economic footprint of this development is limited, similar low-density, conservation-compatible residential and tourism-compatible developments cumulatively contribute to the local construction and service economy. Conversely, unmanaged expansion of development within sensitive coastal areas could, over time, reduce land availability for conservation or tourism-related activities if not spatially regulated.

Mitigation Measures:

- Prioritise local employment and procurement during the construction phase (Appendix D5, p. 7).
- Source ongoing maintenance, rehabilitation, and landscaping services from nearby communities where possible.
- Ensure that municipal spatial planning continues to balance residential, conservation, and tourism-compatible land uses within the Groenvlei coastal corridor.

Infrastructure and Public Resources Impact: The proposed development will operate entirely off-grid and will not place any demand on municipal bulk infrastructure or public services. Water supply will be provided through rainwater harvesting and storage systems, wastewater will be managed via sealed conservancy tanks, and electricity will be generated through solar photovoltaic systems (Town Planning Report, Appendix D5, p. 11). No borehole abstraction is proposed as part of the current application. Access will be provided via existing public roads and a private internal access route, with all maintenance costs borne by the landowner. Construction-related vehicle movement and waste generation may result in minor, short-term pressure on local roads and waste facilities, but these impacts will be temporary and managed through standard construction controls.

Cumulative Effect: Although this individual development does not burden municipal infrastructure, cumulative residential and tourism-compatible development(s) within the Groenvlei coastal area could, over time, place pressure on municipal services if future projects do not adopt comparable self-sufficiency measures.

Mitigation Measures:

- Maintain full off-grid operation, including renewable energy generation and on-site water and wastewater management.
- Implement a construction waste management plan, with disposal at licensed municipal facilities.
- Encourage future developments in the area to adopt private infrastructure funding and self-sufficiency standards, consistent with rural and conservation-area planning policy (Appendix D5, p. 10).

Conclusion

The cumulative impacts associated with the proposed development on Portion 79 of Farm Ruygte Valley No. 205 are assessed as manageable and acceptable, provided that all prescribed mitigation and management measures are implemented and enforced through the EMPr and ongoing compliance monitoring.

From an environmental perspective, the proposed development results in a net positive outcome through targeted removal of invasive alien vegetation, active rehabilitation of degraded CBA2 areas, erosion control, and long-term protection of indigenous coastal vegetation. Although the site is located within the broader 100 m HWM trigger area, the updated Constraints Map confirms that the approved development footprint is positioned outside mapped high-risk coastal erosion and flood-prone areas and landward of site-specific erosion-risk thresholds identified in the Preliminary Geotechnical and Geomatic Report. The coastal dune setting requires careful engineering consideration; however, compliance with ECSA-certified foundation design, slope-stabilisation measures, stormwater management controls, and retention/reinstatement of vegetated dune buffers will reduce the risk of long-term instability.

From a social perspective, the proposal maintains the established low-density rural residential character of the Groenvlei coastal area. Construction-related disturbances will be limited in extent and duration and are expected to be temporary and reversible, while providing modest short-term local employment opportunities. Public access to the coast via Bushy Way and Groenvlei Beach Road will remain intact and unaffected.

From an economic perspective, the development's contribution is intentionally modest and limited primarily to short-term construction employment and local procurement. While the land-use application includes a tourism-compatible zoning framework for planning and rezoning alignment purposes, the proposed cottages are intended for private family and guest accommodation and will not generate ongoing tourism-related employment. Fully off-grid servicing ensures that no demand is placed on municipal infrastructure.

In summary, the cumulative impacts of the proposed development are assessed as low to moderate in significance, subject to strict adherence to the approved layout, constraints-led siting and all environmental and engineering mitigation measures. The proposal delivers ecological and visual benefits, results in minimal and temporary social disturbance, and avoids placing pressure on municipal services. With implementation of the EMPr, ECO oversight and compliance with specialist recommendations, the proposed development represents a context-appropriate and environmentally responsible rural residential development that balances lawful land-use rights with long-term conservation objectives.

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 historical 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

Preferred Alternative

The preferred alternative comprises a main dwelling (approximately 200 m²), three small self-contained units (approximately 65 m² each), staff accommodation (approximately 50 m²), an equipment shed (approximately 80 m²), and associated access, parking, and pedestrian infrastructure.

The amended preferred layout increases the total disturbance footprint from approximately 1 175 m² (previous layout) to approximately 1 375 m² in order to improve avoidance of the identified D7 geotechnical constraint, while retaining a compact clustered development envelope.

The Applicant has stated that the additional units are intended for private family and guest accommodation. For land-use planning purposes, the broader planning application seeks a framework capable of accommodating additional units, subject to separate municipal processes and approvals.

Ancillary structures include staff accommodation and a storage shed intended to support land maintenance, conservation management, and general property operations.

Vehicular access is proposed via a gravel road aligned generally along the eastern boundary of the property, not exceeding approximately 3 m in width, terminating in a designated parking area. From the parking area, elevated timber boardwalks or similar low-impact pedestrian pathways are proposed to provide access to the dwelling and associated units. This approach is intended to minimise soil compaction, reduce disturbance, and maintain natural drainage patterns.

The preferred residential cluster is positioned within the southern portion of the property on elevated terrain, informed by the updated Site Constraints Map and the findings of the:

- Terrestrial Biodiversity Assessment;
- Visual Compliance Statement; and
- Preliminary Geotechnical and Geomatic Report.

The layout seeks to avoid, where feasible:

- Critical Biodiversity Area 1 (CBA1) areas;
- indigenous forest / milkwood stands;
- steeper or unstable slopes;
- sensitive faunal habitat and movement corridors where identified;
- Species of Conservation Concern (SCC) vegetation habitat, where feasible; and
- mapped higher-risk coastal erosion and flooding constraint areas.

Although portions of the property fall within the broader 100 m High-Water Mark (HWM) trigger area, the preferred footprint is located outside mapped higher-risk coastal erosion and flooding areas identified through available

specialist input and is considered the comparatively lower-risk location presently identified within a constrained coastal environment.

The proposal does not include marine infrastructure, shoreline hardening works, development below the high-water mark, or direct disturbance of Coastal Public Property.

Although the property is currently zoned Agriculture Zone I, no agricultural activities form part of the present proposal. Available specialist input indicates limited agricultural capability due to soil, topographical, and environmental constraints.

The Applicant has indicated an intention to pursue rezoning to Open Space III (Nature Conservation Area), subject to separate municipal approval, together with active conservation management, alien invasive vegetation removal, and rehabilitation of degraded portions of the site.

Architecturally, the development proposes a lightweight and environmentally responsive design approach, making use of materials such as steel, timber, glass, and natural stone in place of more intensive conventional construction methods where feasible.

This approach is intended to:

- reduce excavation requirements;
- lower material demand;
- reduce visual bulk; and
- improve integration with the surrounding coastal landscape.

The total building footprint is approximately 525 m².
Including the access road, parking area, and boardwalk infrastructure, the total development footprint is approximately 1 375 m².

This equates to approximately 2.7% of the total property area (±5.1576 ha), with approximately 97.3% of the site expected to remain in a natural or rehabilitated state.

The limited and clustered footprint, together with constraints-led siting and off-grid / low-demand servicing, is expected to reduce the risk of:

- unnecessary habitat loss;
- erosion and slope instability;
- disturbance to sensitive coastal systems;
- visual intrusion;
- indirect impacts on adjacent marine / coastal environments through runoff or sedimentation; and
- pressure on municipal infrastructure.

Accordingly, the preferred alternative represents a refined low-intensity development option intended to balance reasonable private land use with biodiversity protection, coastal sensitivity, and long-term stewardship of the property.

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 (Listing Notice 3) Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation, where such clearance occurs— (a) within a Critical Biodiversity Area as identified in a biodiversity plan; or (b) within a buffer area identified in such a plan.	The proposed dwelling, accommodation units, access road, parking area and associated infrastructure will require the clearance of indigenous vegetation exceeding 300 m² within a mapped CBA2 (Restore) area. Potential impacts include localised vegetation loss, disturbance of degraded Goukamma Strandveld habitat, possible disturbance to Species of Conservation Concern (SCC) flora, and temporary disturbance to fauna utilising the site. Mitigation includes limiting clearing to the approved footprint, pre-construction botanical walk-downs where required, alien invasive clearing, topsoil management, rehabilitation with locally indigenous species, and long-term conservation management of the remaining property. Residual impacts are anticipated to be low following mitigation.
GN R.327 (Listing Notice 3) 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 —	The proposed development includes infrastructure and structures exceeding 50 m² in footprint, portions of which occur within 100 metres inland of the High-Water Mark of the sea where no gazetted setback line applies. Potential impacts include visual intrusion, disturbance of coastal landscape character, increased human activity within the coastal interface, lighting impacts on fauna, and indirect runoff effects on coastal and marine systems. The preferred layout avoids mapped higher-risk erosion and flood areas, excludes any marine infrastructure or Coastal Public Property disturbance, and applies low-impact design, stormwater control, and lighting mitigation. Residual impacts are anticipated to be low to moderate and acceptable with mitigation.
GN R.327 (Listing Notice 3) 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	Construction of foundations, boardwalk supports, access infrastructure and services will require excavation and movement of soil exceeding 5 m³ within 100 metres inland of the High-Water Mark. Potential impacts include erosion, sediment mobilisation, temporary destabilisation of sandy soils, and indirect sediment runoff toward the coastal environment. Impacts are mitigated through lightweight construction methods, minimised cut-and-fill, erosion control measures, rehabilitation, stormwater management, and construction-phase

	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.	environmental controls. Residual impacts are anticipated to be low following mitigation.

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.

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 associated with the Preferred Alternative — including controlled vegetation clearance limited to ±1 375 m², excavation for foundations, grading of a narrow gravel access road, and installation of raised pedestrian boardwalks — will temporarily disturb loose, sandy coastal soils that exhibit high permeability and low clay content. These soils are inherently susceptible to erosion, surface scouring, and compaction if left exposed. Temporary loss of vegetative cover may increase surface run-off velocity and reduce natural infiltration capacity during heavy rainfall events. There is a short-term risk of hydrocarbon or cement contamination if construction materials are mishandled; however, groundwater occurs at depth and is not intercepted by excavation. Air-quality impacts are limited to localised dust generation and minor exhaust emissions from light construction machinery, both of which are temporary and reversible and will not result in measurable deterioration of regional air quality.
Extent and duration of impact:	Local, short-term — confined to the active construction footprint and immediate surroundings for the ±6–12 month construction period.
Probability of occurrence:	High without mitigation.

Degree to which the impact can be mitigated:	High - impacts are readily manageable through erosion, sediment, and pollution control measures.
Degree to which the impact may cause irreplaceable loss of resources:	Low — soil disturbance is reversible; groundwater is protected by depth and containment; vegetation loss occurs within degraded CBA2 areas and is offset by rehabilitation.
Cumulative impact prior to mitigation:	Moderate — small-scale erosion and dust emissions could incrementally contribute to local dune disturbance when considered together with nearby rural development, although effects remain localised.
Significance rating prior to mitigation:	Medium
Proposed mitigation:	• Install silt fences, sediment traps, and temporary swales to control run-off. • Restrict clearing strictly to the approved footprint. • Immediately rehabilitate exposed soils with indigenous vegetation. • Store fuels and lubricants in bunded areas; no servicing of vehicles on site. • Provide spill kits and enforce hazardous material protocols. • Spray water on dusty surfaces during windy conditions. • Maintain machinery to reduce emissions. • ECO monitoring throughout construction.
Cumulative impact post mitigation:	Low — erosion, contamination, and dust risks are reduced to negligible levels; rehabilitation improves long-term soil stability.
Significance rating after mitigation:	Low

Potential impact on geographical aspects	**100 m High-Water Mark (HWM) and dune stability**
Nature of impact:	The Preferred Alternative is located within the 100 m High-Water Mark (HWM) trigger area; however, this trigger functions as a risk screening tool rather than a legislated prohibition. The Preliminary Geotechnical and Geomatic Report (Appendix D2) confirms that the proposed footprint is positioned on elevated terrain (~80 m above mean sea level) and outside mapped high-risk coastal erosion and flood-prone zones. The specialist documents historic cyclic dune erosion of approximately 4–6 m between 2005 and 2024 and projects a potential inland retreat of ±30 m by 2100 under climate-change sea-level rise scenarios. The preferred footprint was selected through a constraints-led process to avoid structurally weak zones (e.g. D7 fracture areas and PE scenario slopes) and represents the most stable buildable location on the property. Temporary disturbance of loose, highly erodible dune sands may occur during vegetation clearance and foundation excavation. Without controls, this could reduce root cohesion, increase wind and stormwater erosion, and mobilise surface sediments. However, the disturbance is spatially limited to ±1 375 m² within a 5.16 ha property and occurs in previously degraded, alien-invaded areas. No active dune crest, scarp face, or dynamic littoral zone processes will be directly impacted.
Extent and duration of impact:	Localised and footprint-confined. Construction disturbance is short-term (6–12 months), with medium-term stabilisation dependent on rehabilitation success. The dune system beyond the approved footprint remains unaffected.
Probability of occurrence:	Medium–High without mitigation, because the development occurs in a dynamic coastal dune environment characterised by loose sandy soils, steep gradients, and exposure to wind-driven

	erosion. The probability is linked to soil physics rather than the development scale.
Degree to which the impact can be reversed:	High. Dune systems are naturally resilient, provided sediment loss is prevented and vegetative cover is restored. The specialist confirms that re-vegetation with indigenous Strandveld species rapidly reinstates root cohesion and surface stability (Appendix D2).
Degree to which the impact may cause irreplaceable loss of resources:	Low. The affected footprint lies within degraded CBA2 vegetation already invaded by Acacia cyclops. No primary dune geomorphological features or irreplaceable coastal formations occur within the development area.
Cumulative impact prior to mitigation:	Moderate. While the individual footprint is small, unmanaged incremental coastal development across the region could cumulatively weaken dune resilience under long-term sea-level rise scenarios. The rating reflects regional vulnerability, not site-specific severity.
Significance rating prior to mitigation	Medium–High — justified because the activity occurs in a sensitive coastal environment with known erosion dynamics. Even a small disturbance in such systems is rated conservatively until mitigation is applied.
Degree to which the impact can be mitigated:	High. The specialist confirms that engineering controls + vegetation stabilisation effectively reduce risk to acceptable levels.
Proposed mitigation:	• Strict confinement of all works to the approved footprint shown on the Constraints Map. • ECSA-certified foundation and slope stabilisation design (Appendix D5). • Geotextile erosion barriers during construction. • Phased vegetation clearing to retain root cohesion. • Retention of indigenous dune vegetation ≥600 mm root depth where feasible. • Immediate post-construction rehabilitation using local Strandveld species. • ECO coastal stability monitoring during and after construction.
Cumulative impact post mitigation:	Low. Stabilised dunes, controlled stormwater dispersion, and vegetation restoration ensure the development does not measurably contribute to regional erosion trends. The footprint becomes geomorphologically neutral post-rehabilitation.
Significance rating after mitigation	Low — mitigation reduces the probability of erosion to negligible levels and restores dune function. The residual impact is within acceptable coastal risk tolerance as confirmed by the specialist.

Potential impact on biological aspects	**Habitat and biodiversity loss**
Nature of impact:	Vegetation clearing within the ±1 375 m² footprint will remove degraded CBA2 vegetation dominated by invasive Acacia cyclops, with limited indigenous Strandveld loss. Habitat disturbance may temporarily displace small fauna. No CBA1 forest or high-sensitivity habitat is affected. Removal of invasive species combined with rehabilitation is expected to improve the ecological condition relative to baseline.
Extent and duration of impact:	Local; short-term disturbance, medium-term ecological recovery (1–3 years).
Probability of occurrence:	Definite — vegetation clearing is unavoidable within the footprint.

Degree to which the impact can be reversed:	High — habitat restored through rehabilitation.
Degree to which the impact may cause irreplaceable loss:	Low — degraded habitat only.
Cumulative impact prior to mitigation:	Moderate — incremental vegetation loss regionally.
Significance rating prior to mitigation:	Medium
Proposed mitigation:	• Alien invasive eradication programme. • Indigenous plant rescue and on-site nursery. • Raised boardwalks to minimise ground disturbance. • Fauna relocation during clearing. • Monthly ECO biodiversity inspections.
Cumulative impact post mitigation:	Low / potentially positive — ecological improvement.
Significance rating after mitigation:	Low (positive trend)

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	**Positive impact**: The Preferred Alternative will generate modest but meaningful local socio-economic benefit primarily during construction through temporary employment and procurement. The Town Planning Report (Appendix D5, pp. 7–8) anticipates local spending on labour, building materials, transport, and specialist services. The development is fully off-grid and does not burden municipal services, meaning it does not divert public resources away from community priorities. The scale is low-intensity and private in nature, so no displacement, service exclusion, or negative social impacts on surrounding communities are expected.
Extent and duration of impact:	Local; short-term (construction phase ±6–12 months).
Probability of occurrence:	Definite
Degree to which the impact can be reversed:	Positive impacts are time-bound but beneficial; economic benefit ceases post-construction but does not create negative dependency.
Degree to which the impact may cause irreplaceable loss of resources:	None
Cumulative impact prior to mitigation:	Minor positive — contributes incrementally to the local economy.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High):	Medium-High (Positive)
Degree to which the impact can be mitigated:	High — benefit can be strengthened through local hiring/procurement commitments.
Proposed mitigation:	• Prioritise local employment and procurement wherever feasible (Town Planning Report, p. 7). • Provide basic safety/skills transfer where feasible to strengthen local capacity. • Ensure fair labour conditions, wages, and OHSA compliance. • Maintain clear communication with neighbours to prevent social friction during construction.
Cumulative impact post mitigation:	Sustained positive (short-term) contribution; no negative cumulative socio-economic effects expected due to low intensity and private/off-grid nature.
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High):	High – Positive

Potential visual impacts	Aesthetic impact
Nature of impact:	Construction activities associated with the Preferred Alternative will temporarily introduce visual disturbance through vegetation clearing (±1 375 m²), movement of light construction machinery, and temporary material stockpiles. According to the Visual Compliance Statement (Appendix D1), the site exhibits a high Visual Absorption Capacity (VAC) due to dense Goukamma Strandveld vegetation, dune topography, and natural screening. The specialist confirms that the development is not visible from key public viewpoints, including Groenvlei Beach, Cola Beach, and the N2 corridor. Temporary construction visibility may occur only from the nearest neighbouring residence (~250 m east), and this effect is short-term and reversible. The final architectural form, use of natural materials, and clustered footprint ensure long-term visual integration with the coastal landscape.
Extent and duration of impact:	Local; limited to the immediate site and nearest residence during the 6–12 month construction phase. No long-term visual intrusion is expected post-rehabilitation (Visual Compliance Statement, p. 11).
Probability of occurrence:	Definite — temporary construction activity will be visible at close range.
Degree to which the impact can be reversed:	High — visual disturbance ceases immediately after construction and rehabilitation.
Degree to which the impact may cause irreplaceable loss of resources:	None — scenic coastal landscape character remains intact.
Cumulative impact prior to mitigation:	Low — the development footprint is visually contained and screened. The specialist confirms a negligible contribution to regional scenic degradation.
Significance rating of impact prior to mitigation	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	• Retain existing vegetation buffers wherever possible. • Screen active construction areas using green shade cloth. • Immediate rehabilitation using indigenous Strandveld species. • Use earth-toned, non-reflective finishes. • Remove all temporary construction materials promptly. • Install low-intensity downward lighting only. • Weekly ECO visual compliance inspections.
Cumulative impact post mitigation:	Negligible — the specialist confirms the site will remain visually absorbed within the dune landscape.
Significance rating after mitigation	Very Low

Potential impact on safety	Safety on site
Nature of impact:	Construction activities associated with the Preferred Alternative introduce occupational health and safety risks typical of small-scale building works, including interaction with moving machinery, excavation hazards, uneven and unstable sandy terrain, manual handling of materials, and temporary exposure to fuels and construction chemicals. The coastal dune environment increases slip and collapse risk where sands are loose and erodible, particularly in areas identified as geotechnically weak in the Preliminary Geotechnical and Geomatic Report (Appendix D2). Additional risk arises from potential unauthorised public access to

	the site during construction, given proximity to informal access routes and the coastal setting. Without formal controls, these hazards could result in injury to workers or members of the public.
Extent/duration:	Local; confined to the 5.16 ha property and immediate access interface; limited to the active construction phase (±6–12 months). Residual risk post-construction is negligible once the site is stabilised and occupied.
Probability:	High without controls, because construction inherently involves hazardous equipment, excavations, and unstable surfaces. With proper controls, probability reduces to low.
Reversibility:	Most incidents (minor injuries, slips, cuts) are reversible with medical treatment; however, severe incidents could be irreversible.
Irreplaceable loss:	Low–Moderate, limited to potential human injury risk; no ecological or heritage resources are at risk from safety incidents.
Cumulative prior:	Moderate. If multiple coastal construction sites operate simultaneously without strong safety standards, cumulative strain could be placed on local emergency services.
Significance prior:	Medium
Mitigation:	• Full compliance with the Occupational Health and Safety Act (OHSA) and Construction Regulations. • Preparation and implementation of a site-specific Health and Safety Plan before works commence. • Appointment of a qualified Safety Officer and regular toolbox talks. • Mandatory PPE (helmets, boots, gloves, eye protection, high-visibility clothing). • Controlled access: temporary fencing, signage, and designated entry points to prevent unauthorised public entry. • Safe excavation practices: shoring or battering of unstable sandy slopes where required; no open trenches left unattended • Spill response readiness and safe chemical storage in bunded areas. • Emergency procedures: first-aid kits on site, trained first-aid personnel, emergency contact numbers displayed, clear evacuation routes. • Fire safety: basic firefighting equipment available; no uncontrolled open flames; worker training in fire response. • Daily site inspections and incident reporting; ECO oversight to confirm compliance with EMPr safety provisions.
Cumulative post:	Low — strong OHSA compliance and site controls prevent contribution to regional safety risks.
Significance after:	Low

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Construction noise from vegetation clearing, limited earthworks, foundation preparation, and small-scale building activities will temporarily elevate ambient noise levels in an otherwise quiet rural coastal environment. Potential receptors include the nearest residence (±250 m east) and occasional road users. Fauna within adjacent vegetation may experience short-term disturbance during peak activity periods. However, the footprint is small, works are temporary, and no industrial plant or long-duration high-decibel activities are proposed. Compliance with municipal noise

	control requirements and restricted work hours reduces nuisance risk to acceptable levels.
Extent and duration of impact:	Local; short-term (construction phase ±6–12 months), daylight hours only.
Probability of occurrence:	Definite — construction noise is unavoidable but controllable.
Degree to which the impact can be reversed:	High — noise stops immediately on completion of works.
Degree to which the impact may cause irreplaceable loss of resources:	None
Cumulative impact prior to mitigation:	Minor — short-term.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High):	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	• Restrict working hours (e.g., 07h00–17h00), no Sundays/public holidays. • Use well-maintained equipment; limit idling; fit silencers where applicable. • Notify the nearest receptor of periods of higher noise (foundation/earthworks). • Limit heavy vehicle movements to mid-day/off-peak where feasible. • ECO to record complaints and ensure corrective actions are implemented promptly.
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High):	Very Low

Potential impacts on the cultural-historical aspects:	**Cultural-historical**
Nature of impact:	Ground disturbance for foundations and minor service trenches could theoretically expose chance archaeological material, fossil material in sands, or unmarked graves, although the DFFE Screening Tool indicates low archaeological sensitivity and no known heritage resources are recorded within the development footprint. The site is largely dune-derived sands and previously disturbed/alien-invaded areas. The primary heritage risk is therefore a low-probability "chance find" event during excavation rather than a known impact to a mapped heritage resource.
Extent and duration of impact:	Construction phase only (excavation period).
Probability of occurrence:	Improbable
Degree to which the impact can be reversed:	Irreversible if a heritage resource were damaged, but the likelihood is low and controlled through stop-work procedures.
Degree to which the impact may cause irreplaceable loss of resources:	Potentially high if heritage resources were encountered and not managed; however, this is not expected and is mitigated through protocol measures.
Cumulative impact prior to mitigation:	Low — due to the absence of known heritage features and small footprint.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High):	Low
Degree to which the impact can be mitigated:	High — through chance-find protocols and training.
Proposed mitigation:	• Apply National Heritage Resources Act provisions and include a stop-work chance finds procedure in the EMPr.

	• Conduct environmental awareness training, including identification of heritage indicators (bones, artefacts, shell middens, grave markers). • If finds occur stop work, secure area, notify relevant authority/specialist; only resume once cleared. • Include Fossil Finds Procedure (FFP) for potential fossil/archaeological material in sands.
Cumulative impact post mitigation:	Negligible
Significance rating of impact after mitigation (Low, Medium, Medium-High, High, or Very-High):	Very Low

Potential impact on biological aspects:	**Waste**
Nature of impact:	Construction will generate general waste (packaging, plastics, off-cuts), rubble, and potentially hazardous waste (oily rags, empty containers, small quantities of contaminated sand if a spill occurs). In a coastal dune environment, unmanaged waste can disperse rapidly via wind and runoff, causing littering, wildlife ingestion risk, and contamination of soils. The risk is short-term and entirely management-dependent. With a controlled waste system, the project will not create a persistent pollution source.
Extent and duration of impact:	Local; construction phase only.
Probability of occurrence:	Probable (without mitigation) because waste generation is inevitable; low with waste controls.
Degree to which the impact can be reversed:	High — wastes can be removed and areas cleaned/restored.
Degree to which the impact may cause irreplaceable loss of resources:	None — if managed; pollution risk is preventable and reversible.
Cumulative impact prior to mitigation:	Low — could contribute to broader coastal litter issues if unmanaged.
Significance rating of impact prior to mitigation (Low, Medium, Medium-High, High, or Very-High):	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	• Provide clearly marked bins for general waste, recyclables, and hazardous waste; secure bins against wind. • Remove waste frequently; dispose at licensed facilities; maintain safe disposal certificates • Prohibit burying or burning of waste on site. • Spill response procedures: contaminated sand removed to licensed facility. • ECO inspections and toolbox talks covering waste impacts and housekeeping standards.
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 / groundwater / soil
Nature of impact:	During operation, impacts relate to domestic wastewater generation, rainwater harvesting systems, small-scale stormwater runoff, and long-term soil stability around structures. Wastewater will be stored in sealed conservancy tanks and removed by licensed contractors; failure or leakage could contaminate soil or shallow groundwater if not properly managed. Compaction around buildings and access areas may slightly alter natural drainage patterns, but the small footprint and permeable surfaces limit hydrological disruption. The raised boardwalk design prevents long-term soil sealing and allows natural infiltration. Stormwater runoff from roofs is captured via rainwater harvesting systems, reducing discharge volumes. No borehole abstraction is proposed, and groundwater will not be intercepted.
Extent/duration:	Local, long-term but footprint-limited; confined to the ±1 375 m² developed area.
Probability:	Low–Medium without maintenance; Low with proper management.
Reversibility:	High — soil and drainage impacts are reversible through rehabilitation and infrastructure repair.
Irreplaceable loss:	None — no irreversible geological or hydrological resources are affected.
Cumulative prior:	Low–Moderate — cumulative runoff effects could occur if multiple coastal developments ignored stormwater management.
Significance prior:	Medium
Mitigation:	• Routine inspection and pumping of conservancy tanks by licensed contractors. • Secondary containment around wastewater storage. • Maintain rainwater harvesting systems to prevent overflow erosion. • Use permeable surfaces for parking and pathways. • Stormwater dispersed via vegetated swales. • Immediate repair of leaks or erosion features. • ECO compliance inspections during the early operational phase.
Cumulative post:	Low — controlled runoff and wastewater management prevent cumulative hydrological degradation.
Significance after:	Low

Potential impact on geographical and physical aspects	100 m High-Water Mark (HWM) / coastal processes (operational phase)
Nature of impact:	During the operational phase, no further vegetation clearance or earthworks are anticipated within the 100 m High-Water Mark (HWM) trigger area. The primary operational risk relates to long-term human presence, informal foot traffic, and maintenance activities that could destabilise dune vegetation if not properly controlled. Because the development is permanently located within a dynamic coastal system, cumulative micro-disturbances — such as trampling, minor landscaping, or unmanaged stormwater — could gradually weaken dune cohesion if the site is not actively managed. However, the approved layout deliberately confines activity to a compact node positioned outside mapped coastal erosion and flood-risk zones, as confirmed in the Preliminary Geotechnical and Geomatic Report and

	Constraints Map. The raised boardwalk system prevents repeated soil compaction and protects root systems critical to dune stability. Indigenous rehabilitation, alien clearing, and vegetation restoration strengthen the protective dune buffer over time. The operational phase, therefore, shifts from disturbance to long-term stabilisation and stewardship. No shoreline hardening, seawalls, or engineering interference with natural coastal processes is proposed.
Extent/duration:	Local; permanent but footprint-limited; confined to ±1 375 m² within the 5.16 ha property.
Probability:	Low with ongoing vegetation management; Medium without active stewardship.
Reversibility:	High — dune systems remain biologically recoverable through vegetation restoration and erosion control.
Irreplaceable loss:	Low — the affected area is degraded CBA2; dune function can be restored if disturbance occurs.
Cumulative prior:	Moderate — cumulative degradation could occur regionally if multiple coastal properties fail to manage vegetation and foot traffic within the HWM zone.
Significance prior:	Medium
Mitigation:	• Permanent retention and reinforcement of indigenous dune vegetation. • Strict prohibition of informal pathways outside boardwalk areas. • Annual coastal stability inspections by ECO or environmental practitioner. • Immediate rehabilitation of any exposed sand patches. • Ongoing alien invasive clearing programme. • Stormwater dispersed through vegetated areas; no concentrated discharge down slopes. • No expansion of footprint or new infrastructure within the 100 m HWM zone without reassessment. • Dark-sky compliant lighting to protect dune fauna. • Environmental awareness for occupants regarding dune sensitivity.
Cumulative post:	Low — active stewardship improves dune stability and offsets broader coastal pressure.
Significance after:	Low

Potential impact on biological aspects	**Habitat disturbance**
Nature of impact:	Operational presence introduces low-level human disturbance (lighting, movement, noise, domestic activity). Wildlife may temporarily avoid the immediate building cluster, but 97.3% of the property remains natural habitat. Alien clearing and rehabilitation result in long-term habitat improvement. No fencing that restricts wildlife movement is proposed. Night lighting could affect nocturnal fauna if poorly designed.
Extent/duration:	Local; permanent but low intensity.
Probability:	Definite (human presence exists).
Reversibility:	High — habitat quality improves through rehabilitation.
Irreplaceable loss:	None — net ecological gain expected.

Cumulative prior:	Moderate — cumulative human presence in coastal areas can reduce wildlife tolerance.
Significance prior:	Medium
Mitigation:	• Dark-sky compliant lighting (downward-facing, motion-activated). • No external floodlighting. • Ongoing alien invasive control. • Indigenous vegetation restoration. • Limit domestic pets roaming freely. • • Maintain ecological corridors across the site.
Cumulative post:	Low–Positive — rehabilitation offsets disturbance.
Significance after:	Low (potentially positive)

Potential noise impacts	**Operational Noise**
Nature of impact:	Normal residential noise (vehicles, conversation, maintenance) will occur but remains consistent with rural residential character. No commercial or high-noise activities are proposed.
Extent/duration:	Local; permanent but low intensity.
Probability:	Definite.
Reversibility:	Immediately upon cessation of activity.
Irreplaceable loss:	None.
Cumulative prior:	Low.
Significance prior:	Low
Mitigation:	• No amplified outdoor sound systems. • Maintain quiet rural character. • Restrict maintenance noise to daylight hours.
Cumulative post:	Negligible.
Significance after:	Very Low

Potential visual impacts	**Aesthetic / visual character (operational phase)**
Nature of impact:	During the operational phase, visual impacts relate to the permanent presence of built form within a previously undeveloped coastal landscape. The site forms part of a visually sensitive rural coastal system characterised by natural dune vegetation, steep topography, and a strong sense of landscape seclusion. The Visual Compliance Statement confirms that the site has a high Visual Absorption Capacity (VAC) due to dense Goukamma Strandveld vegetation, pronounced coastal landforms, and topographic screening from key public viewpoints. The preferred development footprint is positioned within a visually contained depression, below skyline level and outside prominent ridgelines, ensuring that structures do not interrupt the natural coastal silhouette. According to the specialist assessment, the development will not be visible from Groenvlei Beach, Cola Beach, or the N2, and visibility from surrounding properties is highly restricted due to vegetation screening. Limited partial visibility may occur from the nearest residence ±250 m east, but this is filtered through vegetation and will not materially

	alter the perceived landscape character. The architectural language — lightweight structures using timber, steel, glass and natural stone — has been selected specifically to minimise visual mass, colour contrast, and reflectivity. Earth-toned finishes and non-reflective materials further reduce visual intrusion. Lighting design is low-intensity, downward-facing and motion-activated in accordance with specialist recommendations to preserve night-sky conditions and prevent glare within the coastal environment. The operational phase, therefore, represents a visually recessive intervention that integrates into the existing landscape rather than competing with it.
Extent/duration:	Local, permanent but visually contained, limited to a single clustered node within a high VAC landscape.
Probability:	Definite — built form is permanent, but visibility is low.
Reversibility:	Moderate — structures are removable, and vegetation rehabilitation can fully restore the visual character if ever decommissioned.
Irreplaceable loss:	None — scenic character remains intact due to screening and siting.
Cumulative prior:	Moderate — cumulative coastal development could gradually erode scenic character if not subject to strict visual controls.
Significance prior:	Medium
Mitigation (specialist recommendations):	• Retain all perimeter vegetation to maintain visual screening. • Use earth-toned, non-reflective exterior finishes. • No skyline or ridgeline construction. • Prohibit future expansion outside the approved footprint. • Maintain natural dune vegetation as a permanent buffer. • Apply dark-sky compliant lighting only. • Immediately rehabilitate any disturbed areas. • No reflective roofing or glazing facing the coast. • Conduct periodic visual audits as part of ECO monitoring. • Any future additions must undergo site-specific visual assessment.
Cumulative post:	Low — development remains visually recessive and reinforces conservation-led coastal character.
Significance after:	Low

Alternative 1 (Not Preferred)

Alternative 1 represents the earlier layout configuration based on the previous site constraints mapping, prior to refinement through the updated integrated constraints analysis. The development components remain substantially the same in scale and intent as the preferred alternative, comprising a main dwelling (approximately 200 m²), three small self-contained units (approximately 65 m² each), staff accommodation (approximately 50 m²), an equipment shed (approximately 80 m²), and associated parking and access infrastructure.

The Applicant has indicated that the additional units are intended for private family and guest accommodation. For planning purposes, the broader land-use application seeks a framework capable of accommodating multiple units, subject to separate municipal approvals.

Ancillary structures include staff accommodation and a storage shed intended to support land management, maintenance, and conservation activities.

Vehicular access under Alternative 1 would similarly be provided via a gravel road not exceeding approximately 3 m in width along the eastern boundary, terminating in a parking area linked to the buildings via raised timber boardwalks or similar low-impact pedestrian access structures. This approach would minimise soil compaction and assist in maintaining natural drainage patterns.

Under Alternative 1, the residential cluster was positioned within the southern portion of the property based on the earlier constraints interpretation. While the layout sought to avoid mapped CBA1 areas and indigenous forest, subsequent specialist review and updated constraints integration identified that portions of the earlier configuration were located closer to geotechnically sensitive dune areas and higher long-term coastal risk zones than necessary.

The total disturbance footprint under Alternative 1 is approximately 1 175 m². This remains a relatively small portion of the 5.1576 ha property, with the majority of the site remaining undeveloped and natural.

However, the earlier layout did not optimise separation from mapped erosion-risk and geotechnical constraint areas to the same degree as the preferred alternative. The updated constraints mapping incorporated refined coastal risk modelling, slope analysis, vegetation sensitivity mapping, and integrated specialist inputs, allowing the footprint to shift marginally landward into a comparatively lower-risk and more visually contained location.

Architecturally, Alternative 1 retains the same lightweight design philosophy using materials such as steel, timber, glass, and natural stone to reduce excavation requirements and visual bulk.

However, the previous siting offered:

- slightly reduced visual containment;
- less effective use of natural vegetation screening;
- reduced precautionary separation from identified constraints; and
- lower long-term resilience relative to the preferred alternative.

<u>Reasons Alternative 1 is Not Preferred</u>

Alternative 1 is considered potentially feasible but not optimal for the following reasons:

- it is positioned closer to identified geotechnical sensitivity areas than the preferred alternative;
- it offers reduced long-term resilience to projected coastal process and erosion scenarios;
- it provides slightly less visual containment within the dune landscape;
- it does not fully utilise the comparatively lower-risk development envelope identified through updated constraints mapping; and
- it represents an earlier planning iteration superseded by improved specialist data integration.

Conclusion

While Alternative 1 may still represent a relatively low-intensity development option, the preferred alternative achieves a better balance between:

- ecological protection;
- coastal and geotechnical risk avoidance;
- visual integration; and
- long-term resilience.

Accordingly, Alternative 1 is considered a reasonable but sub-optimal alternative and is therefore not selected as the preferred development option.

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 (Listing Notice 3) Activity 12	The clearance of an area of 300 square metres or more of indigenous vegetation, where such clearance occurs— (a) within a Critical Biodiversity Area as identified in a biodiversity plan; or (b) within a buffer area identified in such a plan.	Alternative 1 would require the clearance of indigenous vegetation exceeding 300 m² within a mapped CBA2 (Restore) area for the proposed dwelling, accommodation units, access road, parking area, and associated infrastructure. Potential impacts include localised vegetation loss, disturbance of degraded Goukamma Strandveld habitat, possible disturbance to Species of Conservation Concern (SCC) flora, and temporary disturbance to fauna utilising the site. While the affected vegetation is largely degraded and partially invaded by alien species, Alternative 1 offers a less refined footprint than the preferred alternative and does not optimise avoidance to the same degree. Mitigation would include limiting disturbance to the approved footprint, pre-construction botanical walk-downs where required, alien invasive clearing, topsoil management, rehabilitation with locally indigenous species, and long-term conservation management of the remaining property. Residual impacts are anticipated to be low following mitigation.
GN R.327 (Listing	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	Alternative 1 includes infrastructure and structures exceeding 50 m² in footprint, portions of which occur within 100 metres inland of the

Notice 3) Activity 17	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 —	High-Water Mark of the sea where no gazetted setback line applies. Potential impacts include visual intrusion, disturbance of coastal landscape character, increased human activity within the coastal interface, lighting impacts on fauna, and indirect runoff effects on coastal and marine systems. Relative to the preferred alternative, Alternative 1 is positioned closer to mapped higher coastal risk and geotechnical constraint areas and offers slightly reduced visual containment. Although no marine infrastructure or direct disturbance of Coastal Public Property is proposed, Alternative 1 is considered less precautionary than the preferred layout. Mitigation would include low-impact design, stormwater controls, lighting restrictions, and strict footprint containment. Residual impacts are anticipated to be low to moderate following mitigation.
GN R.327 (Listing Notice 3) 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.	Construction of foundations, boardwalk supports, access infrastructure, and services under Alternative 1 would require excavation and movement of soil exceeding 5 m^3 within 100 metres inland of the High-Water Mark. Potential impacts include erosion, sediment mobilisation, temporary destabilisation of sandy soils, and indirect sediment runoff toward the coastal environment. Because Alternative 1 is located closer to identified geotechnical sensitivity areas, it may require greater reliance on engineering intervention and erosion control than the preferred alternative. Impacts would be mitigated through lightweight construction methods, minimised cut-and-fill, erosion barriers, stormwater management, rehabilitation, and construction-phase environmental controls. Residual impacts are anticipated to be low to moderate following mitigation.

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.

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 associated with Alternative 1, including ±1 175 m² vegetation clearance, grading of the gravel access road, excavation for foundations, and installation of boardwalk structures, may temporarily increase surface run-off and disturb highly erodible coastal sandy soils (>750 mm depth; <15% clay). The Preliminary Geotechnical and Geomatic Report (Appendix D2, pp. 7–10) identifies weak soil layers at HW2 requiring engineered intervention. Removal of Acacia cyclops and temporary vegetation loss may exacerbate erosion if exposed sand is not stabilised immediately. Groundwater occurs at depth and is not intersected by shallow works; contamination risks are short-term and manageable through bunding and spill control. Dust and exhaust emissions from machinery are localised, temporary, and reversible (Visual Compliance Statement, Appendix D1, p. 11).
Extent and duration of impact	Local, short-term — confined to the development footprint and neighbouring properties during the 6–12 month construction phase, with possible residual erosion risk for 1–2 rainy seasons if rehabilitation is delayed.
Probability of occurrence	High (without mitigation), due to erodible dune sands and coastal wind exposure.
Degree to which the impact can be mitigated	High – impact is readily mitigable through engineering and rehabilitation controls.
Degree to which the impact may cause irreplaceable loss of resources	Low. Soil erosion is reversible; groundwater is deep and protected; vegetation occurs within degraded CBA2 areas and will be rehabilitated. Air-quality impacts are temporary.
Cumulative impact prior to mitigation	Moderate. Local erosion could incrementally contribute to dune instability when combined with other low-density coastal developments; dust impacts remain negligible regionally.

Significance rating prior to mitigation	Medium
Proposed mitigation	• Install silt fences, sediment traps, and stormwater cut-off drains. • Phase clearing to minimise exposed sand. • Immediate stabilisation using mulch/geotextiles. • Final building positions and foundations must be confirmed against the *Alternative 1 (previous) Constraints Map*. Where works fall within or adjacent to mapped weak zones (e.g., D7 / HW2), foundations and drainage must be designed and certified by an ECSA-registered engineer and/or micro-siting applied to avoid the weak zone where feasible." • Bunded fuel storage; spill kits on site. • No cement mixing on bare soil. • Water spraying for dust control. • ECO monitoring and immediate rehabilitation. • Indigenous vegetation restoration and alien control.
Cumulative impact post mitigation	Low — erosion and contamination risks are reduced to negligible levels; rehabilitation improves dune stability and soil retention.
Significance rating after mitigation	Low

Potential impact on geographical and physical aspects	**100 m High-Water Mark (HWM) and dune stability**
Nature of impact	Construction activities associated with Alternative 1 will occur within the 100 m High-Water Mark trigger area as confirmed on the Constraints Map. Works include excavation for foundations, access road grading, and vegetation clearance within a dynamic coastal dune system consisting of loose, highly erodible sands (>750 mm depth; <15% clay). The Preliminary Geotechnical and Geomatic Report (Appendix D2, pp. 27, 36, 38) records historic cyclic dune retreat of approximately 4–6 m (2005–2024) and projects potential inland migration of ±30 m by 2100. Disturbance of dune-stabilising vegetation may temporarily reduce slope stability and increase erosion susceptibility if not controlled. Structurally weak zones (including D7 and steeper slope sections) present elevated instability risk. The layout was informed by the *Alternative 1 (previous) Constraints Map* and specialist findings; however, where any components fall near mapped weak/instability zones (e.g., D7 / steeper slope sections), additional geotechnical design measures and/or micro-siting will be required to manage stability risk.
Extent and duration of impact	Local, short- to medium-term — confined to the development footprint within the 5.16 ha property. Effects may persist for 1–5 years if disturbed dunes are not stabilised promptly.

Probability of occurrence	Medium–High without mitigation due to location within an active dune system exposed to wind and rainfall.
Degree to which the impact can be mitigated	High — dune systems respond well to rapid stabilisation and vegetation rehabilitation.
Degree to which the impact may cause irreplaceable loss of resources	Low–Moderate. The affected area is small and degraded, but uncontrolled erosion could reduce the dune protective function.
Cumulative impact prior to mitigation	Moderate. Incremental dune disturbance combined with other coastal developments could reduce long-term resilience if unmanaged.
Significance rating prior to mitigation	Medium-High
Proposed mitigation	• Strict confinement of works to the approved footprint. • Avoid weak zones (D7); ECSA-certified foundation and drainage design. • Install erosion barriers, geotextiles, and phased clearing. • Immediate rehabilitation with indigenous Strandveld vegetation. • Maintain dune root structures where feasible. • Alien invasive removal and long-term restoration. • ECO monitoring during and after construction.
Cumulative impact post mitigation	Low — stabilised dunes and restored vegetation improve long-term resilience relative to the current degraded condition.
Significance rating after mitigation	Low

Potential impact on biological aspects	**Habitat and biodiversity loss**
Nature of impact	Construction activities associated with Alternative 1 will require vegetation clearance within a degraded CBA2 (Restore) area dominated by Acacia cyclops with remnant Goukamma Strandveld. Approximately 1 175 m² of vegetation will be removed for buildings, access and boardwalk infrastructure. This will temporarily reduce habitat availability and may displace small mammals, reptiles and birds. The Terrestrial Biodiversity Assessment confirms that CBA1 areas, indigenous forest and other high-sensitivity features are avoided within the Alternative 1 footprint (subject to final pegging and ECO verification). The affected habitat is already ecologically compromised by invasive alien vegetation. Without mitigation, edge effects such as trampling, erosion and alien spread could extend beyond the footprint.
Extent and duration of impact	Local, short- to medium-term — limited to the development footprint. Vegetation loss occurs during the 6–12-month construction phase. Recovery is expected within 1–3 years following rehabilitation.

Probability of occurrence	Definite — vegetation clearance is unavoidable within the approved footprint.
Degree to which the impact can be mitigated	High — alien removal and rehabilitation result in ecological improvement.
Degree to which the impact may cause irreplaceable loss of resources	Low — the area is degraded and dominated by invasive species; no irreplaceable biodiversity features occur within the footprint.
Cumulative impact prior to mitigation	Moderate. Incremental coastal habitat loss combined with regional development may reduce biodiversity resilience over time.
Significance rating prior to mitigation	Medium
Proposed mitigation	• Implement Alien Invasive Management Plan (removal of Acacia cyclops). • Plant rescue and on-site indigenous nursery. • Use raised boardwalks to minimise soil disturbance. • Restrict construction to the demarcated footprint. • Pre-construction fauna walk-downs. • Monthly ECO ecological monitoring. • Immediate rehabilitation using locally indigenous Strandveld species.
Cumulative impact post mitigation	Low to positive — restoration improves ecological condition relative to the baseline degraded state.
Significance rating after mitigation	Low (potentially positive)

Potential impacts on socio-economic aspects	**Socio-economic**
Nature of impact	Construction of Alternative 1 will generate short-term local employment and procurement opportunities. Temporary jobs will be created for general labour, skilled trades, transport, materials supply and support services. The project remains private, small-scale and low intensity, meaning no displacement of existing land uses, no loss of livelihoods, and no pressure on municipal infrastructure. The socio-economic impact is therefore positive, modest in scale, and consistent with rural conservation land use.
Extent and duration of impact	Local; short-term (construction phase ±6–12 months). Benefits confined to the Sedgefield / Knysna municipal area.
Probability of occurrence	Definite — employment and procurement will occur during construction.
Degree to which the impact can be mitigated	High — benefits can be maximised through local hiring and fair labour practices.
Degree to which the impact may cause irreplaceable loss of resources	None — no socio-economic resources are lost.

Cumulative impact prior to mitigation	Minor positive — contributes marginally to local economic activity when combined with other small rural developments.
Significance rating prior to mitigation	Medium-High (Positive)
Proposed mitigation	• Prioritise ≥70% local labour recruitment. • Skills transfer and safety training. • Use local suppliers and contractors where feasible. • Fair wages and OHSA compliance. • Transparent contractor recruitment.
Cumulative impact post mitigation	Sustained positive — strengthens local economic participation without infrastructure burden.
Significance rating after mitigation	High (Positive)

Potential noise impacts	**Noise disturbance**
Nature of impact	Construction of Alternative 1 will temporarily increase ambient noise through the operation of light construction machinery, vehicle movement, grading, foundation work and material handling. Noise may disturb the nearest residence (±250 m east), users of Groenvlei Beach Road and local fauna occupying the adjacent dune and Strandveld habitat. The scale of work is small and confined to ±1 175 m², and no heavy industrial equipment is required. The Terrestrial Biodiversity Assessment confirms that wildlife disturbance will be temporary and reversible. All activities will comply with Knysna Municipal noise by-laws.
Extent and duration of impact	Local; short-term — limited to the construction footprint and immediate surroundings for ±6–12 months during daylight hours only.
Probability of occurrence	Definite — construction noise is unavoidable during active works.
Degree to which the impact can be mitigated	High — noise is controllable through timing, equipment standards and site management.
Degree to which the impact may cause irreplaceable loss of resources	None — impacts are temporary and reversible.
Cumulative impact prior to mitigation	Minor — short-term increase in background noise levels in a rural setting.
Significance rating prior to mitigation	Low
Proposed mitigation	• Restrict working hours to 07h00–17h00 weekdays. • No work Sundays or public holidays. • Maintain equipment and fit silencers. • Avoid simultaneous high-noise operations. • Notify nearest residents prior to noisy phases. • Limit heavy vehicle movement to off-peak periods. • ECO monitoring of complaints.

Cumulative impact post mitigation	Negligible — residual noise is brief, localised and reversible.
Significance rating after mitigation	Very Low

Potential visual impacts	**Aesthetic impact**
Nature of impact	Construction of Alternative 1 will temporarily alter the visual character of the coastal landscape through vegetation clearing (±1 175 m²), operation of machinery, stockpiling of materials and visible construction activity. The Visual Compliance Statement confirms the site has a high Visual Absorption Capacity (VAC) due to dense Strandveld vegetation, dune topography and natural screening. The site is not visible from Groenvlei Beach, Cola Beach or the N2. Visual exposure is limited to very local viewpoints, mainly the nearest residence ±250 m east and occasional users of Groenvlei Beach Road. The disturbance is temporary and confined to the construction period. No skyline intrusion or long-range visual scarring will occur.
Extent and duration of impact	Local; short-term — confined to the construction footprint and immediate surroundings for ±6–12 months.
Probability of occurrence	Definite — temporary visual disturbance occurs during active construction.
Degree to which the impact can be mitigated	High — visual effects are easily controlled through screening and housekeeping.
Degree to which the impact may cause irreplaceable loss of resources	None — visual impacts are temporary and fully reversible.
Cumulative impact prior to mitigation	Low — minor short-term addition to existing rural visual activity.
Significance rating prior to mitigation	Low
Proposed mitigation	• Retain natural vegetation buffers wherever possible. • Fence and screen the site using green shade cloth. • Maintain strict housekeeping and remove waste daily. • Cover stockpiles and limit exposed materials. • Avoid unnecessary scarring of dunes. • Immediate rehabilitation and replanting post-construction. • Weekly ECO visual inspections.
Cumulative impact post mitigation	Negligible — the site visually recovers immediately after rehabilitation.
Significance rating after mitigation	Very Low

Potential impact on biological aspects	**Safety on site**
Nature of impact	Construction activities under Alternative 1 involve machinery operation, excavation, working on uneven dune terrain,

	material handling, and temporary infrastructure. These conditions create occupational risks, including slips, falls, equipment accidents, dust inhalation, and fire hazards. The geotechnical setting — erodible sands, local steep slopes, and identified weak zones — increases the baseline hazard level if unmanaged. There is also a risk of unauthorised public access from Groenvlei Beach Road entering an active construction site. Without strict safety management, incidents could occur.
Extent and duration of impact	Local; confined to the 5.16 ha property during the 6–12 month construction phase.
Probability of occurrence	High without controls; Moderate with controls.
Degree to which the impact can be mitigated	High — construction safety risks are well understood and controllable under OHSA frameworks.
Degree to which the impact may cause irreplaceable loss of resources	Low–Moderate — Severe incidents could involve irreversible human injury, but the likelihood is low with compliance.
Cumulative impact prior to mitigation	Moderate — contributes to the general construction risk profile in the Sedgefield area if unmanaged.
Significance rating prior to mitigation	Medium
Proposed mitigation	• Full Occupational Health & Safety Act compliance. • Site-specific Health & Safety Plan. • Appoint a qualified safety officer. • Mandatory PPE and training. • Controlled access fencing and signage. • Fire-fighting equipment and emergency drills. • Daily safety inspections and incident reporting. • Spill kits and hazardous material controls.
Cumulative impact post mitigation	Low — risk reduced to standard construction baseline.
Significance rating after mitigation	Low

Potential impact on biological aspects	**Waste**
Nature of impact	Construction under Alternative 1 will generate general building rubble, packaging waste, scrap materials, and small volumes of hazardous waste (e.g., fuel containers, oily rags, cement residues). If poorly managed, waste could contaminate soil, surface water, and vegetation within the coastal dune environment. Wind-blown litter could spread into adjacent natural vegetation and contribute to visual pollution. Improper handling of hazardous waste could create localised soil or groundwater contamination. The sensitive sandy soils and coastal setting increase the need for strict waste control.
Extent and duration of impact	Local: limited to the construction phase and immediate site footprint.
Probability of occurrence	Probable without management; Low with proper controls.
Degree to which the impact can be mitigated	High — standard construction waste management is effective.

Degree to which the impact may cause irreplaceable loss of resources	None — impacts are reversible and localised.
Cumulative impact prior to mitigation	Low–Moderate — contributes incrementally to local pollution risk if unmanaged.
Significance rating prior to mitigation	Low
Proposed mitigation	• Provide clearly marked waste containers on site. • Separate recyclable and hazardous waste. • Remove waste regularly to licensed facilities. • Maintain disposal certificates. • No dumping or burning on site. • Environmental awareness training for workers. • ECO monitoring of waste management compliance.
Cumulative impact post mitigation	Very Low — negligible pollution risk.
Significance rating after mitigation	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**
Nature of impact	During operation, the development will function as a low-intensity private residential cluster with off-grid services. Impermeable surfaces are limited and most of the site remains vegetated. Minor ongoing impacts could arise from concentrated runoff around structures, small fuel storage for maintenance equipment, and wastewater management. Because the site is located on sandy coastal soils with high permeability, any accidental contamination could infiltrate rapidly if not controlled. However, sealed conservancy systems and rainwater harvesting significantly reduce pollution risk. Long-term soil stability is expected to improve due to rehabilitation and vegetation restoration.
Extent and duration of impact	Local, long-term but low intensity and confined to the developed footprint.
Probability of occurrence	Low with proper infrastructure maintenance.
Degree to which the impact can be mitigated	High — operational controls are straightforward.
Degree to which the impact may cause irreplaceable loss of resources	None — impacts are reversible and localised.
Cumulative impact prior to mitigation	Low — contributes minimally to regional hydrological change.
Significance rating prior to mitigation	Low
Proposed mitigation	• Maintain sealed wastewater systems. • Regular inspection of tanks and plumbing. • No chemical dumping. • Maintain vegetated buffers. • Permeable surfaces for parking. • • Stormwater dispersion away from slopes.

Cumulative impact post mitigation	Very Low — negligible hydrological impact.
Significance rating after mitigation	Very Low

Potential impact on geographical and physical aspects	**100 m High-Water Mark (HWM) / coastal processes (operational phase)**
Nature of impact:	During the operational phase, no further vegetation clearance or earthworks are anticipated within the 100 m High-Water Mark (HWM) trigger area. The primary operational risk relates to long-term human presence, informal foot traffic, and maintenance activities that could destabilise dune vegetation if not properly controlled. Because the development is permanently located within a dynamic coastal system, cumulative micro-disturbances — such as trampling, minor landscaping, or unmanaged stormwater — could gradually weaken dune cohesion if the site is not actively managed. However, the approved layout deliberately confines activity to a compact node positioned outside mapped coastal erosion and flood-risk zones, as confirmed in the Preliminary Geotechnical and Geomatic Report and Constraints Map. The raised boardwalk system prevents repeated soil compaction and protects root systems critical to dune stability. Indigenous rehabilitation, alien clearing, and vegetation restoration strengthen the protective dune buffer over time. The operational phase, therefore, shifts from disturbance to long-term stabilisation and stewardship. No shoreline hardening, seawalls, or engineering interference with natural coastal processes is proposed.
Extent/duration:	Local; permanent but footprint-limited; confined to ±1 175 m² within the 5.16 ha property.
Probability:	Low with ongoing vegetation management; Medium without active stewardship.
Reversibility:	High — dune systems remain biologically recoverable through vegetation restoration and erosion control.
Irreplaceable loss:	Low — the affected area is degraded CBA2; dune function can be restored if disturbance occurs.
Cumulative prior:	Moderate — cumulative degradation could occur regionally if multiple coastal properties fail to manage vegetation and foot traffic within the HWM zone.
Significance prior:	Medium
Mitigation:	• Permanent retention and reinforcement of indigenous dune vegetation. • Strict prohibition of informal pathways outside boardwalk areas. • Annual coastal stability inspections by ECO or environmental practitioner. • Immediate rehabilitation of any exposed sand patches. • Ongoing alien invasive clearing programme. • Stormwater dispersed through vegetated areas; no concentrated discharge down slopes. • No expansion of footprint or new infrastructure within the 100 m HWM zone without reassessment. • Dark-sky compliant lighting to protect dune fauna. • Environmental awareness for occupants regarding dune sensitivity.

Cumulative post:	Low — active stewardship improves dune stability and offsets broader coastal pressure.
Significance after:	Low

Potential impact on biological aspects	**Habitat disturbance**
Nature of impact:	Operational presence introduces low-level human disturbance (lighting, movement, noise, domestic activity). Wildlife may temporarily avoid the immediate building cluster; however, approximately 97.7**%** of the ±5.16 ha property remains in a natural/rehabilitable state under Alternative 1, with disturbance confined to the ±1 175 m² footprint. Alien clearing and rehabilitation result in long-term habitat improvement. No fencing that restricts wildlife movement is proposed. Night lighting could affect nocturnal fauna if poorly designed.
Extent/duration:	Local, permanent but low intensity.
Probability:	Definite (human presence exists).
Reversibility:	High — habitat quality improves through rehabilitation.
Irreplaceable loss:	None — net ecological gain expected.
Cumulative prior:	Moderate — cumulative human presence in coastal areas can reduce wildlife tolerance.
Significance prior:	Medium
Mitigation:	• Dark-sky compliant lighting (downward-facing, motion-activated). • No external floodlighting. • Ongoing alien invasive control. • Indigenous vegetation restoration. • Limit domestic pets roaming freely. • • Maintain ecological corridors across the site.
Cumulative post:	Low–Positive — rehabilitation offsets disturbance.
Significance after:	Low (potentially positive)

Potential noise impacts	**Operational Noise**
Nature of impact:	Normal residential noise (vehicles, conversation, maintenance) will occur, but remains consistent with rural residential character. No commercial or high-noise activities are proposed.
Extent/duration:	Local, permanent but low intensity.
Probability:	Definite.
Reversibility:	Immediately upon cessation of activity.
Irreplaceable loss:	None.
Cumulative prior:	Low.
Significance prior:	Low
Mitigation:	• No amplified outdoor sound systems. • Maintain quiet rural character.

	• Restrict maintenance noise to daylight hours.
Cumulative post:	Negligible.
Significance after:	Very Low

Potential visual impacts	Aesthetic / visual character (operational phase)
Nature of impact:	During the operational phase, visual impacts relate to the permanent presence of built form within a previously undeveloped coastal landscape. The site forms part of a visually sensitive rural coastal system characterised by natural dune vegetation, steep topography, and a strong sense of landscape seclusion. The Visual Compliance Statement confirms that the site has a high Visual Absorption Capacity (VAC) due to dense Goukamma Strandveld vegetation, pronounced coastal landforms, and topographic screening from key public viewpoints. The Alternative 1 development footprint is positioned within a visually contained depression, below skyline level and outside prominent ridgelines, ensuring that structures do not interrupt the natural coastal silhouette. According to the specialist assessment, the development will not be visible from Groenvlei Beach, Cola Beach, or the N2, and visibility from surrounding properties is highly restricted due to vegetation screening. Limited partial visibility may occur from the nearest residence ±250 m east, but this is filtered through vegetation and will not materially alter the perceived landscape character. The architectural language — lightweight structures using timber, steel, glass and natural stone — has been selected specifically to minimise visual mass, colour contrast, and reflectivity. Earth-toned finishes and non-reflective materials further reduce visual intrusion. Lighting design is low-intensity, downward-facing and motion-activated in accordance with specialist recommendations to preserve night-sky conditions and prevent glare within the coastal environment. The operational phase, therefore, represents a visually recessive intervention that integrates into the existing landscape rather than competing with it.
Extent/duration:	Local, permanent but visually contained, limited to a single clustered node within a high VAC landscape.
Probability:	Definite — built form is permanent, but visibility is low.
Reversibility:	Moderate — structures are removable, and vegetation rehabilitation can fully restore the visual character if ever decommissioned.
Irreplaceable loss:	None — scenic character remains intact due to screening and siting.
Cumulative prior:	Moderate — cumulative coastal development could gradually erode scenic character if not subject to strict visual controls.
Significance prior:	Medium
Mitigation (specialist recommendations):	• Retain all perimeter vegetation to maintain visual screening. • Use earth-toned, non-reflective exterior finishes. • No skyline or ridgeline construction.

	• Prohibit future expansion outside the approved footprint. • Maintain natural dune vegetation as a permanent buffer. • Apply dark-sky compliant lighting only. • Immediately rehabilitate any disturbed areas. • No reflective roofing or glazing facing the coast. • Conduct periodic visual audits as part of ECO monitoring. • Any future additions must undergo site-specific visual assessment.
Cumulative post:	Low — development remains visually recessive and reinforces conservation-led coastal character.
Significance after:	Low

No-Go Alternative Impact Summary

The No-Go Alternative entails Portion 79 of Farm Ruygte Valley No. 205 remaining in its current undeveloped state, with no residential dwelling, associated infrastructure, or formal land-use change taking place. Under this option, no construction-related disturbance would occur and the site would remain largely in its present condition.

The No-Go Alternative would avoid direct short-term impacts associated with construction activities, including vegetation clearing, excavation, noise, dust generation, traffic movements, and temporary disturbance to fauna. It would also avoid any immediate visual or physical alteration of the site arising from development.

However, the No-Go Alternative would also retain the current baseline environmental conditions, including areas affected by alien invasive vegetation, particularly Acacia cyclops, and other degraded portions of the site. In the absence of active management, these conditions may persist and, in some areas, deteriorate over time through continued invasive spread, reduced indigenous regeneration, and ongoing ecological decline.

The proposed development includes commitments to alien invasive clearing, rehabilitation, and long-term environmental stewardship linked to the broader land-use planning process. By contrast, the No-Go Alternative provides no assurance that such management or restoration measures would be implemented on a sustained basis.

From a biodiversity perspective, the No-Go Alternative protects the site from development disturbance but may not secure active ecological improvement. It therefore represents a passive conservation scenario rather than a managed restoration scenario.

From a land-use planning perspective, the No-Go Alternative would mean that the landowner does not exercise existing lawful development rights associated with the current zoning, including the right to establish a dwelling house subject to applicable approvals. It would also not advance the proposed conservation-oriented rezoning framework intended to guide long-term land use on the property.

From a socio-economic perspective, the No-Go Alternative would forgo modest local economic benefits associated with the construction phase, including temporary employment opportunities, use of local contractors, and procurement of goods and services. No meaningful long-term economic activity would be generated under this option.

From an agricultural perspective, available specialist input indicates limited agricultural capability due to sandy soils, steep gradients, cadastral constraints, and ecological sensitivities. Accordingly, the No-Go Alternative would not be expected to result in meaningful agricultural productivity or improved rural economic use of the land.

The No-Go Alternative also provides no formal mechanism for:

- active alien invasive clearing;
- structured rehabilitation;
- managed conservation stewardship;
- low-intensity lawful residential use; or
- improved site oversight and maintenance.

Overall Assessment

The No-Go Alternative avoids development-related impacts but largely maintains the status quo. While this may be preferable where development would cause unacceptable harm, the specialist-informed preferred alternative has been designed to minimise impacts through:

- a compact development footprint;
- avoidance of higher sensitivity areas;

- low-intensity off-grid servicing;
- rehabilitation commitments; and
- long-term stewardship measures.

Conclusion

The No-Go Alternative remains a reasonable benchmark option and avoids all direct development disturbance. However, it does not secure the potential environmental management, rehabilitation, or modest socio-economic benefits associated with the preferred alternative.

On balance, and subject to strict conditions and mitigation, the preferred alternative is considered the more appropriate long-term land-use outcome for the property and represents the Best Practicable Environmental Option currently identified.

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:	Under the No-Go Alternative, no construction or operational development activities would occur. The site would remain in its current undeveloped state, and no additional soil disturbance, vegetation clearance, excavation, compaction, or built-surface creation would take place. Existing natural drainage patterns, groundwater conditions, soil profiles, and ambient air quality would remain substantially unchanged from the current baseline. However, existing degraded areas and alien invasive vegetation may continue to influence local runoff patterns, fire risk, and ecological condition if not actively managed.
Extent and duration of impact:	Site-wide baseline conditions retained over the long term. No development-related disturbance would occur.
Probability of occurrence:	Definite — the existing physical environment would remain largely unchanged in the absence of development.
Degree to which the impact can be mitigated:	Not applicable in the conventional sense, as no development impact arises. Existing degradation could, however, be improved through voluntary rehabilitation and alien clearing.
Degree to which the impact may cause irreplaceable loss of resources:	None anticipated as a result of the No-Go Alternative.

Cumulative impact prior to mitigation:	Low — no additional contribution to runoff, groundwater contamination, soil erosion, or air-quality degradation from development activities. Existing unmanaged conditions may persist.
Significance rating prior to mitigation:	Low
Proposed mitigation:	No project mitigation required. Desirable management measures would include alien invasive clearing, erosion repair where necessary, and continued maintenance of natural vegetation cover.
Cumulative impact post mitigation:	Low to potentially positive if voluntary rehabilitation measures are implemented.
Significance rating after mitigation:	Low

Potential impacts on geographical and physical aspects:	**100-Highwater Mark and Dune Stability**
Nature of impact:	Under the No-Go Alternative, no construction, grading, excavation, access development, or foundation works would occur within or adjacent to the 100 m High-Water Mark (HWM) trigger area. Coastal dunes, stabilising vegetation, and existing landforms would remain free from development-related disturbance. Natural coastal processes, including erosion, accretion, sediment movement, and storm response, would continue without interference from built infrastructure. No direct dune destabilisation, vegetation clearance, or alteration of coastal geomorphology would arise as a result of development. However, existing degraded or alien-invaded portions of the site may remain unmanaged, which could limit long-term ecological recovery and dune vegetation resilience.
Extent and duration of impact:	Site-wide coastal baseline conditions retained over the long term. No development-related disturbance would occur.
Probability of occurrence:	Definite — no project-related impact would arise under the No-Go Alternative. Natural coastal processes would continue.
Degree to which the impact can be mitigated:	Not applicable in relation to development impacts. Existing degradation could be improved through voluntary alien clearing and rehabilitation.
Degree to which the impact may cause irreplaceable loss of resources:	None as a result of the No-Go Alternative.
Cumulative impact prior to mitigation:	Low — no additional contribution to coastal erosion, dune instability, or disturbance within the HWM trigger area from development. Existing unmanaged conditions may persist.
Significance rating of impact prior to mitigation:	Low

Proposed mitigation:	No project mitigation required. Desirable management measures include alien invasive removal, protection of dune vegetation, prevention of informal trampling paths, and rehabilitation of any disturbed patches.
Cumulative impact post mitigation:	Low to potentially positive if voluntary stewardship and rehabilitation measures are implemented.
Significance rating of impact after mitigation:	Low

Potential impacts on biological aspects:	**Habitat and biodiversity loss**
Nature of impact:	Under the No-Go Alternative, no vegetation clearance, habitat transformation, access construction, or development-related disturbance would occur. No additional habitat loss or fragmentation would arise from the proposed project. Existing vegetation communities, including degraded CBA2 areas, indigenous components, alien invasive vegetation, and associated fauna such as birds, reptiles, invertebrates, and small mammals, would remain broadly in their current condition. However, the No-Go Alternative would also retain the current degraded ecological baseline in affected portions of the property. In the absence of active management, alien invasive species may persist or expand, indigenous regeneration may remain suppressed, and opportunities for ecological rehabilitation and long-term stewardship may not be realised.
Extent and duration of impact:	Site-wide baseline ecological conditions retained over the long term. No development-related habitat loss would occur.
Probability of occurrence:	Definite — no project-related biodiversity disturbance would arise. Existing ecological conditions would remain unless separately managed.
Degree to which the impact can be mitigated:	Not applicable in relation to development impacts. Existing ecological degradation could be improved through voluntary alien clearing, habitat restoration, and conservation management.
Degree to which the impact may cause irreplaceable loss of resources:	None as a result of the No-Go Alternative.
Cumulative impact prior to mitigation:	Low to Moderate — no new development pressure would occur, but existing invasive impacts and ecological degradation may continue cumulatively over time if unmanaged.
Significance rating of impact prior to mitigation:	Low
Proposed mitigation:	No project mitigation required. Desirable management measures include alien invasive eradication, rehabilitation with locally indigenous species, fire management where appropriate, and ongoing biodiversity stewardship.

Cumulative impact post mitigation:	Low to potentially positive if voluntary rehabilitation and conservation measures are i

Potential impacts on socio-economic aspects:	**Socio-economic**
Nature of impact:	Under the No-Go Alternative, the proposed development would not proceed and no construction-related employment, contractor opportunities, or local procurement benefits would be generated. The modest short-term socio-economic benefits associated with labour demand, materials supply, transport services, and related spending would therefore be foregone. No negative displacement, infrastructure burden, or community service pressure would arise, but no positive project-related economic contribution would occur either.
Extent and duration of impact:	Local; short-term economic opportunities would not materialise during the period in which construction would otherwise have occurred. Long-term no material socio-economic change expected.
Probability of occurrence:	Definite — no project-related economic activity would arise under the No-Go Alternative.
Degree to which the impact can be reversed:	Moderate — lost short-term opportunities cannot be recovered for the specific project period, although alternative future economic activity may occur.
Degree to which the impact may cause irreplaceable loss of resources:	None.
Cumulative impact prior to mitigation:	Low negative — contributes to forgone small-scale local economic activity when considered with other unrealised rural investments.
Significance rating of impact prior to mitigation:	Low (Negative)
Degree to which the impact can be mitigated:	Limited — only through alternative lawful investment, land management activity, or future development opportunities.
Proposed mitigation:	No project mitigation applicable. Desirable measures could include voluntary conservation management, property maintenance, or other lawful low-impact economic uses that create some local benefit.
Cumulative impact post mitigation:	Very Low negative to neutral.
Significance rating of impact after mitigation:	Very Low (Negative)

Potential noise impacts:	**Noise disturbance**
Nature of impact:	Under the No-Go Alternative, no construction or operational development activities would occur. No additional project-related ambient noise would be generated from machinery, vehicles, building works, occupants, or maintenance activities. Existing background noise levels associated with the rural coastal environment

	would remain substantially unchanged, limited to natural sounds, occasional traffic, neighbouring activities, and ambient environmental conditions.
Extent and duration of impact:	Site-wide baseline acoustic environment retained over the long term. No project-related noise disturbance would occur.
Probability of occurrence:	Definite — no project-generated noise would arise under the No-Go Alternative.
Degree to which the impact can be reversed:	Not applicable, as no additional noise impact would be created.
Degree to which the impact may cause irreplaceable loss of resources:	None.
Cumulative impact prior to mitigation:	Low — no contribution to cumulative regional noise levels from development activities.
Significance rating of impact prior to mitigation:	Low
Degree to which the impact can be mitigated:	Not required in relation to project impacts.
Proposed mitigation:	No project mitigation required.
Cumulative impact post mitigation:	Low / neutral.
Significance rating of impact after mitigation:	Low

Potential visual impacts:	**Aesthetic impact**
Nature of impact:	Under the No-Go Alternative, no buildings, access infrastructure, lighting, or associated development would be introduced onto the site. The existing undeveloped visual character of the property and surrounding coastal landscape would remain substantially unchanged. Scenic qualities associated with natural dune vegetation, topography, and rural seclusion would be retained. No project-related visual intrusion, night-light spill, or alteration of landscape character would occur. However, existing alien invasive vegetation and unmanaged degraded areas may persist, which could continue to detract from the natural aesthetic quality in certain portions of the site.
Extent and duration of impact:	Site-wide existing visual character retained over the long term. No development-related visual disturbance would occur.
Probability of occurrence:	Definite — no project-generated visual impact would arise under the No-Go Alternative.
Degree to which the impact can be reversed:	Not applicable in relation to development impacts, as no new visual intrusion would occur. Existing degraded visual elements could be improved through voluntary rehabilitation and alien clearing.

Degree to which the impact may cause irreplaceable loss of resources:	None. Scenic landscape resources would remain intact.
Cumulative impact prior to mitigation:	Low — no contribution to cumulative scenic degradation from additional development. Existing unmanaged visual degradation may persist locally.
Significance rating of impact prior to mitigation:	Low
Degree to which the impact can be mitigated:	Not required in relation to project impacts. Existing site aesthetics could be improved through vegetation management and rehabilitation.
Proposed mitigation:	No project mitigation required. Desirable measures include alien invasive clearing, rehabilitation of disturbed patches, and ongoing conservation management to enhance visual quality.
Cumulative impact post mitigation:	Low to potentially positive if voluntary rehabilitation is undertaken.
Significance rating of impact after mitigation:	Low

Potential impact on biological aspects:	**Safety on site**
Nature of impact:	Under the No-Go Alternative, no construction, excavation, machinery operation, transport of materials, or operational occupation associated with the proposed development would occur. Accordingly, no project-related occupational health and safety risks would arise, such as injuries from machinery, falls, excavation collapse, chemical handling, or construction traffic. Existing background risks associated with an undeveloped rural coastal property would remain, including natural terrain hazards, fire risk from unmanaged vegetation, wildlife encounters, and informal access-related risks.
Extent and duration of impact:	Site-wide existing safety baseline retained over the long term. No project-related safety risks would occur.
Probability of occurrence:	Definite — no development-generated safety impacts would arise under the No-Go Alternative. Existing natural site risks may continue.
Degree to which the impact can be reversed:	Not applicable in relation to project impacts, as no new development risk would be introduced.
Degree to which the impact may cause irreplaceable loss of resources:	None as a result of the No-Go Alternative.
Cumulative impact prior to mitigation:	Low — no contribution to regional construction or operational safety risks. Existing unmanaged fire or access risks may persist locally.
Significance rating of impact prior to mitigation:	Low
Degree to which the impact can be mitigated:	Not required in relation to project impacts. Existing baseline risks could be reduced through voluntary land management measures.
Proposed mitigation:	No project mitigation required. Desirable management measures include alien invasive clearing for fire risk reduction, maintenance of safe access routes, and general site stewardship.

Cumulative impact post mitigation:	Low / neutral.
Significance rating of impact after mitigation:	Low

Potential impact on biological aspects:	**Waste**
Nature of impact:	Under the No-Go Alternative, no construction or operational development activities would occur. Accordingly, no project-related construction rubble, packaging waste, domestic waste, hazardous substances, or wastewater associated with the proposed development would be generated. No additional pollution source would be introduced to the site as a result of the project. Existing background littering or illegal dumping risks, if any, could still occur independently of the proposed development and would remain subject to general municipal and environmental controls.
Extent and duration of impact:	Site-wide existing waste baseline retained over the long term. No project-generated waste streams would occur.
Probability of occurrence:	Definite — no development-related waste generation would arise under the No-Go Alternative.
Degree to which the impact can be reversed:	Not applicable in relation to project impacts, as no new waste impact would be created. Existing litter or dumping issues, if present, could be remediated through site clean-up measures.
Degree to which the impact may cause irreplaceable loss of resources:	None as a result of the No-Go Alternative.
Cumulative impact prior to mitigation:	Low — no contribution to cumulative waste or pollution pressures from development activities.
Significance rating of impact prior to mitigation:	Low
Degree to which the impact can be mitigated:	Not required in relation to project impacts. Existing baseline waste issues could be managed through voluntary clean-up and monitoring.
Proposed mitigation:	No project mitigation required. Desirable measures include periodic litter removal, prevention of illegal dumping, and ongoing conservation management.
Cumulative impact post mitigation:	Low / neutral.
Significance rating of impact after mitigation:	Low

Section I

Conclusion and Recommendations

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 has been assessed in accordance with the National Environmental Management Act (NEMA), the Environmental Impact Assessment Regulations, 2014 (as amended), and all applicable sectoral legislation and spatial planning frameworks.

The proposed development on Portion 79 of Farm Ruygte Valley No. 205 has been assessed in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998), the Environmental Impact Assessment Regulations, 2014 (as amended), and applicable sectoral legislation, environmental considerations, and relevant spatial planning frameworks.

The assessment indicates that the preferred alternative — comprising a main dwelling (approximately 200 m²), three small self-contained units (approximately 65 m² each), staff accommodation (approximately 50 m²), an equipment shed (approximately 80 m²), together with associated access, parking, and pedestrian infrastructure — represents a low-intensity development option with a compact footprint.

The Applicant has stated that the additional units are presently intended for private family and guest accommodation. Any broader land-use rights associated with multiple accommodation units remain subject to separate municipal planning processes and approvals.

Although portions of the property fall within the broader 100 m High-Water Mark (HWM) trigger area, specialist investigations and the constraints-led site planning process indicate that the preferred layout:

- avoids higher sensitivity ecological and coastal constraint areas where feasible;
- is confined to a relatively small footprint of approximately 1 375 m² (about 2.7% of the property);
- avoids mapped higher-risk erosion and flooding areas identified through available specialist input;
- avoids mapped CBA1 and indigenous forest areas; and
- allows the majority of the property (approximately 97.3%) to remain undeveloped and available for conservation-oriented management.

Potential environmental impacts associated with both the construction and operational phases — including soil disturbance, erosion risk, biodiversity impacts, visual effects, noise, waste generation, and coastal sensitivity considerations — were assessed as generally low to moderate prior to mitigation, reducing to low or very low after mitigation in most instances.

No fatal environmental flaw was identified through the specialist studies, provided that mitigation measures, footprint controls, and management commitments are properly implemented.

The proposal is further considered broadly aligned with the intent of relevant planning instruments, including:

- the Knysna Spatial Development Framework;
- the Western Cape Provincial Spatial Development Framework;
- the Garden Route Environmental Management Framework; and
- applicable need and desirability principles.

These frameworks generally support appropriately scaled, environmentally responsive development outside the urban edge where ecological constraints are recognised and managed.

The No-Go Alternative would avoid all direct development-related disturbance, but would also not realise the potential benefits associated with:

- active alien invasive clearing;
- rehabilitation of degraded portions of the site;
- structured long-term stewardship; and
- lawful low-intensity use of privately owned land.

For these reasons, the No-Go Alternative is not considered the most appropriate long-term option currently identified.

Recommendations

It is recommended that Environmental Authorisation be granted for the proposed development, subject to conditions including, but not limited to, the following:

- strict adherence to the approved site layout and authorised footprint;
- no encroachment into identified no-go or higher sensitivity areas;
- implementation of all mitigation measures contained in the BAR, EMPr, and specialist inputs;
- appointment of an independent Environmental Control Officer (ECO) for the construction phase;
- rehabilitation of all disturbed areas with appropriate locally indigenous vegetation;
- implementation of erosion, stormwater, and sediment control measures;
- ongoing alien invasive vegetation management;
- use of low-impact lighting to reduce faunal disturbance;
- ECSA-registered engineering input for foundations, drainage, and any required geotechnical measures at detailed design stage;
- controlled use of designated access routes and pedestrian boardwalks only; and
- compliance with all separate municipal planning, building control, and other statutory approvals.

Any future change in use, intensification, expansion of the development footprint, or commercial tourism operation beyond the scope assessed in this BAR may require separate approvals and/or further environmental consideration.

Final Finding

Subject to the above conditions and implementation of mitigation measures, the proposed development is considered environmentally acceptable and consistent with the principles of sustainable development and integrated environmental management contained in NEMA.

Recommended Mitigation and Conditions of Authorisation

Should Environmental Authorisation be granted for the proposed development on Portion 79 of Farm Ruygte Valley No. 205, it is recommended that the following mitigation measures and conditions of authorisation be imposed to ensure compliance with the principles of the National Environmental Management Act (NEMA), the EIA Regulations, 2014 (as amended), and all applicable sectoral and planning legislation.

General Conditions

The development shall be implemented strictly in accordance with:

  - the approved Site Development Plan (SDP);
  - the updated Constraints Map; and
  - the final approved Environmental Management Programme (EMPr).

- No development activities shall occur outside the approved development footprint of approximately ±1 375 m².

- Any deviation from the approved layout, footprint, access routes, or infrastructure design shall require prior written approval from the Competent Authority.
    - The main dwelling and associated cottages shall function as a low-intensity private residential and tourism-compatible accommodation cluster in accordance with approved zoning rights.
    - Any future expansion, increase in unit numbers, or change in land-use intensity shall require separate statutory approval.

Coastal Location, High-Water Mark and Dune Stability Conditions

- All permanent structures shall be confined to the approved development footprint located within 100 m inland of the High-Water Mark (HWM), as assessed and authorised in terms of GN R.327 (Listing Notice 3).
- No structures, services, access routes, or ancillary infrastructure shall be permitted closer to the coastline than those reflected on the approved SDP and Constraints Map.
- Development shall avoid all mapped high-risk coastal erosion and flood-prone areas as identified in the Preliminary Geotechnical and Geomatic Report and consolidated in the Constraints Map.

The integrity and stability of the coastal dune system shall be protected through:

    - retention of stabilising indigenous vegetation where feasible;
    - immediate rehabilitation of disturbed areas using locally indigenous Goukamma Strandveld species; and
    - avoidance of unnecessary ground disturbance within the coastal zone.
- A detailed, site-specific geotechnical investigation shall be undertaken at the building-plan stage, and all foundation, slope-stabilisation, and stormwater designs shall be prepared and certified by an ECSA-registered professional engineer, with specific consideration of:

    - erodible sandy soils;
    - identified structurally weak zones, including D7; and
    - projected long-term coastal retreat and sea-level-rise scenarios.

Biodiversity and Vegetation Management Conditions

- Vegetation clearing shall be strictly limited to the approved development footprint and confined to the degraded CBA2 portion of the site.
- No clearing, disturbance, or encroachment shall occur within:

    - CBA1 (Maintain) areas;
    - indigenous coastal forest; or
    - protected Milkwood Forest areas.
- An Alien Invasive Management Plan shall be implemented for the duration of the development, with priority given to the systematic removal and long-term control of Acacia cyclops.
- A search-and-rescue operation for indigenous plant species shall be undertaken prior to construction, and an on-site nursery shall be established and maintained for rehabilitation purposes.
- Rehabilitation of all temporarily disturbed areas shall be undertaken progressively and completed immediately following construction, using locally indigenous species characteristic of the Goukamma Strandveld.

Construction Phase Environmental Management

- An independent Environmental Control Officer (ECO) shall be appointed prior to commencement of construction.

The ECO shall:

    - monitor compliance with the EMPr and conditions of authorisation;
    - conduct regular site inspections; and
    - compile and submit audit reports to the Competent Authority if required.
- Construction activities shall be restricted to daylight hours only.
- Erosion and surface run-off control measures shall include, but not be limited to:
    - installation of silt fences and sediment traps;
    - use of stormwater swales directing flows away from slopes and dune systems; and
    - phased vegetation clearing to minimise exposure of bare soil.
- Raised timber boardwalks shall be utilised where approved to minimise soil compaction and disturbance of natural drainage patterns.

Operational Phase Conditions

- The development shall operate entirely off-grid, utilising:
    - solar energy generation;
    - rainwater harvesting and storage systems; and
    - sealed conservancy tanks or approved on-site wastewater treatment systems.
- All stormwater infrastructure shall be maintained to prevent erosion, concentration of run-off, or discharge toward the coastal zone.
- Pedestrian and vehicle movement shall be restricted to approved access roads and boardwalks to prevent secondary habitat degradation.
- Ongoing alien invasive vegetation control, rehabilitation, and vegetation maintenance shall be implemented for the operational life of the development.

Monitoring and Adaptive Management

- The landowner shall ensure ongoing monitoring of:
    - coastal dune stability and erosion;
    - vegetation condition and rehabilitation success; and
    - stormwater performance.
- Should any unanticipated environmental impacts arise, adaptive management measures shall be implemented in consultation with the relevant specialists and the Competent Authority.

Final Recommendation

Subject to the implementation of the above mitigation measures and conditions of authorisation, the proposed development is considered environmentally acceptable, manageable, and consistent with the principles of Integrated Environmental Management, sustainable coastal development, and conservation-compatible land use.

This Basic Assessment Report, together with the Environmental Management Programme, specialist studies, public participation documentation, declarations, and supporting appendices, is hereby respectfully submitted to the Competent Authority for consideration and decision-making in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), and the Environmental Impact Assessment Regulations, 2014 (as amended). The application seeks authorisation for a compact, low-intensity development footprint that has been refined through a constraints-led planning process and informed by specialist input to avoid and minimise environmental impacts. Any future expansion, intensification, or land-use change beyond the development footprint and scope assessed in this Basic Assessment Report would remain subject to separate statutory approvals and, where applicable, further environmental assessment.