

# **PRE-APPLICATION**

# **DRAFT SCOPING REPORT**

PROPOSED KHOISAN BAY RESIDENTIAL DEVELOPMENT ON PORTION 2 OF FARM STRANDFONTEIN NO 712, GANSBAAI

9 April 2025

Consultant:

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## STATEMENT OF INDEPENDENCE

Lornay Environmental Consultants nor any of the authors of this report have any material present or contingent interest in the outcome of this report, nor do they have any financial or other interest which may affect the independence of the author(s) or Lornay Environmental Consulting. The consultant fees paid to Lornay Environmental Consulting for the completion of this report is in line with standard professional fees and daily rates. The settling of the professional fee is not dependent on the outcome of the report.

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# **PROJECT DETAILS**

TITLE	Proposed Khoisan Bay Residential Development on Portion 2 of Farm
	Strandfontein No. 712, Gansbaai.

- **PROCESS** Environmental Impact Assessment Process
- **REPORT** Draft Scoping Report, including Plan of Study for EIA
- **DEA&DP Ref.** 16/3/3/6/7/2/E2/10/1279/24
- **REPORT DATE** 9 April 2025
- **APPLICANT:** Oosterwijk Strandfontein BK

## **EXECUTIVE SUMMARY**

#### Introduction

Lornay Environmental Consulting has been appointed by Oosterwijk Strandfontein BK to facilitate the Environmental Impact Assessment (EIA) process for the proposed Khoisan Bay Residential Development on a portion of Portion 2 of Farm Strandfontein No. 712, De Kelders. This application seeks Environmental Authorisation (EA) in accordance with the National Environmental Management Act (NEMA, Act 107 of 1998) and the Environmental Impact Assessment Regulations of 2014, as amended.

The proposed development site is strategically located within the Greater Gansbaai area, adjacent to the Walker Bay Nature Reserve to the north, the existing De Kelders residential area to the west, and agricultural land to the east and south. The property is situated along the western side of the R43 road, providing itself as a key expansion area for the De Kelders township.

#### **Previous Authorisation**

The development described herein, currently holds a valid Town Planning Land Use Approval from the Overstrand Municpality, which will lapse in August 2026. The proposal was also previously approved under the National Environmental Management Act (NEMA) (Act 107 of 1998) however the Environmental Authorisation lapsed in June 2022.

#### **Development Proposal**

The development proposal involves the subdivision and rezoning of Portion 2 (Lang Bosch) of Farm Strandfontein No. 712 into three portions and the remainder, to establish a residential development and associated open spaces, access roads, community facilities, institutional spaces, and a commercial site. The design considers the existing character, urban fabric, environmental significance, traffic flow, target market, and social impact on the Greater Gansbaai area. Notably, the northern boundary of the property will remain undeveloped, designated as public open space to promote ecological connectivity and biodiversity conservation with the open space inland of the R43.

Key components of the development include:

- → **Residential Development:** A total of 472 residential opportunities are planned, comprising:
  - <sup>o</sup> Single Residential Zone: 118 erven, each approximately 623 m<sup>2</sup>, with total extent of 73461 m<sup>2</sup>.
  - ° Townhouse Zone: 179 erven, each approximately 314 m<sup>2</sup>, with total extent of 38 966 m<sup>2</sup>.
  - <sup>o</sup> Group Housing Zone: 175 erven, each approximately 410 m<sup>2</sup>, with a total extent of 70 583 m<sup>2</sup>.

Development controls and guidelines will be implemented to realize the vision of the proposed development. A Homeowners Association, established in accordance with Section 29 of the Ordinance, will oversee each of the four Group and Town Housing Clusters to ensure adherence to guidelines and conditions of authorisation.

- → **Business Zone:** A commercial site of approximately 5783 m<sup>2</sup> is proposed at the junction of the existing De Kelders residential area and the new extension. This location ensures the facility serves both existing and new residents, functioning as a local hub without encouraging through-traffic from the R43.
- → **Community Facility:** A community facility of approximately 2417 m<sup>2</sup> is planned opposite the commercial site, at the entrance of the existing De Kelders residential area. The specific use of this facility will be market-driven, with a site development plan submitted for municipal approval prior to development.
- → **Transport Zone:** Access routes and internal road network
- → Ecological Corridors: In alignment with the Overstrand Spatial Development Framework (SDF) and specialist recommendations, specific areas have been designated for public and private open space to improve overall ecological connectivity. The development will be concentrated along the southwestern boundary, facilitating the establishment of a conservation corridor to the north which aims to retain and improve connectivity above the R43 towards the mountains. Private open spaces within the group and town housing clusters will further enhance ecological connectivity.

#### **Engineering Alternatives**

Various engineering alternatives have been considered to ensure the development is both sustainable and practical:

- → Water Supply: The development requires the construction of a 2.2 MI reservoir, along with the installation of 300 mm and 200 mm diameter pipelines to reinforce and extend the existing water reticulation system. A variable speed booster pump is also proposed to maintain required residual pressures.
- → Electricity Supply: Given the current capacity constraints in the De Kelders area, a new bulk electricity supply is proposed. This includes a medium voltage cable from the Gansbaai Main switching station, approximately 4.6 km away, connecting through the development to De Kelders. An application will be submitted to Eskom for a 2,000 kVA increase in the municipal supply point. Internal services will consist of underground cables, substations, distribution kiosks, and single-phase connections, designed in accordance with Overstrand Municipality guidelines.
- → **Stormwater Management:** The site's topography divides it into three main drainage areas. The stormwater system will include catch pits and underground pipes, with overland escape routes for major storm events. Roads will be graded to prevent low points, ensuring efficient stormwater conveyance.
- → Sewerage: The proposed development will feature an internal sewerage system, graded to collect sewage at two points, which will then be transported via underground pipes to the existing treatment plant. The design will accommodate future connections from the existing De Kelders area.
- → Road Infrastructure: Access to the development will be from the R43, with additional lanes provided, and from Main Road in the existing De Kelders area. Internal roads will have asphalt surfaces with mountable kerbs, designed to specified cross falls and substructure standards. Traffic circles are proposed at major intersections to facilitate flow and serve as traffic calming measures.

### **No-Development Alternative**

The no-development alternative would retain the status quo, leaving the land zoned as Agricultural Zone I and undeveloped. This option would forgo the potential socio-economic benefits of the proposed development, including addressing housing demand and enhancing local infrastructure, as well as securing formal open spaces and corridors in perpetuity.

#### **Summary of Alternatives**

The preferred alternative (Alternative 1) aligns with the applicant's vision and has been refined through specialist consultation. This approach balances development needs with environmental conservation, providing substantial buffers to the adjacent Walker Bay Nature Reserve and establishing corridors linking inland and coastal areas. Engineering alternatives have been integrated to ensure sustainability and feasibility.

The proposed Khoisan Bay Residential Development aims to create a self-sustaining, environmentally conscious residential community, thoughtfully designed to harmonize with the natural landscape and existing urban fabric.

#### **Process status**

This is the first round of public participation on the **Draft Scoping Report.** Comments received will be recorded and amendments made as required.

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# **ENVIRONMENTAL & SPECIALIST TEAM**

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Archaeological	Agency for Cultural Resource Management (Jonathan Kaplan)
Botanical	Nick Helme Botanical Surveys (Nick Helme)
Faunal	Wildlife Conservation Decision Support (Jan Venter & Rudi Swart)
Heritage	Agency for Cultural Resource Management (Jonathan Kaplin)
Paleontological	Agency for Cultural Resource Management (John Pether)
Socio-economic	Amandla Consulting (Amanda Fitschen)
Traffic Impact Statement	iCE Group (Pty) Ltd
Visual Assessment	New World Associates

## **ABBREVIATIONS**

AIA – Archaeological Impact Assessment	LUPO – Land Use Planning Ordinance	
BID – Background Information Document	<b>MSA</b> – Middle Stone Age	
<b>CFR</b> – Cape Floristic Region	<b>NEMA</b> – National Environmental Management Act	
<b>DEA</b> – Department of Environmental Affairs	<b>NEMBA</b> – National Environmental Management: Biodiversity Act	
<b>DEA&amp;DP</b> – Department of Environmental Affairs and Development Planning	<b>NEMWA</b> – National Environmental Management: Waste Act	
<b>DEAT</b> – Department of Environmental Affairs and Tourism	NHRA – National Heritage Resources Act	
EAP – Environmental Impact Practitioner	NID – Notice of Intent to develop	
EIA – Environmental Impact Assessment	NTS – Not to Scale	
EIR – Environmental Impact Report	<b>OCF</b> – Overstrand Conservation Foundation	
EIAR – Environmental Impact Assessment Report	<b>POS</b> – Plan of Study	
EMPr – Environmental Management Programme	SDF – Spatial Development Framework	
<b>ESA</b> – Early Stone Age	VIA – Visual Impact Assessment	
<b>GN</b> – Government Notice	<b>WCPSDP</b> – Western Cape Provincial Spatial Development Framework	
HIA – Heritage Impact Assessment		
HWC – Heritage Western Cape		
I&AP – Interested and Affected Party		
IDP – Integrated Development Plan		
LSA – Later Stone Age		

# **1. INTRODUCTION AND BACKGROUND**

## 1.1. Project overview

Consideration is being given to the establishment of a mixed-use development on Portion 2 of Farm Strandfontein No. 712, Caledon Regional District. The property is situated to the northeast of De Kelders, within the Overstrand Municipality in Gansbaai. The property is bordered by the Walker Bay Nature Reserve to the north, the established De Kelders residential area to the west, and vacant properties to the east. Additionally, the R43 road runs along the southern boundary of the property, providing a direct connection to other areas within the region.



Figure 1. Locality of the subject farm with the application area indicated in red (Source: Cape Farm Mapper)

The proposal includes the Subdivision and Rezoning of a Portion of Portion 2 of the Farm Strandfontein No. 712, to establish a residential extension of De Kelders, with associated infrastructure.



Figure 2. Proposed subdivision of Portion 2 of the Farm 712, to create the development area indicated in red

The development of the subject portion for residential purposes, takes into consideration existing planning policies, the natural environment and the character of the area. The Subdivision and Rezoning aims to create a high-quality residential extension and expansion to the De Kelders area, providing housing options for various income levels in the Greater Gansbaai Area.

It is important to note that the current application for Environmental Authorisation (EA) was previously approved both under the National Environmental Management Act (NEMA) (Act 107 of 1998) and the Overstrand Municipalities Town Planning Polices and Regulations. The Environmental Authorisation lapsed in 2022 and the existing town planning approval lapses in August 2026, as such the Environmental Authorisation is no longer valid, but the Land Use Planning application and approval is still valid. In addition to this, the Heritage permit issued by Heritage Western Cape under the original application is still valid.

Application is (was) made for the following land use actions:

- → The subdivision of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 into two portions (Portion A and Remainder);
- → The subdivision of Portion A, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, into three portions (Portions 1, 2 and 3);

- → Rezoning of Portions 2 and 3, portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, from Agriculture Zone I to Private Open Space and Public Open Space respectively
- → For the rezoning of Portion 1, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, from Agriculture Zone I to Subdivisional Area;
- $\rightarrow$  For the subdivision of Portion 1, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712;
- $\rightarrow$  For the amendment of the Greater Gansbaai Spatial Development Framework.
- $\rightarrow$  For the establishment of Homeowners' Associations.

The surrounding land uses include the established De Kelders Township, primarily consisting of single residential dwellings, the Walker Bay Nature Reserve, tourism and agricultural properties. The growth in population within the Overstrand area has intensified the demand for housing, and this proposal is intended to address that need. The development will consist of approximately 472 residential erven, ranging from group housing plots to single residential units, as well as the necessary infrastructure, including roads, bulk services, and utilities. Open spaces are also included in the proposal. The long-term conservation of the remainder of the site above the R43, in line with the previous Environmental Authorisation, remains.

This development concept emphasizes a compact urban form, with a well-balanced mix of housing types. It does not extend beyond the interim urban edge and is in alignment with the unique character of the area, fostering a sustainable community. The design prioritizes open space corridors, which will be incorporated throughout the development to maintain ecological integrity. One of the key elements of the project is the inclusion of ecologically sensitive areas as Open Space zones, essential for preserving an ecological corridor between the Walker Bay Nature Reserve, the R43, and the proposed development to the west. This area is proposed to be rezoned as Open Space, with an emphasis on conservation and long-term management. The maintenance of these ecologically significant open spaces will be formalized in the Homeowners Association or property owner documentation, ensuring their preservation in perpetuity.

In terms of land use planning, the development will consist of small residential units strategically positioned adjacent to the existing urban area, ensuring limited encroachment into environmentally sensitive zones. These units will be connected by a medium density "high street", which will serve as the central movement spine of the development. This spine will link to the R43 road and the established De Kelders urban area, where residents will have access to amenities and services. The design of the development encourages pedestrian and bicycle mobility, fostering a car-free environment within the site and promoting sustainable living. This movement spine is central to creating a sense of place for the community, reinforcing the urban character of the development while maintaining its connection to the surrounding natural and built environments.



Figure 3. Location of the subject property with relevant zoning indicated

Note that this document is the Scoping Report and forms part of the Application for Environmental Authorisation. The aim of this document is to:

- $\rightarrow$  Outline the EIA Process and state of the application
- $\rightarrow$  Describe the Project and alternatives for assessment
- → Describe and identify the Receiving Environment (social, economic, cultural, and biophysical)
- → Describe the issues and impacts identified in the Scoping process
  - How the project will impact on the different elements of the receiving environment during different phases of development (planning, construction, and operation)
- ightarrow Indicate the proposed Scope of specialist investigations to be undertaken in the EIA Phase
- → Allow for possible interested and Affected Parties (I&AP'S) and Organs of State, opportunity to provide comment and input into the proposal
- → Show the method for assessing the suitability of the project against which the Department of Environmental Affairs and Development Planning (DEA&DP) can decide on the application or provide guidance for further input and / or revision prior to moving into the Environmental Impact Assessment reporting phase.

## **1.2. The Environmental Impact Assessment Process**

This process is being undertaken in accordance with the National Environmental Management Act (Act 107 of 1998) and the EIA Regulations (2014) as amended. The process can be broadly summarised as follows:



Figure 4. Scoping and EIA process, red circle indicates where in the process the application currently stands.

The scope of the study has been determined with reference to the requirements of the relevant legislation, including the National Environmental Management Act (Act No. 107 of 1998) (NEMA), the Environmental Impact Assessment (EIA) Regulations (2014), as amended. This draft Scoping Report forms part of the Environmental Assessment Process for the proposed development on Portion 2 of Farm 712 and serves to outline the key responsibilities and actions to be undertaken as part of the Scoping and EIA process.

The main responsibilities of the Environmental Assessment Practitioner (EAP) include, but are not limited to the following, as stipulated in the EIA Regulations:

- → Management of **Pre-application** process, including information gathering, appointment of specialists and identification of interested and affected parties and public participation process
- → Submission of the required **Application Form** to the relevant authority (in this instance, the Department of Environmental Affairs and Development Planning (DEA&DP) in order to register the proposed project and obtain the applicable reference numbers.

- → Consultation with relevant authorities, stakeholders, and interested and affected parties (I&APs) through the Scoping and EIA phases to ensure that all relevant issues and concerns are identified and addressed in accordance with the EIA Regulations.
- → Identification and assessment of potential environmental impacts associated with the proposed development, including consideration of social, ecological, and economic factors. Issues raised during public participation will be documented and responded to throughout the EIA process.
- → Preparation of the required Scoping Report (SR) and Environmental Impact Assessment Report (EIAR), which will describe the proposed activity, assess the affected environment, outline potential environmental impacts, and discuss relevant legislation and guidelines. The reports will also document the public participation process followed, identify aspects requiring further investigation, and present the findings of specialist studies, along with proposed mitigation measures to be implemented during the construction and operational phases.
- → Public and Authority Review Submission of the Scoping and EIA Reports for public review and comment, followed by submission to the competent authority (DEA&DP) for evaluation and decision-making.

One of the fundamental aims of a Scoping and EIA process, is to ensure that the imperative of sustainable development is met on a project level, within the context of the greater area. The most common definition of sustainable development is *development that meets the needs of the present generation whilst not compromising the needs of future generations*. The EIA for the proposed development of the property is therefore being undertaken with sustainable development principles as a goal. The EIA phase will look at the potential impacts of the project proposals on the environment and assess the significance of these impacts, as well as proposed mitigation measures, as required, to reduce anticipated impacts to acceptable levels.

### **1.3. Summary of the Scoping and Environmental Impact Assessment Process**

The Scoping and Environmental Impact Assessment process is undertaken in distinct phases in accordance with the requirements of the EIA Regulations 2014 (as amended).

The first phase may or may not include pre-application public participation – as is applied in this scenario and the submission of the Application for Environmental Authorisation to the competent authorities.

This **Draft Scoping Report** will be circulated to all potential Interested and Affected Parties (I&AP's) including all adjacent landowners, relevant Organs of State and other relevant community groups. A Register for Interested and Affected Parties is opened. The aim of this round of public participation is to aid in the identification of any potential fatal flaws upfront. This Draft Scoping Process was initiated to identify potential issues associated with the proposed development. This includes the assessment of available baseline information and a public consultation process. Issues and concerns raised will be addressed in the Final Scoping Report.

A Notice of Intent to Develop (NID) was originally submitted to Heritage Western Cape as part of the previous approval process and the heritage permit was subsequently issued by Heritage Western Cape (HWC). This permit is still valid and the conditions of this approval will be applied to the application at hand.

## **1.4.** Assumptions and limitations

This section provides a brief overview of the specific assumptions and limitations having an impact on this environmental application process:

- → It is assumed that the information upon which this report is based, including baseline studies, project details, and existing data, is accurate and reliable.
- → The baseline information provided in this report is preliminary and may require further detailed assessment as part of subsequent phases of the Environmental Impact Assessment (EIA) process.
- → The proposed development is aligned with the current statutory planning framework for the area, as outlined in the Overstrand Spatial Development Framework. Accordingly, it is assumed that the cumulative impacts of the development on the area's character have been considered during the strategic planning process. Note that the original Land use approval is still valid and will only lapse in August 2026, therefore the assumption is made that the proposal is in line with the current municipal requirements.
- → It is assumed that the specialist studies included in this report, along with their respective mitigation measures, recommendations, and impact management strategies, will be implemented to minimize adverse environmental impacts and maximize environmental benefits.
- → It is also important to note that the originally conducted Impact Assessment reports will be utilised as far as possible and where this is the case, the responsible specialist will confirm that the report is still valid.
- → Furthermore, it is assumed that all impact management and mitigation measures recommended by specialists in this report, as well as any additional measures identified in future assessments, will be incorporated into the Environmental Management Programme (EMPr) and effectively implemented at the commencement of the proposed development.

#### **1.5. Pre-Application Phase**

The application for Environmental Authorisation is controlled by a legislated timeframe. However in this scenario, the appointed Environmental Assessment Practitioner (EAP) has opted to follow a pre-application process and has submitted a Notice of Intent (NOI) to the Competent Authority (CA), the Department of Environmental Affairs and Development Planning (DEA&DP) to make the CA aware of the project and obtain a pre-application reference number which was used for all pre-application procedures. Pre-Application Public Participation has been included in the Pre-application phase. Once the Pre-application processes are completed and the proposal is at a point which is considered satisfactory to both the EAP and CA, the Application for Environmental Authorisation will be submitted, and the legislated timeframe will commence. See further explanation regarding the EIA process and times frames, below.

# 2. LEGISLATIVE REQUIREMENTS

Portion 2 of the Farm Strandfontein No. 712 is legally owned by the applicant under the title deed T18024/1971 with no restrictive conditions that need to be removed in order for this application to be approved. The intent of the proposal is to undertake a sustainable residential development that complements the surrounding natural environment and contributes to the local economy. The proposed development will be located adjacent to the existing built-up urban edge to align with the existing bulk services crossing the subject property, ensuring efficient service provision and infrastructure alignment. The remaining portion of the property situated on the northern side will be maintained as a conserved natural area to preserve the ecological value of the site and surrounding environment.

The Constitution of the Republic of South Africa (Act 108 of 1996) states that everyone has a right to a non-threatening environment and that reasonable measures are applied to protect the environment. This includes preventing pollution and promoting conservation and environmentally sustainable development, while promoting justifiable social and economic development. The Constitution and Bill of Rights provides that everyone has the right:

- $\rightarrow$  To an environment that is not harmful to their health or well-being; and
- → To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures:
  - Prevent pollution and ecological degradation
  - Promote conservation
  - To secure ecologically sustainable development and the use of natural resources while promoting justifiable economic and social development.

The National Environmental Management Act (NEMA), discussed below, is the enabling legislation to ensure this primary right is achieved.

### 2.1. The National Environmental Management Act (NEMA)

The National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA), provides for cooperative environmental governance by establishing principles for decision making on matters affecting the environment, institutions that will promote co-operative governance and procedures for co-ordinating environmental functions exercised by organs of state; and to provide for matters connected therewith.

Sections 24 and 44 of NEMA make provision for the promulgation of regulations that identify activities which may not commence without an EA issued by the competent authority. On the 8th of December 2014, the EIA Regulations, 2010, were repealed and replaced by Government Notice 327, 325 and 324 (GG40772 of 7 July 2017) which governs the process, methodologies, and requirements for the undertaking of EIAs in support of EA applications.

Listing Notices 1, 2 and 3 as outlined in the NEMA, list activities that require Environmental Authorisation, via either a Basic Assessment (BA) process or a Scoping and Environmental Impact Report (S&EIR) process in order to obtain the EA. Listing Notice 1 and 3 lists activities which can be authorised under a Basic Assessment process, while Listing Notice 2 lists activities that require assessment via the Scoping and EIA process.

The regulations for both processes stipulated the following:

- $\rightarrow$  Public participation must be undertaken at various stages of the assessment process;
- $\rightarrow$  The assessment must be conducted by an independent EAP;
- ightarrow The relevant authorities must respond to applications and submissions within stipulated timeframes;
- → Decisions taken by the authorities can be appealed by the proponent or any other Interested and Affected Party (I&AP); and
- $\rightarrow$  A draft EMPr must be compiled and released for public comment.

The proposed project and its associated activities were assessed relative to the listed activities in Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998 NEMA) as identified in terms of Section 24(2) and 24D of NEMA

Government Notice 327, 325 and 324; in Government Gazette 40772 of 7 July 2017 and the following activities are confirmed to be listed for the proposal, in terms of the EIA Regulations, 2014:

#### Table 1. Listing Notice 1

No.	Listed Activity	Interpretation
9	The development of infrastructure exceeding 1 000 metres in length for the bulk transportation of water or storm water— (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for bulk transportation of water or storm water or storm water drainage inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.	<ul> <li>Water - An installation of 300mm diameter parallel pipe reinforcement (560m) from the 2.2Ml proposed reservoir to the branch of the existing De Kelders development and the proposed site is required.</li> <li>Storm water - The minor storm water system will consist of catch pits and underground concrete spigot and socket pipes, which will discharge as described above. The minimum pipe size will be 375mm diameter and a self-cleaning velocity during 75% of the 1:2 year recurrence interval storm event of 0.9m/s will be maintained. The maximum distance between manholes and catch pits will be 90m.</li> </ul>
10	The development and related operation of infrastructure exceeding 1 000 metres in length for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes – (i) with an internal diameter of 0,36 metres or more; or (ii) with a peak throughput of 120 litres per second or more; excluding where— (a) such infrastructure is for the bulk transportation of sewage, effluent, process water, waste water, return water, industrial discharge or slimes inside a road reserve or railway line reserve; or (b) where such development will occur within an urban area.	The site will be graded to ensure that the internal sewage reticulation system can be collected at two positions within the proposed development. The proposed internal sewage reticulation system (gravity full bore) will range between 160- 250 mm diameter. It is estimated that this development will generate approximately 1013kl effluent on a peak day, including infiltration and peak flow factor and approximately 352kl.
28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare ;excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The subject property is currently zoned under Agricultural Zone 1 subjected to rezoning for residential development and the total land to be developed is approximately 37.9 hectares.

#### Table 2. Listing Notice 2

No.	Listed Activity	Interpretation
15	The clearance of an area of 20 hectares or more of indigenous vegetation, excluding where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	Approximately 37.9 hectares of indigenous will be cleared for the construction of the proposed development.

#### Table 3. Listing Notice 3

No.	Listed Activity	Interpretation
4	The development of a road wider than 4 metres with a reserve less than 13,5 metres. i. Western Cape i. Areas zoned for use as public open space or equivalent zoning; ii. Areas outside urban areas; (aa) Areas containing indigenous vegetation; (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or iii. Inside urban areas: (aa) Areas zoned for conservation use; or (bb) Areas designated for Conservation use in Spatial Development Frameworks adopted by the competent authority.	The proposal includes the construction of public and private roads with a range between 5 m -7.4 m width.
12	The clearance of an area of 300 square metres or more of indigenous vegetation i. Western Cape i. Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004;	The proposed development will result to clearance of more than 300m <sup>2</sup> of indigenous vegetation with endangered status.

The proponent on this project has a responsibility to ensure that the proposed activities and the Scoping and Impact Assessment process conform to the principles of NEMA, and are obliged to take actions to prevent pollution or degradation of the environment in terms of Section 28 of NEMA, and to ensure that the environmental impacts associated with the Project are considered and / or mitigated as far as possible. The proponent is obliged to apply for Environmental Authorisation (EA) for the applicable NEMA listed activities as listed in the tables above and to undertake the impact assessment process in accordance with the procedures stipulated in the legislation.

### 2.2. The Protocols

Regulation 320 (Government Gazette 42946 dated 10 January 2020) "Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in Terms of Sections 24(5)(A) & (H) and 44 of NEMA, when Applying for Environmental Authorisation", must be applied to the NEMA application. This Regulation prescribes general requirements for undertaking site sensitivity verification and provides protocols for the assessment and minimum report content requirements of environmental impacts for various identified environmental themes in Environmental Authorisation applications. Each protocol applies exclusively to the environmental theme identified within its scope, and more than one theme may apply to a single application for Environmental Authorisation. Assessments for these themes must be undertaken in accordance with the relevant protocol, or where no specific protocol has been prescribed, in accordance with the requirements of the EIA Regulations.

The site sensitivity verification and desktop screening were applied to the subject property using the Department of Forestry, Fisheries and the Environment (DFFE) online Screening Tool to generate the Screening Report as referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended. This report dictated the various specialist input and requirements which must inform the proposal.

Theme	Very High	High	Medium	Low
	sensitivity	sensitivity	sensitivity	sensitivity
Agriculture Theme		Х		
Animal Species Theme		Х		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural		Х		
Heritage Theme				
Civil Aviation Theme		Х		
Defence Theme				X
Paleontology Theme	Х			
Plant Species Theme			Х	
Terrestrial Biodiversity Theme	Х			

The following summary of the environmental sensitivities was identified using the tool:

Based on the selected classification, as well as the known impact(s) associated with the type of proposed development, the following list of specialist assessments were identified in the Screening Tool (Note that it is the responsibility of the EAP to confirm this list and to motivate when a specialist is not required):

No.	Specialist Assessment	Included (Y/N) and Reason
1	Agricultural Impact Assessment	Compliance Statement undertaken
2.	Landscape / Visual Impact Assessment	A permit has already been issued by Heritage Western Cape and
		is still valid, therefore no further assessment in terms of this
		theme is required
3.	Archaeological and Cultural Heritage Impact Assessment	A permit has already been issued by Heritage Western Cape and
		is still valid, therefore no further assessment in terms of this
		theme is required
4.	Palaeontological Impact Assessment	A permit has already been issued by Heritage Western Cape and
		is still valid, therefore no further assessment in terms of this
		theme is required
5.	Terrestrial Impact Assessment	Assessment conducted by Nick Helme
6.	Aquatic Biodiversity Impact Assessment	Watercourse delineation undertaken by Delta Ecology (Kim van
		Zyl) – no watercourses were identified on site therefore no
		further assessment will be included further
7.	Hydrology Assessment	As above
8.	Socio-Economic Assessment	Assessment conducted
9.	Plant Species Assessment	Assessment conducted by Nick Helme
10.	Animal Species Assessment	Assessment conducted by Jan Venter

Table 4. Specialist assessments identified in the Screening Report as generated using the DFFE Screening Tool

## 2.3. Additional legislation

#### National Heritage Resources Act (NHRA)

The protection and management of South Africa's heritage resources is regulated in terms of the NHRA. In terms of the threetier management system outlined in the NHRA, the South African Heritage Resources Agency (SAHRA) is responsible for the protection and management of heritage resources of significance within a national context including Grade 1 heritage resources and formally declared national heritage sites). The provincial heritage authority within the Western Cape, i.e. Heritage Western Cape (HWC) is responsible for the protection and management of heritage resources of significance within the provincial and regional context, i.e. Grade 2 heritage resources and formally declared provincial heritage sites (formerly known as national monuments). HWC also administers certain general provisions of the NHRA including Section 34 (structures older than 60 years), and Section 35 (archaeological remains). In terms of Section 34(1), no person may alter or demolish any structure, or part of a structure, which is older than 60 years without a permit issued by the responsible heritage resources authority. Nor may anyone destroy, damage, alter, exhume or remove from its original position, or otherwise disturb, any grave or burial ground older than 60 years, which is situated outside a formal cemetery administered by a local authority, without a permit issued by the responsible heritage resources authority in terms of Section 36(3). In terms of Section 35(4) no person may destroy, damage, excavate, alter or remove from its original position, or collect, any archaeological material or object, without a permit issued by the responsible heritage resources authority.

In terms of Section 38 of the Act, a heritage resources authority (in this instance SAHRA and / or HWC) may require a Heritage Impact Assessment (HIA) in respect of certain categories of developments described therein. Section 38 of the Act does not apply in situations where the assessment of heritage impacts identified in connection with a proposed development will be undertaken as part of an EIA process undertaken in terms of the EIA Regulations.

Note: The Heritage permit as issued by Heritage Western Cape under the original application is still valid.

#### National Environmental Management: Biodiversity Act (Act 10 of 2004)

The National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004) (the "Biodiversity Act") provides for the management and conservation of South Africa's biodiversity within the framework of the NEMA. The Biodiversity Act came into effect on 1 September 2004 and provides for the consolidation of legislation regarding biodiversity by establishing national norms and standards for the management of biodiversity and the restriction of activities which have an adverse impact on biodiversity. The State is the trustee of South Africa's biodiversity and is obliged to manage, conserve and sustain such biodiversity. The State also has a positive obligation to implement the Act to achieve the progressive realisation of the environmental right contained in section 24 of the Constitution. The Biodiversity Act contains various provisions which may be of relevance to the proposed development. These include the following:

- → The declaration of threatened ecosystems and the identification of any activity or process which threatens such ecosystems and requires an environmental authorisation under section 24 of the NEMA;
- → A prohibition on carrying out restricted activities involving listed threatened or protected species;
- → The regulation of restricted activities involving alien species and the imposition of a duty of care in respect of the carrying out of such activities; and
- → The regulation of restricted activities involving invasive species and the imposition of a duty of care in respect of the carrying out of such activities. In this regard, the Act includes the obligation to control and eradicate listed invasive species by appropriate means and methods.

According to the Botanical Scoping report (**Appendix H1**) the botanical sensitivity of the site ranges from Medium to High on a local and regional scale. 90% of the site is deemed to be of High sensitivity, whilst the portions that have, or have recently had (until informal wood harvesting), more than 70% woody alien invasive plant cover are deemed to be of Medium sensitivity at a site scale. The vegetation on site is considered to be mostly pristine, and is degraded only by dense, mostly small patches of woody alien invasive vegetation (rooikrans).

According to the SA Vegetation Map the original natural vegetation in the study area is all Overberg Dune Strandveld (Mucina & Rutherford 2018). The botanical specialist argued that this vegetation is gazetted as Endangered on a national basis. About 90% of its total original extent remains intact, about 36% is conserved, and the national conservation target is also 36% (Rouget et al 2004), and it was urged that it is unclear on how this can be listed as Endangered (cited as "restricted distribution and threatening processes"). The unit is known to support relatively few plant Species of Conservation Concern (Raimondo et al 2009), most of which are threatened by habitat loss to urban development and alien invasive vegetation – which are also the main threats here.

#### Land Use Planning

On the **1 September 2015**, the Overstrand Municipality approved the Town Planning Application for the proposed rezoning and subdivision of Portion 2 of the Farm 712, Caledon RD. The following was included in the letter of Approval:

- ightarrow The application for subdivision of Portion 2 of the Farm Strandfontein No. 712 into
  - Portion A (~ 110, 4573 ha)
  - Remainder (~ 519,9503 ha)
  - Further subdivision of Portion A into three portions
    - Portion 1 (~ 37,895 ha)
    - Portion 2 (~ 18,2336 ha)

- Portion 3 (~ 54,3286 ha), be approved
- $\rightarrow~$  The application for the rezoning of
  - Portion 2 from Agricultural Zone 1 to Open Space Zone 2 (Private Open Space),
  - Portion 3 from Agricultural Zone 1 to Open Space Zone 1 (Public Open Space),
  - Portion 1 to Subdivisional Area, and the subsequent subdivision thereof to develop
    - 118 Residential Zone 1 erven
    - 1 Transport Zone 2 erf (Public Road)
    - 6 Open Space Zone 1 erven (Public Open Space)
    - 1 Institutional Zone 1 erf
    - 1 Business Zone 2 erf (Local Business)
    - 4 Group and Townhouse nodes comprising 175 Residential Zone 2 erven (group housing)179 Residential Zone III erven (Town housing)
    - 5 Transport Zone 2 erven (Private Road), in terms of the provisions of Sections 16 and 25 of the Land Use Planning Ordinance, 1985 (Ordinance 15 of 1985), be approved.

The application to rezone the property to Subdivisional Area with a basket of development rights allows for the phased development of the property, as outlined in the Town Planning application. The property will ultimately be zoned for a variety of land uses in terms of the Land Use Planning Ordinance Section 8 Scheme Regulations as outlined above and as per the municipal approval.

It is the intention of the owners and developers of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 to develop the subject property in a sustainable, aesthetical manner to contribute to and compliment the urban fabric of the existing De Kelders and greater Gansbaai area. The growing Overberg region, the extension of the De Kelders township (in line with the future planning policies of the region) as well as the proposed nuclear power station proposed for Bantamsklip contribute to the need for the extension of De Kelders and in turn the greater Gansbaai area. Our clients also recognise the need for an inclusionary development that provides for residential units that meets the need of various income levels in the greater Gansbaai area.

The development of the site will be controlled by a set of approved design guidelines, which will ensure that all development is in line with the vision for the development, as well as to ensure that the development conforms to the approved architectural guidelines and land uses proposed for the site. The implementation of these design guidelines will be governed by the future Homeowners Association, in terms of an approved Constitution.

The Land Use approval is still valid and lapses in August 2026.

#### **2.4. Guideline Documents**

There are a number of guideline documents that must inform the work of both the EAP and the various specialists. The principles contained in the guideline documents will be incorporated into the various aspects of the study and are not described in detail, but the relevant documents are noted below:

#### Guidelines for NEMA EIA applications

The contents of the guideline series which have been produced by DEA&DP to facilitate the implementation of the regulations in terms of NEMA are noted and the principles adhered to as far as possible. These guideline documents are as follows:

- → NEMA Environmental Impact Assessment Regulations: Guideline and Information Document Series. Guideline on Public Participation. September 2007. The purpose of this guideline is to provide clarity on DEA&DP's requirements with respect to public participation for the EIA process. It sets out the roles and responsibilities of the respective parties in the process, namely, the proponent, the EAP, the relevant authority and the Interested and Affected Party (I&AP). It also deals with the public participation requirements for the respective stages of the EIA process and it covers the advertising requirements. Due to the promulgation of the amended 2010 NEMA regulations, a new set of Guideline Documents were implemented for Public Participation in August 2010.
- → NEMA Environmental Impact Assessment Regulations: Guideline and Information Document Series. *Guideline on Alternatives*. September 2007. The purpose of this guideline is to provide clarity on DEA&DP's requirements with respect to the consideration of alternatives in the EIA process. It stipulates the factors to be taken into account in the identification and assessment of the alternatives. It also deals with the roles of the various parties and the types of alternatives that may be identified. The new Guidelines document for Alternatives was released in August 2010 corresponding to the new NEMA regulations.

#### **Guidelines for EIA Requirements**

This document sets out DEA&DP's requirements with regard to the EIA process in order to ensure that adequate information is provided to allow for informed decision-making. To this end:

- → Information must be presented in an objective and neutral manner. The language used in documents and reports should not reflect a "pro" or "anti" development stance, except where the views of Interested and Affected Parties (I&AP's) are being recorded.
- $\rightarrow$  Information provided must be unbiased, factually correct, clearly presented and comprehensive.
- → The EAP must obtain and evaluate all relevant information and present it in a way that makes it easy for DEA&DP to make a decision, i.e. the pros and cons of a development should be clear and independently verifiable.
- → All information to make an informed decision must be presented upfront as DEA&DP cannot authorise a development subject to further Environmental Impact Assessments being required, unless they relate to an activity that is totally independent of the proposed activity. DEA&DP can also not authorise an activity that is dependent on future authorisation of a further activity.

#### Guidelines for Urban Edge

This document aims to determine guidelines for the implementation of the urban edge policies contained in the Western Cape Provincial Spatial Development Framework ("WCPSDF") and guide the management of land use applications inside, on or beyond the urban edge.

#### Guidelines for Determining the Scope of Specialist Involvement in EIA Processes

The purpose of this series of guidelines is to improve the efficiency, effectiveness and quality of specialist involvement in EIA processes, with the aim of improving the capacity of role players to anticipate, request, plan, review and discuss specialist involvement in EIA processes. Specifically, the guidelines aim to improve the capacity of EAP's to draft appropriate terms of reference for specialist input and assist all role-players in evaluating whether or not specialist input to the EIA process was appropriate for the type of development and environmental context. Terms of Reference for specialists for this study were based on the requirements set out in the guideline series.

The Guidelines attempt to clarify:

- $\rightarrow$  The key principles and concepts underpinning the involvement of specialists in EIA processes;
- → The different roles of specialists in EIA processes;
- $\rightarrow$  The different times in the EIA process at which a specialist can be involved;
- $\rightarrow$  The generic approach that can be used to determine at which point in the EIA process the specialists should be involved and for what purpose;
- $\rightarrow$  The prerequisites for a specialist to be involved efficiently and effectively in EIA processes;
- → The elements to be considered when determining the scope of specialist inputs and when developing specialist Terms of Reference;
- $\rightarrow$  The information required by specialists; and
- $\rightarrow$  The responsibilities of different role players in the EIA process.

The series of guidelines includes the following discrete documents:

- → Guideline for Involving Biodiversity Specialists in EIA Processes;
- → Guideline for Involving Heritage Specialists in EIA Processes;
- $\rightarrow$  Guideline for Involving Visual and Aesthetic Specialists in EIA Processes;
- → Guideline for Involving Economists in EIA Processes; and
- → Guidelines on Need and Desirability for proposed development;
- → Guideline for Involving Access and Traffic Impact Assessment

# 3. Motivation for the proposed development

The following serves as the motivation in terms of the provision of the Land Use Planning Ordinance No. 15 of 1985 (LUPO) in furtherance of the positive consideration of this application by the Local Authority.

#### 3.1. Need and desirability

The Department of Environmental Affairs and Development Planning's Guidelines on Need and Desirability (October 2011) stipulates what is needed and desired for a specific area must be strategically and democratically determined. The need and desirability of development must therefore be measured against the contents of the credible Integrated Development Plan (IDP), Spatial Development Framework (SDF) and Environmental Management Framework (EMF) for the area, and the sustainable development vision, goals, objectives, strategies and policies formulated in, and the desired spatial form and pattern of land use reflected in the area's credible IDP and SDF.

The abovementioned guidelines further clarify that the concept of need and desirability can be explained in terms of the general meaning of its two components in which need refers to time and desirability to place. Need and desirability can be equated to wise use of land - i.e. the question of what is the most sustainable use of land. This in turn implies that any proposed development must be socially, environmentally and economically sustainable and that decisions must take into account the interests, needs and values of all the relevant stakeholders involved in the project.

The following criteria are used to motivate the need and desirability for the proposed development on Portion 2 (Lang Bosch) of the farm Strandfontein No. 712:

- → The proposed development on the subject property provides a unique opportunity to create a sustainable residential development whilst preserving the property's environmental features due to its location alongside Walker Bay Nature Reserve.
- → In terms of the Overstrand Municipality's vision, the site has long since been identified for future urban expansion. The Overstrand Municipal Wide Spatial Development Framework (2006) also describes the provision of a balanced mix of residential housing supply to address the full range of socio-economic groupings from subsidised social housing to housing options for the middle and upper-income groups as one of the Local Spatial Development Principles. The policy furthermore restricts urban development outside the demarcated urban edge. Following the global trend of sustainable living, an appropriate development proposal, supported by the input from various specialists, is now made for the site. This development proposal is based on an environmental and sustainable approach for development.
- → The subject property which is currently demarcated within the existing Overstrand urban edge is in line with the Local Municipality Spatial Development Framework, (2020). Portion 2 of the Farm 712 is in the north of the R43 falls within the proposed urban edge for the Greater Gansbaai area.
- → The proposed development will also offer the Overstrand community with several intangible benefits. Not only will this development aim to set high sustainability standards in terms of natural resources and green building principles, but it will also create opportunities for the social development and upliftment of the existing communities within the region.
- → During the preliminary environmental investigations, large parts of the site were identified as being potentially environmentally sensitive and have therefore been earmarked as areas to be retained as part of the conservation zone, which will remain in existence following this development.

## **3.2.** Site specifics

#### Cadastral Information and extent

The subject property covers a total area of approximately 110.23 ha and is legally registered under Oosterwijk Strandfontein CC, which owns Portion 2 (Lang Bosch) of the Farm Strandfontein No. 712.

The extent of the property provides sufficient space to accommodate the proposed development while ensuring the inclusion of open space areas and ecological corridors. These open spaces are strategically planned to maintain ecological connectivity between the Walker Bay Nature Reserve, the northern boundary of the property, and the coastal area to the west.

The property is currently zoned as Agricultural Zone 1 and remains vacant and undeveloped. However, minor disturbances are present in the form of informal pathways that traverse the site. These pathways indicate some historical or community use but do not significantly impact the overall ecological integrity of the property. The proposed development layout considers the site's ecological and cadastral constraints. Specific design elements will ensure that ecological corridors, open spaces, and environmentally sensitive areas are integrated into the development footprint, minimizing the overall environmental impact while maintaining biodiversity linkages.

#### Locality

The proposed residential development is to be situated Northwest of the R43, just outside the southern boundary of the Walker Bay Nature Reserve, in the Overstrand Local Municipality, within the Overberg District Municipality.

21-digit Surveyor general code: C0130000000071200000

The location plan including the co-ordinates of the proposed activity:

- $\rightarrow$  Southwestern corner of the location plan: 34°33'25.34"S: 19°22'14.98"E
- $\rightarrow$  South central part of the location plan: 34°33'17.80"S: 19°22'30.18"E
- $\rightarrow$  Central part of the location plan: 34°33'10.91"S ; 19°22'40.00"E

The residential township of De Kelders is located to the west of the subject property. This area accommodates the residential development with a mix of single residential housing, community, limited commercial, recreational facilities and community facilities. The properties in these areas are all zoned according to these urban land uses. The property directly to the north of the subject property is currently zoned as Agriculture I.

#### **3.3.** Regional and Local Planning

#### Western Cape Provincial Spatial Development Framework (2014)

The Western Cape Provincial Spatial Development Framework (PSDF) was adopted in 2009 as the spatial expression of the Provincial Growth and Development Strategy (PGDS). The Western Cape Provincial Spatial Development Framework (PSDF) is a provincial policy aimed at giving spatial expression to the Provincial Growth and Development Strategy. The PSDF defines guidelines as "*policies that are intended as general developmental goals and whose detailed implementation may vary due to place specific conditions and therefore requiring a certain amount of flexibility in their application.*" The guiding principle of the PSDF is sustainable development. Development is only acceptable and in the public interest if it is socially equitable, economically viable and environmentally sustainable. Development should thus serve present and future generations.

The three pillars of sustainability, also referred to as the "triple bottom line" are:

- $\rightarrow$  Ecological integrity (planet).
- $\rightarrow$  Social justice (people) / human well-being; and
- $\rightarrow$  Economic efficiency (prosperity).

The PSDF lists four main components to the overall goal for the Province, as follows

- $\rightarrow$  To establish and consolidate a network of *biodiversity core corridors*;
- → To establish and consolidate a network of regional movement corridors containing well located settlements on combined (where possible) road and rail transport corridors as the priority spatial basis for investment in *regional economic and social capital*;
- $\rightarrow$  To provide guidelines to address the apartheid spatial layout; and

→ To be sensitive to the principle of co-operative governance and recognise that the detailed implementation of principles and policies must occur at the District and Local level.

The PSDF is a long-term planning instrument which sets out a vision for changing the development path of the Western Cape by identifying 9 objectives and strategies supported by a set of policies and actions. These objectives are categorised according to 3 areas of intervention, namely Socio-Economic Development, Urban Restructuring and Environmental Sustainability. On a more regional level the PSDF list the primary issues of the 6 regions within the province and also provides strategies for each of these regions to address these issues. The following outlines the issues that the Overberg region experiences:

- $\rightarrow$  High levels of in-migration
- → Coastal zone mediate potential conflict between resort development and protection of the coastal ecology
- $\rightarrow$  Water shortages especially in the coastal settlements over the Christmas period
- $\rightarrow$  Urban sprawl (Hermanus to Fisherhaven) and traffic congestion

#### The Spatial Agenda

To deliver on the WCG's strategic objectives the PSDF focuses on growing the economy, building greater environmental resilience and much better inclusion. To these ends, the Provincial Spatial agenda may be summarised as follows:

# 1. GROWING THE WESTERN CAPE ECONOMY IN PARTNERSHIP WITH THE PRIVATE SECTOR, NON-GOVERNMENTAL AND COMMUNITY BASED ORGANISATIONS

In the urban space-economy this involves:

- i. Targeting public investment into the main driver of the Provincial economy (i.e. the Cape Metro functional region, the emerging Saldanha Bay/Vredenburg and George/Mossel Bay regional industrial centres, and the Overstrand and Southern Cape leisure and tourism regions).
- ii. Managing urban growth pressures to ensure more efficient, equitable and sustainable spatial performance.
- iii. Aligning, and coordinating public investments and leveraging private sector and community investment to restructure dysfunctional human settlements.
- iv. Supporting municipalities manage urban informality, making urban land markets work for the poor, broadening access to accommodation options, and improving living conditions.
- v. Promoting an urban rather than suburban approach to settlement development (i.e. diversification, integration and intensification of land uses).

# 2. USING INFRASTRUCTURE INVESTMENT AS PRIMARY LEVER TO BRING ABOUT THE REQUIRED URBAN AND RURAL SPATIAL TRANSITIONS

This agenda encompasses:

- i. Aligning infrastructure, transport and spatial planning, the prioritisation of investment and on the ground delivery.
- ii. Using public transport and ICT networks to connect markets and communities.
- iii. Transitioning to sustainable technologies, as set out in the WCIF.
- iv. Maintaining existing infrastructure.

#### 3. IMPROVING OVERSIGHT OF THE SUSTAINABLE USE OF THE WESTERN CAPE'S SPATIAL ASSETS

This agenda encompasses:

- i. Safeguarding the biodiversity network and functionality of ecosystem services, a prerequisite for a sustainable future.
- ii. Prudent use of the Western Cape's precious land, water and agricultural resources, all of which underpin the regional economy.
- iii. Safeguarding and celebrating the Western Cape's unique cultural, scenic and coastal resources, on which the tourism economy depends.
- iv. Understanding the spatial implications of known risks (e.g. climate change and its economic impact, sea level rise associated with extreme climatic events) and introducing risk mitigation and/or adaptation measures.

Two of the Western Cape Provincial Spatial Development Framework strategies are relevant for the purposes of the application:

- $\rightarrow$  Protect biodiversity and support agriculture on the Agulhas Plain.
- → Manage pressure on coastal resources on the Overberg coast by intensifying existing urban settlements and strictly controlling development outside of the urban edge.

Portion 3, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 will be rezoned to Open Space Zone to ensure that the ecological corridor between the nature reserve, the R43 and the proposed development to the west is maintained. The planning approach followed was to create a development that will add to and advance the natural assets of the area; consequently the open space corridor north of the R43 was incorporated in the layout as well as ample private and public open spaces.

The proposed development therefore acknowledges and contributes towards the protection and conservation of the biodiversity of the area. The proposed down-scaled development is the most preferred alternative (as stipulated in the revised ecological report) and causes the least damage and impact to the environment as a whole, in the long term as well as in the short term.

Portion 2, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 falls within the approved urban edge for the Greater Gansbaai area as well as the proposed long term urban edge for the Greater Gansbaai area.

The proposed development also provides for a variety in housing options to address the needs of the different income groups in the Greater Gansbaai area. The proposed Nett Density of  $\pm 24$ du / hectare and Gross Density of  $\pm 14$ du / hectare adhere to the gross density of 25du / hectare being implemented on provincial level to intensify existing urban settlements.

In the light of the above it is clear that the proposed development adheres to the spatial planning strategies and proposed densities stipulated in the provincial spatial planning policy.
#### Overstrand Municipality Integrated Development Plan (IDP) (2024/2025)

The Overstrand Municipality has aligned its vision with that of the Western Cape Provincial Government which promotes the development of integrated and sustainable human settlements with access to social and economic opportunities for all its citizens. Therefore, it is necessary that all spheres of government cooperate in fulfilling this vision.

To address an issue such as integrated and sustainable human settlements, a definite strategy is needed in the approach to housing. A simple definition of strategy is: 'A long term action plan in achieving a goal', for this reason the Overstrand Municipality has compiled a comprehensive 5-Year Human Settlement Strategy and programme guide / pipeline to improve integrated human settlement development and delivery within the municipality.

In the process of developing a strategic housing plan for the Overstrand Municipality it became clear that an understanding must be developed for the existing legislative and policy guidelines that exist in the National and Provincial spheres of Government and which would inform any strategic planning that is being done by the Municipality.

To fully understand the context of housing in South Africa, a comprehensive legislative background is needed. It should be noted that all the relevant legislation and policy frameworks will not be discussed in this document due to its limited content. It has however been dealt with comprehensively in the Overstrand Housing Strategy.

The Overstrand Municipality Integrated Development Framework (2024/25) identify the objectives as set out in the vision and mission statement for the functional areas in the Overstrand.

These include:

- → Provision of Democratic, accountable and Ethical Governance
- → Provision and maintenance of Municipal Services
- $\rightarrow$  The encouragement of structured community participation in the matters of the Municipality.
- $\rightarrow$  Creation and Maintenance of a safe and healthy environment.
- $\rightarrow$  Promotion of Tourism, Economic and Social Development.

The proposed development is considered to be in line with the relevant and applicable priorities in the IDP.

#### **Overstrand Spatial Development Framework (SDF), (2020)**

The local municipality Spatial Development Framework recognises the Greater Gansbaai area as an area with high growth potential. The area's growing importance as a tourist destination and its recognised economic potential in terms of mariculture and the fishing industry makes it imperative that adequate provision is made in the spatial planning of the area to adequately accommodate its future in an orderly and sustainable manner.

The greater Gansbaai is an extensive linear developed town and for ease of reference and plan legibility it is therefore divided into the three areas, namely De Kelders, Gansbaai Proper and Franskraal. The primary functions for Gansbaai are those of a fishing village, residential, retirement and holiday town. Pearly Beach is located 18km east of Gansbaai and Stanford 21km to the north thereof.

The total projected population of the Gansbaai amounted to 19 405 in 2019 based on a 4% projected growth per annum (Census 2001-2011). Based on the said projected growth, the town will consist of a population of 34 354 in 2031. A survey in terms of the availability of vacant land was undertaken in 2019. A total of 2888 vacant residential erven were identified. A total amount of 14 949 additional people will need to be accommodated from 2019 to 2031, based on the aforementioned population total. Based on an average household size of 2.6 persons per household, this amounts to a total requirement of 5750 additional dwelling units by 2031. There will therefore be a total shortage off approximately 2861 Dwelling units by 2031 over all income brackets.

The suburb of Mashakane and Blompark located in Gansbaai Proper, harbours informal settlement of ± 1272 and 105 structures respectively based on a 2018 shack count. The future projected housing need will amount to 2934 by 2021 and 4624 by 2032. This relates to a required land area of approximately 147 ha by 2021 and 231 ha by 2031 based on a density of 20 du/ha.

#### De Kelders

The suburb of De Kelders forms part of Gansbaai and its primary functions are those of residential, retirement and holiday destination. De Kelders is a linear development, brought about by the R43 Provincial Road to the east and the coastline to the west. Natural elements such as the Walker Bay Nature Reserve, the Franskraal Mountains, coastal fynbos, and the Duiwelsgat coastal trail further contribute to containing the form and structure of the suburb and are protected by draft EMOZ's. A number of small local business zones are located throughout this area, with a few vacant business erven available.



Figure 5. De Kelders, the urban edge and subject property

In terms of services infrastructure provision, the following should be noted:

- → The collector road and extended road network through De Kelders is well developed and functions sufficiently.
- → The poor water quality of the area has been attended to by the Municipality and the water supply network is acceptable.
- → De Kelders is reliant on a septic and conservancy tank system with associated risks such as high maintenance cost and negative environmental impacts. In order to facilitate future development, connection to the wastewater treatment works will be required.
- $\rightarrow$  The town is adequately serviced in terms of stormwater management.
- → The town is sufficiently serviced in terms of electricity supply from the Municipality. Limited capacity, however, exist within the ESKOM network which needs to be addressed.
- $\rightarrow$  The solid waste landfill site at Gansbaai is sufficiently capacitated to accommodate waste from De Kelders.

The proposed development on Portion 2 of Farm 712 is situated within the designated urban edge of Gansbaai, confirming its suitability for urban growth and development. This supports the SDF's goal of consolidating urban areas and promoting sustainable development within defined boundaries. The main aim of this proposal is to address all the needs identified above and it will also adhere to the development principles that will be set through the implementation of the policy.

#### Greater Gansbaai Structure Plan (2000)

This policy indicates that the area north-east of the existing De Kelders residential area is earmarked for a new single residential development. Furthermore, the subject policy states that the R43 serves as buffer between the existing township north of the R43 and the agricultural land east of the R43. The R43 is therefore seen as a restricting factor for the optimal functioning of the residential area of De Kelders. It is consequently proposed to restrict the proposed development to the west only, i.e. seaside of the R43.

The proposed commercial site of  $\pm$  5783 m<sup>2</sup> in extent is situated within the area earmarked in the Greater Gansbaai Structure Plan for commercial purposes.

The proposed Institutional Zone erf, as well as proposed Single Residential Zone (erven 15), falls within an area earmarked for Business purposes. It is therefore proposed to amend the structure plan to accommodate the aforementioned institutional and single residential portions on Portion 1 (this was subsequently approved as per the existing Land Use Approval).

The Greater Gansbaai Structure Plan earmarks a larger area of Portion 1, a portion of Portion 2 (Lang Bosch) for residential purposes. It is not proposed to develop the whole area earmarked for residential extension, but only the area indicated as Portion 1 on Plan no. 2 (**Appendix D2**).

A linear area north of the R43 is earmarked for public open space / buffer area purposes. The proposed layout of Portion 1, a portion of Portion 2 of the farm Strandfontein No. 712, took into consideration the existing open space corridor situated between the R43 and De Kelders. A similar public open space corridor is created between the proposed town extension (Khoisan Bay development) and the R43.



Figure 6. Subdivisional Plan for subject property

# 4. OVERVIEW OF THE RECEIVING ENVIRONMENT

The ecological status of the site as well as various site constraints, have been identified by the EAP, the specialist team, the planning team as well as through the application of the various applicable guidelines and policies.

A set of baseline assessments were undertaken in order to gather biophysical, social and economic information pertaining to the proposed development area and surrounds. Below is a summary of the various Scoping and Baseline assessments completed to date. Specialists' findings and recommendations will be addressed in more detail in the Environmental Impact Report. The previous Environmental Authorisation, which lapsed in 2022 and the still valid Municipal Land Use Approval, dictated that the previously assessed preferred layout alternative is carried forward in this scoping assessment. In addition, all previous specialist input, mitigation measures and reports have been included in this Scoping Report. New Scoping Report have been generated for the following disciplines:

- → Botanical Scoping September 2024
- → Freshwater Compliance October 2024
- → Faunal Scoping October 2024
- → Agricultural Compliance and SSV November 2024

The following specialists form part of the Impact Assessment team:

- → Botanical specialist Nick Helme
- → Faunal specialist Prof. Jan Venter
- → Freshwater Compliance Statement Kim van Zyl / Delta Ecology no watercourses or wetlands identified on site therefore no further input or assessment required in this field
- → Heritage Impact Assessment Jonathan Kaplan
- → Visual Impact Assessment Bruce Eitzen / New World Associates
- → Archaeological Impact Assessment Jonathn Kaplan
- → Paleontological Impact Assessment John Pether
- → Agricultural specialist Johann Lantz
- → Socio-Economic Impact Assessment Amanda Fitschen

# 4.1. Botanical Considerations

#### Site Description and Vegetation Structure

The study area exhibits a relatively uniform vegetation structure characteristic of the Overberg Dune Strandveld. However, variations are evident, particularly in older sections where the woody vegetation becomes denser and taller, approaching a thicket-like formation. Topographically, the eastern portion of the site features prominent historically stabilised dunes rising between 5 to 8 meters, while the western areas are comparatively flat.

#### Bioregion

It is part of the South Coast Fynbos bioregion (Mucina & Rutherford 2006), and is part of the Fynbos biome, located within what is now known as the Core Region of the Greater Cape Floristic Region (GCFR; Manning & Goldblatt 2012). The South Coast Fynbos bioregion is characterised by relatively high winter rainfall, strong rainfall gradients, poor, sandy soils, moderate

topographic diversity, and large urban areas and high levels of alien invasive vegetation. Due to this combination of factors the loss of natural vegetation in this bioregion has been extensive (>50% of original extent lost within the region), and the bioregion has a high number of threatened plant species (Raimondo et al 2009).

## The vegetation type

At a finer scale, the site encompasses the Overberg Dune Strandveld, now known as South Western Strandveld, vegetation type, which is classified as Endangered (Government of South Africa 2022). About 90% of its total original extent remains intact, about 36% is conserved, and the national conservation target is also 36% (Rouget et al 2004), however, the specialist also added that it is unclear on how this can be listed as Endangered (cited as "restricted distribution and threatening processes"). The unit is known to support relatively few plant Species of Conservation Concern (Raimondo et al 2009), most of which are threatened by habitat loss to urban development and alien invasive vegetation – which are also the main threats here.

## Floral Diversity

A comprehensive survey of the site has documented a rich assemblage of indigenous plant species, reflecting the biodiversity typical of the South Coast Fynbos bioregion. Notable species observed include:

- → Shrubs and Trees: Searsia glauca, S. laevigata, S. lucida, S. crenata, Euclea racemosa, Pterocelastrus tricuspidatus, Colpoon compressum, Robsonodendron maritimum, Sideroxylon inerme, Olea exasperata.
- → Herbaceous Plants and Geophytes: Bonatea speciosa, Lachenalia rubida, Zantedeschia aethiopica, Gladiolus cunonius, Babiana nana ssp. maculata, Satyrium carneum, Brunsvigia orientalis, Chasmanthe aethiopica, Wachendorfia paniculata, Massonia longipes
- → Succulents and Ground Covers: Ruschia sarmentosa, R. macowanii, Drosanthemum intermedium, Lampranthus bicolor, Carpobrotus acinaciformis, Tetragonia 27 -ruticose, Ficinia ramosissima, F. indica, F. secunda.

This diverse flora underscores the ecological significance of the site and its role in supporting regional biodiversity.

#### Invasive Alien Species

Invasive alien species (mainly rooikrans; *Acacia cyclops*) were identified and cover about 10% of the site, but this tends to be very patchy, and could very easily be removed, although there is no current evidence of any attempt at alien plant control (in spite of the legislative requirement to do so). Most of the site is in good ecological condition. As can be seen in Plates 1-3 of the Botanical Report, the structural diversity is high, with a mix of tall shrubs, grasses, restios and herbs. Indigenous species of plants identified during site survey (see Page 8 of Botanical Scoping Report).



Figure 7. The original extent of vegetation on the property is Overberg Dune Strandveld.

#### Plant Species of Conservation Concern (SoCC)

At least 7 Species of Conservation Concern occur in the study area as well as in the proposed development areas. Notably, *Diosma subulata* is particularly abundant, with thousands of individuals observed across the site. In contrast, *Selago diffusa* has a more restricted distribution, confined to the western portion of the area.

Numerous other SoCC are known from the nearby and adjacent properties, including *Erica irregularis, Capnophyllum lutzeyeri, Lachenalia lutzeyeri, Erica magnisylvae, Cliffortia anthospermoides, Pterygodium vermiferum*, etc. The first two were recorded immediately east of the R43 by the author on the same day as the current site survey, but do not seem to be present on the survey site. Suitable habitat does not exist on site for quite a few of the Grootbos specials, such as *Erica magnisylvae*.

#### Botanical Sensitivity analysis

The site's botanical sensitivity is assessed as ranging from Medium to High on both local and regional scales. Approximately 90% of the site is classified as High sensitivity, informed by factors such as the good ecological condition of the vegetation, species richness, structural integrity, and the presence of multiple SoCCs. Areas with more than 70 % coverage by woody alien invasive plants, particularly those recently subjected to informal wood harvesting, are deemed to have Medium sensitivity at the site scale.



**Figure 8.** Botanical sensitivity map for the site, with the proposed development layout overlaid in white. All shaded areas within the study area of High Botanical sensitivity. (*source*: Helme, 2024).

#### Potential Impacts of the Proposed Development

The proposed development encompasses approximately 36 ha, representing about 33 % of the total site area. Of this footprint, roughly 12 ha (36 %) are classified as medium botanical sensitivity, with the remaining portion designated as high sensitivity.

The overall potential impacts identified will be included in the EIA report.

# 4.2. Terrestrial Faunal Constraints

A Terrestrial Animal Site Sensitivity Verification and Species Specialist Assessment Report was conducted for the study area, and the following has been summarised from this report:

#### Faunal Sensitivity and Identified Species

A total of twelve (12) animal species of concern were identified through the screening tool, with an additional Species of Conservation Concern (SoCC) recognized through a desktop study as potentially occurring on-site. The assessment further identified ten (10) areas of interest, which serve as representative locations of ecological significance within the proposed development area. These identified sites are predominantly located in the central, western, northern, and southern parts of the subject property, with the majority remaining in a natural state.

#### Site specifics and limitations

The faunal survey faced several challenges due to dense stands of invasive vegetation, including Port Jackson (*Acacia saligna*) and Rooikrans (*Acacia cyclops*). Additionally, sections with dense natural vegetation posed accessibility constraints. However, a substantial portion of the property was surveyed on foot, ensuring a comprehensive assessment of the faunal environment.

Given the pristine condition of much of the site's vegetation, its potential role in facilitating species movement, and its nationally recognized conservation status, the property has been classified as having a high Site Ecological Importance (SEI).

One of the rocky outcrop habitat hotspots for the *Bitis armata* species falls well within the development area and the others in the proposed conservation area. *Bitis armata* distribution is very fragmented and limited which allows for little leeway in terms of activities that could result in permanent destruction of their habitat. It is therefore proposed that the areas indicated in the faunal sensitivity map are avoided, buffered with at least 100 m, and remain connected to the natural part of the property in order to limit impacts on this species prime habitat e.g. rocky outcrops and surrounds.

#### Identified Faunal Species

#### Mammals

Bontebok (*Damaliscus pygargus pygargus*) – A near-threatened species known for its preference for fynbos and open plains, observed in areas with Overberg Dune Strandveld.

Cape Grysbok (*Raphicerus melanotis*) – A small antelope species reliant on thick vegetation cover for shelter and foraging, frequently found in shrubland habitats.

#### **Reptiles**

Southern Adder (*Bitis armata*) – A species of concern due to its highly fragmented and limited distribution. It is reliant on rocky outcrops as primary habitat. At least one rocky outcrop falls within the development area with others situated in the proposed conservation zone. Given its habitat specificity, a buffer zone of 100m is recommended to mitigate any adverse impacts.

#### <u>Birds</u>

Black Harrier (*Circus maurus*) – Classified as Endangered, this species was observed in the northern section of the property, near Walker Bay Nature Reserve. The species relies on open landscapes for hunting small vertebrates and requires protected flight corridors.

Barn Swallow (*Hirundo rustica*) – A migratory species recorded in the area, utilizing the site's open landscapes for foraging.

#### **Invertebrates**

Citrus Swallowtail (*Papilio demodocus*) – A butterfly species was observed in the central part of the site, reliant on indigenous plant species for nectar and larval development. Additionally, a Dune Beetle (*Pachylomerus femoralis*) which is an ecologically important beetle species, recorded in sandy habitats along the western boundary of the site.



**Figure 9.** The location and associated PAOI (100 m) of rocky outcrops seen as habitat hotspots for *Bitis armata. Source:* (Venter & Rudi, 2024).

#### Ecological Corridors and Connectivity

The proposed development has the potential to impact faunal species through habitat fragmentation and the loss of ecological corridors. These corridors are critical for maintaining species movement, foraging activities, and reproduction. The development footprint infringes on ESA1 and ESA2 areas within the Project Area of Influence (PAOI), presenting concerns for connectivity between Walker Bay Nature Reserve, Grootbos Private Nature Reserve, and other natural landscapes.

According to Venter & Rudi (2024), faunal connectivity between CBA1 areas and Walker Bay Nature Reserve is of particular concern. To mitigate impacts, it is recommended that areas outside the urban edge (designated as the 'KhoiSan area earmarked for conservation') attain formal conservation status. Concentrating development within the designated development footprint will strengthen ecological function and ensure the long-term viability of conservation zones.

#### Faunal Importance by site

The faunal importance of the subject property is high, primarily due to its role in maintaining terrestrial biodiversity connectivity with Walker Bay Nature Reserve and other surrounding natural areas. Key observations during the site survey are summarized below:

## <u>Central Part</u>

The central part of the site is characterized by pristine vegetation with minimal alien plant presence. During the site survey, several invertebrate and vertebrate species were observed, all of which are classified as Least Concern. The substrate in this area is predominantly sandy.

#### Western Boundary

The western boundary of the site was also assessed. This area contains patches of moderate to dense alien vegetation, primarily concentrated along the road that crosses the site. Indigenous vegetation is scattered throughout, giving the site a semi-natural character. Various invertebrates and vertebrates were observed, all of which are listed as Least Concern. The substrate in this section is also sandy.

#### Northern Boundary

The northern boundary borders Walker Bay Nature Reserve and is characterized by diverse indigenous vegetation with low to moderate levels of alien plant species. Several rocky outcrops were identified, which may provide unique habitats for terrestrial vertebrates. One bird species, observed flying in this area, is listed as Endangered. Most of the other invertebrate and vertebrate species recorded in this section are classified as Least Concern.

#### Summary

The highest concentration of faunal species was observed in areas with pristine vegetation, primarily in the northern and central-northern parts of the site. Notably, the Endangered bird species was encountered in these areas. The development proposal has been designed to exclude these sensitive areas, which will be conserved as part of the overall conservation plan. A complete impact assessment and mitigation measures will be incorporated in the Environmental Impact Report Phase.

#### **4.3. Freshwater constraints**

#### Site Assessment

A site assessment was conducted on 11 September 2024 during the spring season. Given the seasonal variability of aquatic ecosystems, this assessment does not encompass the complete range of seasonal conditions at the site. However, in the opinion of the specialist, this limitation is not materially significant, as the methodology employed—described in Sections 3.2 and 3.3 of the Terrestrial Aquatic Biodiversity Compliance Statement—allowed for an accurate determination of potential watercourses.

#### Initial Site Sensitivity Verification

The site sensitivity verification involved a desktop assessment of the development area, followed by an on-site field assessment on 11 September 2024. Based on the combined findings of these assessments, the study area was classified as having "Low" aquatic sensitivity.

No mapped watercourses were identified within the proposed study area or the 500 m regulated proximity based on the following national datasets:

- $\rightarrow$  National Wetland Map 5 (NWM5) (SANBI, 2018)
- → National Freshwater Ecological Priority Areas (NFEPA) spatial data (CSIR, 2011)
- → Department of Rural Development and Land Reform (DRDLR) topographical and watercourse information

Furthermore, no natural or functional watercourses were observed during the field assessment, and the site was determined to be terrestrial in nature.

#### **Biodiversity Planning Context**

The study area falls within the Breede-Olifants Water Management Area (WMA). The site does not overlap with any Strategic Water Source Area for Surface Water (SWSA-sw) or Groundwater (SWSA-gw) (Le Maitre *et al.*, 2018). Although the Overberg Region SWSA-gw lies within proximity to the 500 m regulated area, it is not expected to be impacted by the proposed development.

According to the Western Cape Biodiversity Spatial Plan (WCBSP, 2017), the study area overlays an aquatic Ecological Support Area 1 (ESA 1) and an aquatic Ecological Support Area 2 (ESA 2). These designations are attributed to the presence of a coastal corridor and potential watercourse connectivity. However, field verification confirmed that no natural watercourses exist within the study area.

Additionally, an aquatic ESA and the Walker Bay Nature Reserve (a protected area) are located within the 500 m regulated buffer zone. Despite their proximity, these areas will not be impacted by the proposed development due to the following reasons:

- $\rightarrow$  The R43 acts as a physical barrier separating the development area from mapped ESAs.
- → The eastern portion of the site, consisting of a dune area bordering Walker Bay Nature Reserve, has been designated as Private and Public Open Space, ensuring ecological conservation.

#### Site Description

The proposed development site is located north of the R43 and adjacent to the De Kelders residential area and Walker Bay Nature Reserve. The topography consists of undulating sand dunes that slope northwest towards the sea. Existing infrastructure includes a service road and an underground bulk water supply pipeline that services the De Kelders Township. The site itself remains vacant, with no existing buildings within the 36-ha development footprint. The vegetation across the site is primarily Overberg Dune Strandveld and Limestone Fynbos, although the southern portion is significantly infested with alien Rooikrantz (*Acacia cyclops*).

#### Assessment of Watercourse Conditions

No indicators of watercourses were found within the study area. The assessment criteria for defining a watercourse as per the National Water Act (NWA) (Act 36 of 1998) include:

- 1. Presence of a riverbed/channel or banks
- 2. Hydric (waterlogged) soils
- 3. Hydrophytic (water-dependent) or riparian vegetation

The field assessment results confirmed:

- $\rightarrow$  No riverbed, channels, or banks were identified.
- → Soil samples revealed well-drained, light brown to dark brown sand, with exposed calcrete in the northern section of the site.
- $\rightarrow$  Dominant vegetation included terrestrial species such as:
  - *Muraltia satureioides* (Sand Purplegorse)
  - Searsia glauca (Blue Kunibush)
  - Osteospermum incanum (Grey Bietou)

#### Conclusions and Recommendations

This study assessed the aquatic biodiversity constraints associated with the Khoisan Bay Residential Development on Portion 2 of Farm Strandfontein 712, De Kelders, Overstrand Municipality. Findings from the desktop analysis indicated no mapped rivers, wetlands (natural or artificial), or hydrological features within the study area or its 500 m regulated buffer. This was corroborated by multiple data sources, including NWM5 (SANBI, 2018), NFEPA (CSIR, 2011), and DRDLR watercourse information. The WCBSP (2017) identified aquatic ESA 1 and ESA 2 due to the presence of a coastal corridor and potential watercourse connectivity, but no watercourses were confirmed on-site.

Given the lack of watercourses within the proposed development extent, the area was deemed to be of "Low" aquatic sensitivity.

## 4.4. Heritage constraints

A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC) for comment under the previous Environmental Authorisation process. In their letter dated 25 April 2012 (Case No. 120416JL05), HWC requested that a HIA, consisting of an Archaeological Impact Assessment, Paleontological Impact Assessment and Visual Impact Assessment, must be included. In addition, HWC requested that an assessment of the visual impact of the proposed development on the `natural landscape of the Walker Bay Reserve' must also be undertaken. The requested specialist assessments were undertaken and presented to HWC in a consolidated Heritage Impact Assessment. The HWC subsequently issued the heritage permit, which is still valid, as confirmed by HWC in November 2024.

Jonathan Kaplan of ACRM was commissioned to undertake the specialist Archaeology and Palaeontology study, and to coordinate the HIA. Bruce Eitzen of New World Associates was commissioned to undertake the assessment of the visual impact of the proposed development on the Walker Bay Reserve natural landscape, as part of a wider Visual Impact Assessment (VIA) that was completed in 2007.

The proposed 36.6 ha footprint area, as well as the remainder of the property (i.e. Portions 2 & 3), are covered in a combination of extremely dense alien vegetation (Rooikrantz) and a thick carpet of Overberg Dune Strandveld and Limestone Fynbos, resulting in very poor archaeological visibility. The southern portion particularly is infested with Rooikrantz. Most of the site is virtually impenetrable. Apart from a few barely visible footpaths, woodcutter trails, the existing servitude and sandy tracks around the boundary, the site is largely inaccessible.

Some basic infrastructure is already in place on the proposed site. This comprises a service road with underground bulk water supply pipeline that services De Kelders Township. The site is currently vacant. No buildings or structures occur within the proposed 36 ha footprint area.

The specialist archaeological study did identify any significant impacts to the archaeological heritage. Buried archaeological remains, including shell middens and human burials, may be exposed during construction work and bulk earthworks. Cumulative impacts will also need to managed, during the operational phase of the proposed project. Heritage Western Cape (HWC) issued a letter of no objection on the 19 June 2013.

Note that Heritage Western Cape has confirmed, as per their letter dated 6 November 2024, that the Heritage approval and permit dated 16 June 2013, is still valid and no further Heritage Assessment is required for the development application.

The originally included conditions must be adhered to:

Decision:	
<ul> <li>Heritage Western Cape archaeological and visit</li> <li>1. The mitigation measure followed.</li> <li>2. Test excavation at Site residential area, in the and determine either the protection.</li> <li>3. The archaeological stud (and possibly 3) of the from the additional modi determine whether these their significance and di place in portions 2 and 3</li> <li>4. Monitoring of vegetation determined by the arch approval.</li> <li>5. If any unmarked humar earthworks, work must Heritage Western Cape.</li> <li>6. A Heritage Management protect archaeological si hidden in vegetation, as development.</li> </ul>	has no objection to proposed development subject to the following tal related concerns being addressed: es detailed on pages 75 to 79 of the Visual Impact Assessment should be as 740 and 741 (2012 report) on the low dunes alongside the De Kelders north western portion of the site, is required to characterize these sites north western portion of the site, is required to characterize these sites ne need for further excavation or for measures necessary for their dy conducted in 2006 indicated 5 sites (STF 1, 2, 8, 9 & 10) in portions 2 current proposal of high or medium significance. The impact on this area te than 470 dwellings will be considerable. The archaeologist is requested to se can be re-identified, and tested through excavation in order to assess etermine measures for their protection. Should further development take 8 they must be excavated and sampled. In clearing operations and bulk earthworks must be carried out as aeologist. A monitoring plan must be submitted to Heritage Western Cape for remains or buried shell middens are uncovered or exposed during bulk cease and these must immediately be reported to the archaeologist, or t Plan must be submitted to Heritage Western Cape for approval, in order to ites, including those outside the proposed footprint area or that may be these will be impacted by cumulative impacts resulting from the proposed

#### VIA mitigation measures

1. Future node SDP layouts to reflect the context

1.1. The SDP should be revised to take cognisance of the landform and vegetation as well as the existing grid where possible.

1.2. High points on dunes should not be developed but left as open spaces to avoid houses being built on high ground.1.3. High points, special vegetation, rocky outcrops, etc should be used as the focus of local open space.

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1.4. A road edge should contain the suburb, not erven, to prevent backyard walls being exposed to open space views and the scenic R43 where possible; otherwise see Recommendation 3: Natural Perimeter Boundary Zones.

1.5. A landscape sense should be built into the design be it in the conservation of natural vegetation or the creation of landscape zones including road reserves wide enough for street trees.

- Perimeter Buffer Zone This has been well achieved along the R43, which fortuitously has a hilly landform along its edge (possibly from road construction), and in the generous Public Open Space in the north. However, the planned backyard fences along it detract; mention is made of Milkwood's in the report, and these could be planted to screen the scheme from the road.
- 3. Natural Perimeter Boundary Zones The old scheme's guidelines handled these well (we think) but generally, on the Portion 1's boundary, particularly towards the open space to the north and the R43 to the south, this should be a natural boundary of dunes and planting, not actual fences. If required these should be carefully concealed and minimal, possibly electric or vined wooden fencing of some sort. No mowing of the edges in swathes please! The new scheme should work from these in developing its own guidelines.
- 4. Architectural Guidelines Need to be prepared. Architectural style was well defined by the Landscape Architect in the old scheme. An appropriately Cape-styled, small scale will be more acceptable. Two sets of guidelines are required, one for single residential and one for the other residential types. This should outline a more natural building approach that is low slung to minimise visual impact and carefully sited for the same reason. Each erf should have a plan of its setbacks and provided and controls for its buildings to minimise visual impact and maximise natural site protection. Typical erf layouts can be prepared as well showing general arrangements of site usage but where dunes are involved these should be specifically drawn up as described.
- 5. Building Colour and Roofscape Building colour should be developed from a blend of several complementary colours in the medium tone range, not white and pale shades, as these stand out strongly in the landscape especially en masse. Likewise, roofs should not be uniform in colour but from a complementary range of colours in the mid-dark tonal range. Overall, considering the strong rural character of the site and its rich vegetation, a more natural range of colours would help to seat the scheme quietly in the landscape. No white walls please.
- 6. Landscape Plan and Guidelines A landscape plan and guidelines should be prepared by a registered Landscape Architect and include some typical model erf designs to guide erf development. Strict controls on the image must be enforced to retain a natural landscape throughout would be an appropriate planting and sustainable theme for a Greenfield site. Interpretive facilities for the local heritage, archaeological, vegetation, wildlife, ecology, etc should be built into the open space system which we really hope will be built with all the paths, etc (preferably wood). Dangerous places where muggings, etc can occur must be carefully planned against.
- 7. Minimise Erf Fencing and Gardening These are also well described by the Landscape Architects of the old scheme and are critical to achieving the less conventional suburb than that existing in De Kelders. If possible, erf boundaries should be avoided completely with limited yards to contain pets. The idea of a continuous fynbos – Strandveld wild garden permeating the entire scheme with no borders into the public open space system is highly desirable if achievable. More subtle electric fencing can be used to delimit erf boundaries or very low walls of 500m or less. The new scheme should work from these in developing its own guidelines.
- 8. Wooden Decks and Rustic Fences Wooden paths and decks will be highly desirable in this undulating landscape where houses will be hanging on dune sides with landscapes falling away below them. Natural stone paving is preferable to fake concrete products. Some rustic fence types should be developed, perhaps out of entwined vines or bunches of sticks. A variety of types will help create choice and inspire people away from conventional 4-foot, unpainted precast walls.
- 9. Lighting is an issue in a rural landscape so should be carefully designed to be subtle and low key. Mast lighting and floodlighting off pole tops are not preferred while lighting along the edges should be reduced as far as possible to

prevent spill-over into the darkness at nighttime. Covers should be used on lights to direct light downwards where required along paths.

#### Construction phase visual mitigations

- 1. Damage All parties must make every effort to control the destruction of soils and vegetation on site, especially any natural vegetation. These must not be damaged under any circumstances.
- 2. Pollution Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas.
- 3. Monitoring Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted.

#### **Operational phase visual mitigations**

- 1. Subtle lighting The provision of suitable lighting that does not conflict with a rural suburban character is necessary. Excessive flood lighting and out-of-keeping street lighting should be avoided
- 2. Endemic planting The use of locally appropriate species is encouraged and the introduction of indigenous trees into the existing framework.

## 4.5. Visual Constraints

The proposed development is expected to have a moderate visual impact, with generally moderate visibility and medium significance. The significance rating is derived from a combination of topographical features, existing urban elements, and landscape characteristics that define the visual setting. The surrounding mountains, the valley landscape, and the proximity to the coastline provide a dynamic visual experience, particularly when traveling along the R43 from Stanford south towards Gansbaai and De Kelders. The site is partially visible from key viewpoints but remains concealed in certain areas due to the undulating topography and natural vegetation cover.

The landscape holds high scenic value due to its coastal cliffs, caves, and rich natural beauty, which have historically been a draw for tourism and recreation. Furthermore, the area has significant cultural and historical importance due to evidence of Khoisan shoreline usage and related heritage elements.

#### Visual Assessment

#### Key Viewpoints and Visibility

The visual influence of the proposed development is largely dictated by its location, scale, and the surrounding topography. Key viewpoints from which the site is visible include:

- → R43 Main Road: The site becomes visible when approaching from the south. As vehicles round the curve entering De Kelders, the development area briefly comes into a broadside view, depending on driving speed.
- → De Kelders Residential Areas: The northern portion of the site is partially visible from residential properties in De Kelders, particularly those located at higher elevations.

- → Franskraal se Berge: Elevated viewpoints from the hills to the east provide a broader perspective of the site, including its relationship with the surrounding environment.
- → Walker Bay Nature Reserve: The northern fringe of the site can be seen from within the nature reserve, though views are largely restricted by dunes and fynbos vegetation.

While the site is visible from certain vantage points, its visual exposure is intermittent due to natural screening elements such as vegetation, dunes, and topographical features. The most prominent views occur along the southern ridge line through De Kelders and higher elevated areas to the north and east.

#### Visual Constraints and Suitability

#### Zones of Visual Influence (ZVI)

Two primary **Zones of Visual Influence (ZVI)** have been identified, as shown in the accompanying visual analysis figure:

#### 1. Southern Zone of Visual Influence

- Located at the southern portion of the site, this zone extends across the R43, making the site visible from key transport routes.
- The visibility duration is brief, primarily dependent on driving speed and specific viewing angles.
- Views are further interrupted by natural vegetation and dune formations on the eastern fringe of De Kelders.

#### 2. Northern Zone of Visual Influence

- This zone extends from the Walker Bay Nature Reserve and surrounding elevated terrains.
- The northern fringe of the site is visible, but the majority remains obscured by dunes and fynbos vegetation.
- Some proposed housing units will extend into this zone, requiring visual mitigation measures to reduce their impact.

Despite the site's large dimensions (over 2 km in length and 500 m at its widest point), the combination of topography and vegetation reduces its overall visibility from the surrounding landscape.

#### Visual Absorption Capacity (VAC)

The Visual Absorption Capacity (VAC) is influenced by three primary factors: landform, land use, and vegetation.

1. VAC of the Landform

The hilly and dune-like topography contributes to natural screening, dividing the site into distinct visual compartments. Key characteristics include:

- $\rightarrow$  A northern ridgeline and a central southern ridgeline, which create distinct visual land units.
- $\rightarrow$  Split valleys that further fragment visibility from different observer positions.
- → Elevated portions near De Kelders increase exposure, but surrounding dunes and hills mitigate direct views.
- 2. VAC of the Land Use

The site's location within the urban edge influences its land use absorption capacity:

- → Existing buildings, fences, and vegetation in De Kelders obscure direct views into the site from certain angles.
- $\rightarrow$  The urban-rural transition provides a logical extension of development, reducing the perceived visual impact.
- $\rightarrow$  Views are fragmented due to adjacent built-up areas, except on the northeastern edge, where exposure is higher.

#### 3. VAC of the Vegetation

Vegetation plays a key role in visual absorption:

- → Dense alien vegetation (rooikrans) along the eastern and southern boundaries significantly obstructs views.
- → Natural fynbos and strandveld, reaching heights of 1 to 1.5 meters, provide limited screening but still reduce full visibility.
- → The absence of large tree cover ensures that while views remain partially open, vegetation still contributes to visual mitigation.

#### Visual Sensitivity and Landscape Integration

The visual sensitivity of the site is considered moderate, given the combination of open views, urban integration, and natural screening elements. Specific observations include:

- → Views from the Walker Bay Nature Reserve are limited to the northern fringe, reducing potential impacts from conservation areas.
- $\rightarrow$  Prominent views are largely restricted to the southern edge, which is only briefly visible from the R43.
- → The logical expansion of De Kelders into the site ensures that the development will not appear out of place within the existing urban fabric.
- → Visual impacts can be further mitigated through design measures, natural landscaping, and sensitive building orientation.

#### Conclusion

The Visual Impact Assessment indicates that the proposed development, while moderately visible, is not significantly intrusive due to existing topographical screening, vegetation cover, and adjacent built-up areas. The logical urban expansion, combined with effective mitigation measures, will help integrate the development into the surrounding landscape while preserving key scenic values.

Further refinement of visual mitigation measures will be incorporated into the Environmental Impact Assessment (EIA) Report to ensure responsible and sustainable development.



Figure 10. Visual analysis: View shed and Zone of Visual Influence

Mitigations and recommendations will be incorporated into the Environmental Impact Assessment Report.

## 4.6. Archaeological Constraints

An Archaeological Impact Assessment (AIA) of the proposed development was undertaken by ACRM at the time, in which 13 archaeological sites, including scatters of marine shellfish, ostrich eggshell, stone flakes and pottery were documented. All archaeological occurrences located during the study were plotted using a handheld GPS device, set on the map datum WGS 84. A 1 day field survey that included an assessment of the proposed new development. The following observations were made

- → Thin, diffuse scatters of fragmented marine shellfish were documented during the baseline study. These ephemeral sites are assigned to the Later Stone Age (LSA). Except for one small piece of weathered ostrich eggshell, and apart from the shellfish, no other organic remains such as bone, or pottery, or any stone implements, were encountered during the study.
- $\rightarrow$  A few Early Stone Age (ESA) flakes and chunks were also located within the footprint area.

→ As archaeological sites are concerned, the occurrences are all lacking in context. They are best described as low density surface scatters. Apart from the extremely small volumes of shellfish, and one small piece of ostrich eggshell, no organic remains, or LSA tools were encountered. As a result, the archaeological remains located during the study have been rated as having low (Grade C) local significance.

The subject property is located immediately alongside the R43, on the right hand side of the road as one enters De Kelders from Stanford. The proposed site comprises a series of undulating sand dunes that slopes in a north westerly direction toward the sea. The proposed site abuts onto the northern boundary of the De Kelders residential area, and the Walker Bay Nature Reserve.

Some basic infrastructure is already in place on the proposed site. This comprises a service road with underground bulk water supply pipeline that services De Kelders Township. The site is currently vacant. No buildings or structures occur within the proposed 36 ha footprint area.

When the 2006 AIA was done, almost the entire northern portion of the farm had been completely burnt (resulting in very good archaeological visibility), but the southern portion was covered with dense alien Rooikrantz, resulting in very poor visibility.

The vegetation has since recovered from the fire, and Farm No. 712 is currently infested with alien Rooikrantz, especially in the south, while Overberg Dune Strandveld and Limestone Fynbos now cover the entire property up until the southern boundary of the Walker Bay Reserve. Most of the site is virtually impenetrable. Apart from a few barely visible footpaths, woodcutter trails, the existing servitude and sandy tracks around the boundary, the site is largely inaccessible. Surrounding land use is residential (De Kelders), Wilderness (Walker Bay Reserve) and vacant land east of the R43.

#### Impact Statement

The results of the baseline study indicate that the proposed Khoisan Bay housing development on Portion 2 (Langbosch) of Farm No. 712 will not have an impact of great significance on the archaeological heritage that has been documented.

Buried shell middens and unmarked human burials may, however, be uncovered during bulk earthworks and excavations for services. This is a distinct possibility, given that a number of potentially important archaeological sites were documented in Portions 2 and 3 of the affected site during the 2006 AIA.

The proposed development site is also very close to the rocky shoreline (and De Kelders Cave), and abundant marine resources that were known to have been exploited by both Middle and Later Stone Age peoples in the past. The receiving environment is a potentially sensitive archaeological landscape.

#### Recommendations

With regard to the proposed Khoisan Bay housing development on Portion 2 (Langbosch) of the Farm Strandfontein No. 712 near De Kelders, the **following recommendations** are made:

1. Test pits (around Sites 740 & 741) must be excavated on the low dunes alongside the De Kelders residential area in the north western portion of the site. This must be done in order to determine the absence/presence of any subsurface archaeological deposits. If some of these surface scatters are found to have depth and undisturbed deposits, they will have to be sampled by way of controlled archaeological excavation.

- 2. Archaeological monitoring of bulk earthworks must be carried during the construction phase of the development. This can be undertaken by the Environmental Control Officer, in consultation with the archaeologist.
- 3. If any unmarked human remains, or buried shell middens are uncovered or exposed during bulk earthworks, these must immediately be reported to the archaeologist (J Kaplan 082 321 0172), or Heritage Western Cape (J. Lavin 021 483 9543). Sampling of deposits may need to be carried out if deemed necessary by the archaeologist. In the case of human burials, these will have to be removed under a permit issued by the South African Heritage Resources Agency (SAHRA). Burials must not be removed until inspected by the archaeologist.
- 4. A Heritage Management Plan must be developed and implemented in order to protect potentially important archaeological sites that were documented (outside the proposed footprint area) during the 2006 AIA, that may be threatened by cumulative impacts resulting from the proposed development. A Heritage Management Plan must be implemented in order to protect potentially important archaeological sites that were documented (outside the proposed footprint area in Portions 3 & 2), during the 2006 AIA, that may be threatened by cumulative impacts resulting from the proposed new development.



Figure 11. Track paths and waypoints pf archaeological finds.

# 4.7. Palaeontology constraints

#### Geological and Palaeontological Context

It is highlighted in the Palaeontological Impact Assessment that the fossil potential of a formation in the Project Area will be typical of that found in the region and more specifically, similar to that already observed in the surrounds of the Project Area (Pether, 2024). In many cases the information on fossil content is limited to the basics, such as in the case of geological mapping when the fossils are not the immediate focus. Scientifically important fossil bone material is expected to be sparsely scattered in coastal-plain deposits, but unless large and obvious, is not generally seen, under-estimating the fossil prevalence. Much depends on careful scrutiny of exposures and on spotting fossils as they are uncovered during digging i.e. by monitoring

excavations. A limitation on predictive capacity exists in that it is not possible to predict the buried fossil content of an area or formation other than in general terms.

The development area is on vegetated dunes of the Holocene Strandveld Formation which overlie older calcified dunes of the mid to late Quaternary Waenhuiskrans Formation. The dunes are an earlier generation relative to the dune field to the immediate north, as is evident in the rounded-off dune ridges indicative of colluvial processes. In contrast, the later dunes emanating from the sandy shores of Walker Bay exhibit the dune morphologies of transverse dunes close to the coast and parabolic dunes inland. These later dunes have been mapped as the Strandveld Fm.(Qs), whereas the area of the old dune ridges of the vicinity and surrounds of the proposed development are mapped as the Waenhuiskrans Fm. Presumably there are outcrops of calcrete and cemented aeolianite in the area, such as on ridge flanks or between ridges. On an older 1963 geological map the area is depicted as "calcified dune sand".



Figure 12. Geological context of the proposed Khoisan Bay development.

#### Impacts on Palaeontological resources

The intensity or magnitude of impact relates to the palaeontological sensitivities of the affected formations and the volume of disturbance by excavation. The proposed development involves trenches for building foundations (0.6-1.0 m depth) and services infrastructure (1.0-2.0 m depth).

Due to its young Holocene age the Strandveld Fm dunes typically host Late Stone Age archaeological material and the bones of "modern" (extant) animals which, not being very old, are termed "subfossils". The large bones of elephant, rhino, and hippo who died in the Strandveld Fm. dunes have occasionally been uncovered during sand quarrying and developments but are apparently rare finds. Deflation and passage of the Strandveld dunes would have moved embedded material down onto deflation palaeosurfaces and deeper down onto the underlying palaeosurface on top of the calcreted and cemented Waenhuiskrans Fm.

Along the South Coast (Worcester and Riversdale geological maps) the Strandveld Fm. has not been accorded a palaeontological sensitivity rating and is UNCLASSIFIED (left clear). However, along the West Coast the equivalent Witzand Fm. is accorded MODERATE palaeontological sensitivity and this sensitivity has been applied to the Strandveld Fm. in the version of the map used in the EIA Screening Tool Palaeontology Theme Sensitivity. The MODERATE rating is applicable close to the coast where subfossil bones in archaeological sites occur, but sites are less common inland. The subfossil bones are expected to be of latest Quaternary, later Holocene age (mainly less than about 7 thousand years old) and are likely to be mainly members of the extant, modern fauna, but unexpected species which do not belong to the modern/historical fauna may occur, due to fluctuations in the prehistoric palaeoclimate of the region. Due to its proximity to the coast the MODERATE rating of the Strandveld Fm. on the proposed development site is endorsed. Although considered to be subfossil remains, radiocarbon dating and geochemical isotope analyses of teeth and bones yield valuable information of changing ecological conditions during the last several thousand years.



Figure 13. Palaeontological sensitivities of formations in the De Kelders area.

According to SAHRIS the Waenhuiskrans Formation is rated Very High, due to previous fossil bone finds in coastal developments. The fossil bones that may occur in the Waenhuiskrans Fm. in the Project Area are expected to be of latemiddle to earlier-late Quaternary age, between ~160 to ~80 ka and, like the later Strandveld Fm. dunes sands, also mainly comprised of representatives of the extant fauna, but unexpected species of a different fauna are more likely to occur, as a result of phases of different ecological and palaeoclimatic conditions in the past, as well as the bones of some species which became extinct in the geologically-recent past. Intersections of the upper, variously calcreted Waenhuiskrans Fm. in earthworks are expected to be limited in volume relative to the affected volume of overlying dune coversands.

The later-mid Quaternary to present day faunas is fairly well known from archaeological sites and hyaena bone accumulations and additional finds are considered to be of moderate scientific importance, i.e. formations known to contain palaeontological localities and that have yielded fossils that are common elsewhere, and/or that are stratigraphically long-ranging, would be assigned a MODERATE sensitivity rating.

#### Mitigation measures and Recommendations

The possible presence of fossils in the subsurface does not have an a priori influence on the decision to proceed with the proposed development. However, mitigation measures are essential. The potential impact has a moderate influence upon the proposed project, consisting of implemented mitigation measures recommended below, to be followed during the vegetation clearing and Construction Phases.

- → Although the inspection of construction excavations may be specified in the Archaeological Impact Assessment, it is not feasible for a specialist monitor to be continuously present during the Construction Phases, when fossils may be unearthed at any time. The rescue of fossil bones during earth works critically depends on spotting this material as it is uncovered during digging.
- → For successful mitigation, it is therefore crucial that earth works personnel must be involved in mitigation by watching for fossil bones as excavations are being made.
- → It is recommended that a protocol for finds of buried fossil bones, the Fossil Finds Procedure (FFP), is included in the Environmental Management Plan (EMP) for the proposed development.
- → The Fossil Finds Procedure provides guidelines to be followed in the event of fossil bone finds in the excavations. The works supervisor/foreman and workers involved in excavating the building foundations, infrastructure trenches and stormwater drainage must be informed of the need to watch for fossils and archaeological material. Workers seeing potential objects are to cease work at that spot and to report to the works supervisor who, in turn, will report to the Environmental Control Officer (ECO) and/or the Developer. The ECO/Developer will contact and liaise with Heritage Western Cape and the standby archaeologist or palaeontologist on the nature of the find and suitable consequent actions such as immediate site inspection, application for a palaeontological collection permit and drafting of a work plan for the collection of the find.
- → If a significant occurrence of fossil bones in a palaeontological context is discovered a professional palaeontologist must be appointed to collect them and to record their contexts. Said palaeontologist must also undertake the recording of the stratigraphic context and sedimentary geometry of the exposure, the sampling of ambient small fossil content and the compilation of the report for distribution to Heritage Western Cape, SAHRA, the approved curatorial institution and local heritage interest groups.
- → A permit from HWC is required to excavate fossil bone finds. The applicant should be the qualified specialist responsible for assessment, collection and reporting (palaeontologist). Should fossils be found that require rapid collecting, application for a palaeontological permit with supporting work plan will immediately be made to HWC. The application requires the details and permission of the registered owner of the site. The fossils and their contextual information must be deposited at a SAHRA/HWC-approved institution. The rescue of discovered palaeontological remains by a contracted specialist shall be at the Developer's expense.

These mitigation measures will ensure that potential palaeontological resources are responsibly managed while allowing the proposed development to proceed with minimal disruption to significant heritage assets.

## 4.8. Agriculture Compliance

The overall conclusion of this assessment is that the proposed development is acceptable because it leads to negligible loss of future agricultural production potential.

The screening tool classifies the assessed property as ranging from low to high agricultural sensitivity. This assessment disputes the high sensitivity classification of the assessed area by the screening tool and rates the entire assessed area as

being of low to medium agricultural sensitivity with a maximum land capability of 6 because of its assessed agricultural production potential and current agricultural land use (Lanz, 2024).

The cropping potential of the site is limited soil constraints, predominantly that soils are very sandy with low water and nutrient holding capacity. Because of these constraints, the site is completely unsuitable for viable rainfed crop production. It is in an area that is not 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 (Lanz, 2024). 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.

## 4.9. Social and Economic Context of the Study Area

A Socioeconomic Impact Assessment was undertaken to evaluate the potential social and economic effects of the proposed development on Portion 2 of the Farm Strandfontein 712, De Kelders, Gansbaai. The landowners recognize the growing demand for quality residential properties in the Overstrand area and seek to utilize this scarce land resource to meet market demand while contributing to regional economic development.

#### Macroeconomic Impacts and Economic Linkages

While the quantitative impact of the development on the regional macroeconomy has not been explicitly calculated, the introduction of 472 residential erven, group housing units, a retirement village, and a commercial facility is expected to stimulate economic growth in the region. The multiplier and accelerator effects of this development, as detailed in the Socioeconomic Impact Assessment will generate forward and backward linkages across multiple economic sectors. These effects will drive job creation, income generation, increased savings, and tax revenue, benefiting both the public and private sectors.

The development will require substantial construction-related expenditure, leading to increased demand for building materials, labour, and services, directly benefiting local contractors, suppliers, and skilled labourers. The operational phase of the development will support long-term employment in property management, maintenance, retail, and service industries. Additionally, new residents and businesses will contribute to increased consumer spending within the local economy.

#### Municipal and Fiscal Benefits

From a Municipal finance perspective, the development is projected to generate significant once-off revenue for the Overstrand Municipality through plan approvals, water and electricity connection fees, and infrastructure levies. Over the long term, the expanded property base will increase municipal tax revenues, improving the financial sustainability of local government services.

The increased residential density will also enhance service delivery efficiency by optimizing existing infrastructure networks, provided that municipal capacity is carefully planned and expanded in line with the projected growth in demand for water, sanitation, electricity, and road infrastructure.

#### Social Impacts and Community Well-being

The proposed development is not expected to result in significant negative social impacts, such as displacement or the disruption of existing communities. Instead, it is anticipated to enhance social well-being by increasing housing supply, improving access to commercial amenities, and catering to a broader demographic, including retirees seeking secure accommodation within the retirement village component. The mixed-use nature of the project will contribute to a more integrated and vibrant community.

By facilitating job creation, infrastructure investment, and economic growth, the development is aligned with regional planning objectives aimed at enhancing the economic resilience of Gansbaai and the broader Overstrand region.

#### Conclusion

The socioeconomic assessment indicates that the proposed development presents substantial economic and social benefits, with minimal adverse social impacts. The project will contribute to local and regional economic growth, create employment opportunities, and enhance municipal revenue streams. To maximize these benefits, careful infrastructure planning and sustainable urban design should be prioritized to ensure that service capacity aligns with projected growth.

## 4.10. Traffic Impact Assessment

A comprehensive Traffic Impact Assessment (TIA) was conducted by 1CE Group (Pty) Ltd to evaluate the potential effects of the proposed Khoisan Bay development in De Kelders on the existing and planned road infrastructure. This assessment encompasses an analysis of current traffic conditions, projected trip generation, and the identification of constraints within the study area.

#### Existing and Planned Road Network

The primary routes anticipated to service the Khoisan Bay development include:

- → **R43 (Class 3)**: A major arterial route facilitating regional connectivity.
- $\rightarrow$  **Guthrie Street (Class 4)**: Serving as a local distributor within De Kelders.
- → De Villiers Street, Main Road, Eden Street, and Normandie Street (Class 4): These streets function as local access roads within the residential area.

The proposed development plans to establish a main access point approximately 1.1 km northeast of Guthrie Street along the R43. Additionally, the internal road network of Khoisan Bay will integrate with the existing De Kelders infrastructure at Main Road, Storm Street, and Eden Street, enhancing local accessibility.

#### Existing Traffic Conditions and Service Levels

De Kelders and its neighbouring towns predominantly serve as vacation destinations, leading to fluctuating traffic volumes, especially during holiday periods. Traffic counts conducted on December 22, 2011, at the intersections of Guthrie Street/R43 and Cove Street/R43, were utilized as baseline data. These counts were projected forward by a 3% annual increase to estimate 2018 traffic volumes.

The analysis, performed using the SIDRA software suite, indicated that all movements at both intersections operated at a Level of Service (LOS) B or better during peak hours in 2018, suggesting efficient traffic flow with minimal delays.

#### Trip Generation

The trip generation rates for the proposed development were derived from the latest South African Trip Generation Rates document.

- → Residential Component: The development comprises single residential units, group housing, and town housing units. Anticipated trip generation is 567 trips during the AM peak hour (425 outbound, 142 inbound), with a reverse pattern in the PM peak hour.
- → Commercial Component: Envisioned to include 2,024 m<sup>2</sup> of Gross Lettable Area (GLA) for retail space. Trip generation rates are estimated at 2.83 trips per 100 m<sup>2</sup> GLA during the AM peak hour and 16.9 trips per 100 m<sup>2</sup> GLA during the PM peak hour.

Notably, approximately 40.2 % of trips generated by the commercial component are expected to originate from within the development, classifying them as internal trips. Consequently, only a minimal portion (2.4%) of these trips would impact the external De Kelders road network.

#### Traffic Impact and Constraints

The TIA assessed several key intersections and road segments to determine the impact of the development:

- → R43/Cove Street Intersection: Projected to operate at LOS C or better during both AM and PM peak hours.
- → R43 between Cove Street and Guthrie Street: With 2018 background traffic volumes, this segment operated at LOS B during the AM peak hour and LOS C during the PM peak hour. The addition of development-related traffic is expected to slightly degrade the AM peak hour to LOS C, while the PM peak hour remains at LOS C.
- → **R43/Guthrie Street Intersection**: All movements are anticipated to maintain LOS B or better during peak hours.
- → R43 between Guthrie Street and Proposed Khoisan Bay Access: This section is projected to operate at LOS C for both AM and PM peak hours, with the development's traffic not significantly altering these levels.
- → R43/Proposed Khoisan Bay Access Intersection: All movements are expected to function at LOS B or better during peak periods.

#### Geometric Considerations and Recommendations

To ensure safety and maintain efficient traffic flow, the following infrastructure enhancements are recommended:

→ **Turning Lanes and Tapers**: Installation of left and right turn lanes at key intersections, including R43/Cove Street, R43/Guthrie Street, and the proposed R43/Khoisan Bay access point, to facilitate safer turning movements and reduce potential congestion.

- → Internal Roads: Design internal roads with a 13-meter reserve and a 5.5-meter surfaced width. Access and internal link roads should have a minimum reserve width of 16 meters (preferably 20 meters) and a surfaced width of 7.4 meters.
- → **Parking**: Ensure adequate on-site parking for the residential units. For the commercial component, adhere to parking ratios as per municipal guidelines, including provisions for offices, service industries, industrial activities, and retail establishments.

#### Public and Non-Motorized Transport Considerations

The development is expected to generate demand for public transport services. It is advisable to investigate the provision of a public transport embayment near the commercial node to accommodate this need. Additionally, incorporating sidewalks along at least one side of the eastern internal access road will support pedestrian movement and enhance safety for non-motorized users.

#### Conclusion

The TIA concludes that, with the implementation of the recommended infrastructure improvements and adherence to design standards, the proposed Khoisan Bay development can be accommodated within the existing road network. These measures will mitigate potential traffic impacts, ensuring that service levels remain acceptable and that both safety and efficiency are maintained for all road users.

## 4.11. Summary of potential impacts

A comprehensive team of specialists conducted detailed assessments of the site's ecological and socio-economic features to identify areas of sensitivity, recommend mitigation measures, and ensure that all environmental constraints are addressed. A primary concern identified by the faunal specialist is the potential loss of ecological corridors that facilitate species movement between Walker Bay Nature Reserve, Grootbos Private Nature Reserve, and surrounding natural landscapes. The study emphasizes the necessity of preserving these corridors to prevent habitat fragmentation, particularly for species of conservation concern. The Terrestrial Faunal assessment identified 12 species of concern, most of which depend on intact vegetation cover. Additionally, critical rocky outcrop habitats, which serve as prime habitats for certain species, require buffer zones of at least 100 m to ensure their conservation. A faunal constraints map has been developed to highlight habitat hotspots and sensitive areas to be excluded from construction activities.

Another identified impact is the potential loss of indigenous vegetation due to the scale of the proposed development. Although the property is currently zoned Agricultural Zone 1, it remains largely undeveloped, with only minor informal pathways present. Given its location adjacent to Walker Bay Nature Reserve, ensuring ecological connectivity through the retention of open space areas and buffer zones is crucial. The proposed development layout incorporates these ecological principles to mitigate environmental disruption while maintaining biodiversity linkages at key spaces.

From a socioeconomic perspective, the development aligns with regional growth objectives and is expected to generate significant economic benefits for the Overstrand Region. The project will create short-term employment during the construction phase and long-term job opportunities in property management, service industries, and commercial operations. The Socio Economic Impact Assessment highlights that the project will stimulate local economic sectors through forward and

backward linkages, increasing household incomes, business activity, and municipal revenue streams. Additionally, the development will enhance municipal financial sustainability by contributing to service fees, plan approvals, and an increased property rates base. However, municipal infrastructure capacity must be assessed to ensure that essential services such as water supply, sewage treatment, and road networks can accommodate the projected demand without negatively affecting existing residents.

Socially, the project is not expected to introduce significant negative impacts such as displacement or community disruption. Instead, it is anticipated to enhance local liveability by providing housing diversity, retirement accommodation, and commercial services that meet the growing demand for quality residential properties in the region.

While the proposed development offers substantial economic and social benefits, careful management is essential to mitigate environmental risks. The integration of ecological corridors, sustainable urban design, and responsible infrastructure planning will be critical in minimizing adverse effects. The Environmental Impact Assessment (EIA) phase will further refine mitigation measures to ensure environmental protection and sustainable land-use planning.

# 5. CONSTRAINTS ANALYSIS AND MITIGATION

Based on the specialist input discussed in Section 4 above, the identified constraints, high sensitivity areas and mitigation measures were analysed to form a composite constraints map which will be used in the evolution of the layout alternatives and future impact assessment procedures.

# 5.1. Botanical

The proposed development footprint covers about 36 ha, or 33 % of the site. About 12 ha (36 %) of this footprint is deemed to be of Medium botanical sensitivity, with the rest being High sensitivity. The proposed development is likely to have a Medium to High negative botanical impact at a regional scale, and this level of impact would ideally be reduced to Medium negative, preferably by reduction of the development footprint by 20% in the High sensitivity areas. The sensitivity areas are mapped below and as per the map below, already use the medium sensitivity areas as far as feasible.

Given the residual medium to high impact, it is recommended that the applicability of a Biodiversity Offset or Stewardship Agreement, be investigated further. There is scope to put aside a significant amount of the subject property for conservation purposes. This information will be included in the next versions of the impact assessment.

The Botanical specialist also recommends that a Search and Rescue for all *Brunsvigia* (tolbos, maartlelie) and other bulks within the authorised development areas, must be undertaken before site disturbance. These bulbs should be transferred to suitable receiving site, such as the Walker Bay Nature Reserve. All alive vegetation must also be removed from the site.

## Summary

- $\rightarrow$  Reduce footprint by 20 % in high sensitivity area
- $\rightarrow$  Search and rescue prior to ground breaking
- $\rightarrow$  Investigate Stewardship and / or Biodiversity Offset options



Figure 14. Botanical sensitivity areas

## **5.2.** Faunal and Animal Species

The following animal impact related mitigation measures are recommended for this development:

- The proposed development area is located in an endangered vegetation type with associated terrestrial faunal diversity. The potential impact will be high and permanent. If development is to go ahead offsets should be considered. In this case the property area to the east of the R43 could do with better protection and should be considered in this regard
- 2. The development plan should be adapted to avoid important *Bitis armata* habitats as indicated in the Figure below. Note that connectivity of these habitat hotspots with the onsite conservation area and adjacent nature reserve should remain in-tact.
- 3. During the construction phase the construction area should be clearly demarcated and blocked off from the 'private open spaces' area to avoid damage and pollution.
- 4. Search and Rescue of slow-moving animals should take place on building sites. Animals should however not be moved off-site but rather released in the conservation area.
- 5. Dogs should not be allowed to free-roam the 'conservation' area.

- 6. Rodent control should make use of environmentally friendly methods such as instillation of owl boxes and raptor perches that attract natural predator control.
- 7. Lights and insects:
  - $\rightarrow$  Switch lights off when not needed
  - $\rightarrow$  Add timers / sensors to lights
  - $\rightarrow$  Make lights activated by movement
  - $\rightarrow$  Add shields to lights
  - $\rightarrow$  Make lights shine downward, or direct only to where needed
  - → Use long wavelength red or amber lights / filtered amber LED, with no blue / minimal green light for outdoor lighted areas
  - $\rightarrow$  A lighting plan should be developed to ensure that the impact of night lights is kept to an absolute minimum
  - $\rightarrow$  Clearing of indigenous fynbos vegetation should be kept to an absolute minimum
  - → Avoid trampling of natural fynbos vegetation surrounding developments

![](_page_67_Figure_12.jpeg)

Figure 15. Rocky outcrop areas requiring protection and long-term connection to the open space and conservation areas

# 5.3. Heritage Western Cape permit conditions

The permit issued by Heritage Western Cape dated 19 June 2013 (Ref. 120416JL05) is still valid, as confirmed by Heritage Western Cape in their comment dated 6 November 2024. The Heritage permit expires 5 years from the date of 6 November 2024.

Six conditions of approval are listed in the permit, namely:

- 1. Visual mitigation measures as per Visual Impact Assessment must be implemented (as outlined below)
- 2. Test excavation sites 740 and 741, as per Heritage Impact Assessment must be implemented (as outlined below)
- 3. The Archaeological Assessment conducted in 2006 indicated 5 sites (STF 1,2,8,9 and 10) in Portion 2 and possibly 3, of the proposal of high or medium significance The impact on this area from the additional more than 470 dwellings will be considerable. The archaeologist is requested to determine whether then can be re-identified and tested through excavation in order to assess their significance and determine measures for their protection. Should further development take place in portions 2 and 3 they must be excavated and sampled.
- 4. Monitoring of vegetation clearing operations and bulk earthworks must be carried out as determined by the archaeologist. A monitoring plan must be submitted to Heritage Western Cape for approval.
- 5. If any unarmoured human remains or buried shell middens are uncovered works must be stopped and required procedures implemented.

 Table 5. Extract from Heritage Impact Assessment finds.

740	S34 33.025 E19 22.541	Fragments/small patches of
		weathered shellfish - mussel and
		limpet inc. S. cochlear on low
		vegetated (ground cover) frontal
		dune alongside residential
		development. 1 x OES.
741	S34 33.020 E19 22.535	Bits/small patches of shell – same
		as above. 1 x small manuport

![](_page_69_Picture_1.jpeg)

Figure 16. Location of archaeological site document during the 2006 AIA

## 5.4. Visual

The following recommendations are listed:

- 1. Future node SDP layouts to reflect the context
  - a. The SDP should be revised to take cognisance of the landform and vegetation as well as the existing grid where possible
  - b. High points on dunes should not be developed but left as open spaces to avoid houses being built on high ground.
  - c. High points, special vegetation, rocky outcrops, etc should be used as the focus of local open space.
  - d. A road edge should contain the suburb, not erven, to prevent backyard walls being exposed to open space views and the scenic R43 where possible; otherwise see Recommendation 3: Natural Perimeter Boundary Zones.
- 2. A landscape sense should be built into the design be it in the conservation of natural vegetation or the creation of landscape zones including road reserves wide enough for street trees.
- 3. Perimeter Buffer Zone This has been well achieved along the R43, which fortuitously has a hilly landform along its edge (possibly from road construction), and in the generous Public Open Space in the north. However, the planned backyard fences along it detract; mention is made of Milkwood's in the report and these could be planted to screen the scheme from the road.

- 4. Natural Perimeter Boundary Zones The old scheme's guidelines handled these well but generally, on the Portion 1's boundary, particularly towards the open space to the north and the R43 to the south, this should be a natural boundary of dunes and planting, not actual fences. If required these should be carefully concealed and minimal, possibly electric or vined wooden fencing of some sort. No mowing of the edges in swathes please! The new scheme should work from these in developing its own guidelines.
- 5. Architectural Guidelines Need to be prepared. Architectural style was well defined by the Landscape Architect. An appropriately Cape-styled, small scale will be more acceptable. Two sets of guidelines are required, one for single residential and one for the other residential types. This should outline a more natural building approach that is low slung to minimise visual impact and carefully sited for the same reason. Each erf should have a plan of its setbacks and provided and controls for its buildings to minimise visual impact and maximise natural site protection. Typical erf layouts can be prepared as well showing general arrangements of site usage but where dunes are involved these should be specifically drawn up as described.
- 6. Building Colour and Roofscape Building colour should be developed from a blend of several complementary colours in the medium tone range, not white and pale shades, as these stand out strongly in the landscape especially en masse. Likewise, roofs should not be uniform in colour but from a complementary range of colours in the mid-dark tonal range. Overall, considering the strong rural character of the site and its rich vegetation, a more natural range of colours would help to seat the scheme quietly in the landscape. No white walls.
- 7. Landscape Plan and Guidelines A landscape plan and guidelines should be prepared by a registered Landscape Architect and include some typical model erf designs to guide erf development. Strict controls on the image must be enforced to retain a natural landscape throughout would be an appropriate planting and sustainable theme for a Greenfield site. Interpretive facilities for the local heritage, archaeological, vegetation, wildlife, ecology, etc should be built into the open space system which we really hope will be built with all the paths, etc (preferably wood). Dangerous places where muggings, etc can occur must be carefully planned against.
- 8. Minimise Erf Fencing and Gardening These are also well described by the Landscape Architects of the old scheme and are critical to achieving the less conventional suburb than that existing in De Kelders. If possible, erf boundaries should be avoided completely with limited yards to contain pets. The idea of a continuous fynbos strandveld wild garden permeating the entire scheme with no borders into the public open space system is highly desirable if achievable. More subtle electric fencing can be used to delimit erf boundaries or very low walls of 500m or less. The new scheme should work from these in developing its own guidelines.
- 9. Wooden Decks and Rustic Fences Wooden paths and decks will be highly desirable in this undulating landscape where houses will be hanging on dune sides with landscapes falling away below them. Natural stone paving is preferable to fake concrete products. Some rustic fence types should be developed, perhaps out of entwined vines or bunches of sticks. A variety of types will help create choice and inspire people away from conventional 4-foot, unpainted precast walls.
- 10. Lighting is an issue in a rural landscape so should be carefully designed to be subtle and low key. Mast lighting and floodlighting off pole tops are not preferred while lighting along the edges should be reduced as far as possible to prevent spill-over into the darkness at nighttime. Covers should be used on lights to direct light downwards where required along paths.

#### Construction phase visual mitigations

- 1. Damage All parties must make every effort to control the destruction of soils and vegetation on site, especially any natural vegetation. These must not be damaged under any circumstances.
- Pollution Chemical damage by cement mixing directly on the ground and by diesel, etc spills must also be prevented at all costs, as should vandalism of the plants and accidental damage to limbs by workers and machinery. Fires must be prevented also at all costs in all areas. Penalties and incentives should be implemented as can fencing off areas.
- 3. Monitoring Monitoring of the landscape, soils and vegetation during construction is very important and must be attended to regularly. Damage to some is all too inevitable and often irreversible. Adequate indigenous (preferably endemic) vegetation must be planted.

#### Operational phase visual mitigations

- 1. Subtle lighting The provision of suitable lighting that does not conflict with a rural suburban character is necessary. Excessive flood lighting and out-of-keeping street lighting should be avoided
- 2. Endemic planting The use of locally appropriate species is encouraged and the introduction of indigenous trees into the existing framework.

#### 5.5. Archaeology

- 1. Test pits (around Sites 740 & 741) must be excavated on the low dunes alongside the De Kelders residential area in the northwestern portion of the site. This must be done in order to determine the absence/presence of any subsurface archaeological deposits. If some of these surface scatters are found to have depth and undisturbed deposits, they will have to be sampled by way of controlled archaeological excavation.
- 2. Archaeological monitoring of bulk earthworks must be carried during the construction phase of the development. This can be undertaken by the Environmental Control Officer, in consultation with the archaeologist.
- 3. If any unmarked human remains, or buried shell middens are uncovered or exposed during bulk earthworks, these must immediately be reported to the archaeologist (J Kaplan 082 321 0172), or Heritage Western Cape (J. Lavin 021 483 9543). Sampling of deposits may need to be carried out if deemed necessary by the archaeologist. In the case of human burials, these will have to be removed under a permit issued by the South African Heritage Resources Agency (SAHRA). Burials must not be removed until inspected by the archaeologist.
- 4. A Heritage Management Plan must be developed and implemented in order to protect potentially important archaeological sites that were documented (outside the proposed footprint area) during the 2006 AIA, that may be threatened by cumulative impacts resulting from the proposed development.4. A Heritage Management Plan must be implemented in order to protect potentially important archaeological sites that were documented (outside the proposed footprint area in Portions 3 & 2), during the 2006 AIA, that may be threatened by cumulative impacts resulting from the proposed new development.


Figure 17. Track paths and waypoints pf archaeological finds.

## 5.6. Consolidated constraints

Based on the information above, a consolidated constraints map has been generated for the site and surrounds. This map should be used to inform layout revisions and alternatives and is subject to change in response to additional information or input becoming available.



Figure 18. Identified consolidated constraints for the subject property.

## **6. PLANNING CONTEXT**

## 6.1. The project in context

The subject property, Portion 2 of the Farm Strandfontein No. 712, is located along the R43 road. It borders the Walker Bay Nature Reserve to the north and forms part of the De Kelders Extension. The site is currently zoned as a Subdivisional Area in terms of the Overstrand Municipality Land Use Scheme (2020). As such, the proposed development is deemed compatible with the spatial planning framework for the area. The township of De Kelders is predominantly positioned along the coastline, forming a narrow strip of residential development. The surrounding area is characterized by its proximity to notable natural features, including the Walker Bay Nature Reserve, which is renowned for its diverse fynbos vegetation and scenic coastal landscapes. De Kelders is also a popular destination for coastal tourism due to its rich marine biodiversity and seasonal whale-watching opportunities.

Although, Portion A of Portion 2 of the Farm Strandfontein No. 712 remains undeveloped, it falls within the urban edge of the greater Gansbaai area, as defined by the Overstrand Municipality. The "urban edge" defines the boundary for sustainable urban growth, directing new developments to areas that are already serviced or can be serviced with minimal environmental impact. This ensures that urban development occurs in a planned and structured manner, in line with the municipality's long-term development vision for the region. The proposed development is therefore consistent with local planning frameworks, which encourage infill development.

The property is currently in a natural state, with some minor disturbances on-site, such as informal access routes traversing the property. The development footprint is proposed on the southwestern boundary of the property, which has been identified as a viable location for the intended project. The main constraint associated with the property is the presence of multiple servitudes related to bulk service infrastructure. These servitudes are essential and cannot be easily relocated, requiring careful planning and design to avoid conflicts with the proposed development.

## 6.2. Existing and Surrounding Zoning and Land Use

Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 is currently zoned Subdivisional Area and is vacant. The subject property is mainly covered by natural vegetation and there are no agricultural activities on the property. Land uses that surround Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 are the existing De Kelders Township, which mostly comprises of single residential dwellings, the Walker Bay Nature Reserve and farms.

## 6.3. Design concept and layout

## Overview of the proposed design

The proposed development on Portion A of Portion 2 of the Farm Strandfontein No. 712 aims to establish a sustainable and aesthetically pleasing residential area that integrates with and enhances the existing urban fabric of De Kelders and the broader Gansbaai region. The design concept prioritizes sustainability and environmental stewardship, aligning with the principles of responsible development to ensure that the needs of the surrounding communities are met without compromising the integrity of the natural environment and its resources.

The proposed layout seeks to utilize previously disturbed areas as far as possible to minimize impacts on environmentally sensitive zones. This approach preserves the ecological connectivity across the site, particularly in the northern and north-central portions of the property, which will remain undeveloped to maintain and enhance the natural landscape. These open spaces will also serve as important ecological corridors, facilitating the rehabilitation of indigenous vegetation and supporting local biodiversity.

Furthermore, the design promotes integration with the existing De Kelders township by connecting the development to available municipal services and infrastructure. The layout incorporates green spaces between residential erven to foster a sense of community while blending the built environment with the surrounding natural landscape. Open spaces along the R43 will be strategically established to minimize visual impacts and maintain the scenic quality of the area.

In addition, the open space network will include the northern portion of the property adjacent to the Walker Bay Nature Reserve. This area will remain undeveloped and managed as a conservation buffer to protect the integrity of the adjacent nature reserve, contributing to the long-term preservation of local biodiversity and ensuring ecological connectivity.

#### Site layout Plan

The proposed site layout reflects these principles, ensuring a well-integrated, sustainable design that balances development needs with environmental conservation. This will be done to ensure that the layout does not compromise the integrity of the natural environment. The application for rezoning and subdivision of the subject property was approved in August 2015, authorising the proposed development to proceed as follows:

- $\rightarrow$  Single residential erven, Group housing & Town housing (19.77 ha)
- $\rightarrow$  Open spaces (9.8 ha)
- $\rightarrow$  Public and Private roads (7.5 ha)
- $\rightarrow$  Institutional (0.25 ha)
- $\rightarrow$  Business zone (0.58 ha)

It is important to note that the approval for rezoning and subdivision will lapse in August 2026. Consequently, the current proposal includes a new application for rezoning and subdivision to facilitate the proposed development described in detail below.

The Environmental Authorisation was granted previously in June 2012, and extended in June 2017, but has subsequently lapsed.

The original EA read as follows:

The Environmental Authorisation is for the reduced development footprint as included in the additional information submission dated 6 March 2012 (Plan No. KSB2.DRW dated September 2011). The development entails the establishment of a residential development on Portion A of the Farm Strandfontein No. 712/2, Gansbaai. The Remainder of the property will be rezoned to Public and Private Open Space and will not be developed.

Portion A will be subdivided into 3 portions. Portions 2 and 3 (dune area) will be rezoned from Agriculture Zone 1 to Private Open Space (18.2 ha) and Public Open Space (54.3 ha), respectively. Portion 1 (37.9 ha) will be rezoned from Agriculture Zone 1 to Subdivisional Area. The residential development on Portion 1 of Portion A will comprise the following:

- → Approximately 472 residential erven (single residential, group housing and town housing)
- $\rightarrow$  45 public and private open space erven
- $\rightarrow$  6 erven for public and private roads
- $\rightarrow$  1 Erf zoned for institutional use
- → 1 Erf zoned for Business use; and
- $\rightarrow$  Bulk Services

The proposed design carefully considers the existing character, urban fabric, and environmental significance of the area, as well as the flow of traffic associated with the proposed development. The design also aligns with the target market for the development and takes into account the potential social impact on the broader Gansbaai community. Particular emphasis was placed on preserving the northern section bordering Walker Bay Nature Reserve, ensuring that the development contributes to the long-term environmental sustainability of the region.

#### Residential development

The proposed development layout makes provision for approximately 472 residential opportunities, which include a variety of single residential, group housing and town housing opportunities. A range of single residential opportunities have been provided for, and will vary in size, with some opportunities reaching approximately 623 m<sup>2</sup>, representing 43.26% of the total single residential opportunities. The proposed single residential erven are located next to the proposed public roads (local distributors). It was decided to outline most of the local distributors (public roads) with single residential erven that abuts the group housing clusters. This creates the illusion of the development being single residential viewed from the public roads and ensures that the proposed extension fits in with the character and visual catchment of De Kelders.

This diversity in residential offerings will ensure that the development caters to various market needs while promoting a balanced and inclusive residential community.

Provisions have also been made for the development of group/ town housing erven with average erf sizes ranging from ±289 m<sup>2</sup> to ±410 m<sup>2</sup> in extent. In addition, the provisions are also made for town housing opportunities clustered within, each town housing will be developed at a maximum developable size of 401 m<sup>2</sup>. The group / town house clusters are included in the proposed development to contribute to the creation of a variety of residential opportunities in the urban structure for the Greater Gansbaai area. The group/ town house component for the proposed development also allows for a higher Net and Gross Density for the proposed development which brings the proposed development in line with the provincial spatial planning guidelines. Each group/ town house cluster gains access from the proposed local distributors (public roads) for the development and no direct access from the R43 for any group house development is proposed. The design of the internal private roads is done to ensure that speeding is discouraged and maximum free draining towards the roads is obtained. Each group / town house cluster gains access road that connects to 13 m, 11 m, 10 m and 8 m internal private roads.

#### Open spaces

The proposed layout of Portion 3, a portion of Portion 2 of the farm Strandfontein No. 712, took into consideration the existing open space corridor situated between the R43 and De Kelders. A similar public open space corridor is created between the proposed town extension and the R43. The proposed green buffer corridor will add to the scenic and aesthetic quality along the R43 and ensure the views and sightlines towards the ocean. Other public open space areas were provided throughout the whole layout, mostly adjacent to the single residential properties. Provision was also made for a public open

space between the proposed commercial site and the existing De Kelders Township to serve as buffer between the residential and business components and serve as a storm water corridor.

Provision is also made for adequate private open spaces throughout the proposed group / town housing clusters. The private open spaces for each group / town house cluster will be provided at 80m<sup>2</sup> private open space per group / town house erf. The proposed private open spaces were designed to allow for ample thorough fares within each group / town housing cluster as well as throughout the proposed development. In certain instances, the private open spaces serve as buffer between the existing residential area of De Kelders (single residential erven) and the proposed group / town housing developments. The proposed layout consequently made provision for functional private and public open spaces.

#### Access roads

Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 currently has a single access (gravel road) which is taken from the R43 to the portion north of the R43. The existing access will be closed to make way for a new access point from the R43 (trunk road 28/2) for Portion 1, a portion of Portion 2 of the farm Strandfontein No. 712, i.e. the Khoisan Bay development. Three of the proposed public roads (local distributors) connect to streets of the existing De Kelders town. The widths of the local distributors are 18m and 12m respectively, except where the existing De Kelders Main Road connects to the proposed development via the public road that is 28m wide. The layout was determined and planned to ensure that speeding and intrusion by extraneous vehicles are discouraged. Each group / town house cluster takes access from a 15m wide access road that connects to 13m, 11m, 10m and 8m internal private roads. More than one access lane to the group / town house clusters can be provided to reduce stacking distances at the entrance gates. The width of the proposed private roads was determined by the number of erven that each private road would serve. The widths of the proposed private roads are in accordance with the land use parameters of the Gansbaai Scheme Regulations.

The single residential erven and the commercial site will gain access directly from the internal collector roads. The proposed community facility will gain access from a private road that forms part of cluster B's internal road design. Each group / town house cluster's private road will link to the internal collector roads (public roads) and no direct access from the R43 for any group / town house development is proposed.

The main intent of the design of the roads was done to ensure that speeding is discouraged and unrestricted storm water draining towards the roads can be obtained.

#### Commercial sites and community facilities

The unique location of the site and the lack of similar facilities in the area created an opportunity for limited commercial sites. A commercial site (shop) is proposed and will be located at the entrance of the existing residential area of De Kelders (where the existing De Kelders residential area meets the proposed extension). This way the proposed commercial site (shop) can serve both the existing residential area and the proposed residential extension of De Kelders. The proposed commercial site will therefore have a local function. The commercial site is ±5783m<sup>2</sup> in extent and it is situated within the area earmarked in the Greater Gansbaai Structure Plan for commercial purposes. The location of the commercial site farthest from the R43 will ensure no unnecessary drive through of cars travelling on the R43 to Gansbaai.

The provisions for the community facility (institution) have been provided for in the proposed site development plan. The community facility will be positioned opposite the commercial site at the entrance of the existing residential area of De Kelders (where the existing De Kelders residential area meets the proposed extension). The community facility is proposed

to be  $\pm$  2417m<sup>2</sup> in extent. The facility will be determined by the market and a site development plan will be submitted prior to the development of the community.

## 6.4. Proposed zoning and development controls

As per the valid municipal approval dated 26 August 2015 in terms of the Land Use Planning Ordinance, 1985 (No. 15 of 1985) and the approval of the extension of time, in terms of Section 61 of the By-Law on Municipal Land Use Planning, 2020, the application was made to the Overstrand Municipality for the following:

- → The Subdivision of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712 into two portions in terms of Section 24 of the Ordinance on Land Use Planning, Ordinance 15 of 1985 (Portion A and Remainder);
- → The subdivision of Portion A, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, into three portions in terms of Section 24 of the Ordinance on Land Use Planning, Ordinance 15 of 1985 (Portions 1, 2 and 3);
- → The rezoning of Portion 3 (dune area), a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, from Agriculture Zone I to Public Open Space Zone in terms of Section 17 of the Ordinance on Land Use Planning, Ordinance 15 of 1985;
- → The rezoning of Portion 2, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, from Agriculture Zone I to Private Open Space Zone in terms of Section 17 of the Ordinance on Land Use Planning, Ordinance 15 of 1985;
- → The rezoning of Portion 1, a portion of Portion 2 (Lang Bosch) of the farm Strandfontein No. 712, in terms of Sections 22(1)(a) of the Ordinance on Land Use Planning, Ordinance 15 of 1985, from Agriculture Zone I to Subdivisional Area for public road, single residential, public open space, institutional and commercial purposes and to create four group / town house cluster development.

## 7. DEVELOPMENT ALTERNATIVES

The Environmental Impact Assessment (EIA) Regulations require that the EIA process includes consideration of "alternatives to the proposed activity that are feasible and reasonable". The determination of site and area wide constraints, including environmental, socio and economic form a key aspect in the Scoping phase and the subsequent screening and evaluation of alternatives should then be applied in Scoping and Impact Assessment phases of the application for Environmental Authorisation. An alternative refers to a possible course of action that meets the same purpose and need as the proposed activity.

The following categories of alternatives are typically considered:

- → Activity Alternatives / Project Alternatives These entail changes in the nature of the proposed activity and are most relevant at the strategic decision-making level. This category includes the "No-Go" alternative.
- → **Location Alternatives** Alternative locations for the entire project or its components.
- → Site Layout / Density Alternatives Variations in spatial design, including adjustments to site layout and density configurations.
- → **Process Alternatives** Alternative methods or technologies that may achieve the same objective with different processes.

The consideration of such alternatives allows for the identification of the most suitable approach to achieving the project objectives while minimizing environmental impacts. The purpose of this section is to determine site and area wide constraints

and / or opportunities and scope and describe potential alternatives in order to determine which options should be further evaluated in the EIA phase of the project.

The proposed residential development on Portion 2 of the Farm Strandfontein No. 712 is being assessed within the constraints identified through baseline studies. Two development alternatives have been identified during the Scoping Phase:

- → Alternative 1 (Preferred Alternative) The current development concept and layout, as previously approved under NEMA and as currently approved in terms of the Land Use Planning Ordinance, 1985 (No.15 of 1985)
- → Alternative 2 (No-Go Alternative) This option entails maintaining the land in its current state without any development and management actions. The status quo remains.

Specialist baseline studies have been conducted. Once all detailed site assessments are completed, the current layout will be refined based on specialist recommendations. Any proposed mitigation measures or preferred alternative layouts will be presented in the EIA phase. At this stage, only the No-Go Alternative and Layout Alternative 1 will be carried forward into the Environmental Impact Report (EIR) phase of the assessment process.

## 7.1.Layout alternatives

#### Layout Alternative 1 - Preferred

The preferred alternative represents the applicant's vision for the site and has been incorporated into the baseline assessments conducted. The Site Development Plan (SDP) is included in the Appendix D1. The proposal involves the subdivision and rezoning of Portion 2 (Lang Bosch) of the Farm Strandfontein No. 712 into three portions and the remainder for the establishment of a residential settlement, open spaces and access roads, community facility, institution, and a commercial site. The proposed design took into consideration the existing character, urban fabric, environmental significance, the flow of traffic to and from the proposed extension, the target market for the proposed development as well as the social impact the proposed extension will have on the greater Gansbaai area. Additionally, the northern boundary of the property will remain undeveloped and will be allocated as a public open space to facilitate ecological connectivity and biodiversity conservation. The rezoning and subdivision plan includes:



Figure 19. Site Development Plan – as currently approved under the Overstrand Land Use Planning Ordinance and as previously approved under NEMA

#### Residential development .

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The proposal includes the Rezoning of Portion 1 of Portion 2 from Agricultural Zone 1 to Subdivision Area for the establishment of:

- → 472 residential opportunities varying from group housing erven, town housing and single residential erven.;
  - Single residential zone: Single Residential
    - 118 erven 623 m<sup>2</sup> erf sizes
    - Area size 73461 m<sup>2</sup>
  - Town house zone: Town Housing
    - 179 erven 314 m<sup>2</sup> erf sizes
    - Area size 38966 m<sup>2</sup>
  - $\circ \quad \mbox{Group house zone: Group housing} \\$ 
    - 175 erven 410 erf sizes
    - Area size 70583 m<sup>2</sup>

Various development controls and guidelines will be implemented to ensure that the visions of the proposed development are realized. A Homeowners Association in terms of Section 29 of the Ordinance will be established for each of the individual four Group and Town Housing Clusters to ensure guidelines and controls are achieved and maintained.

#### Ecological Corridors and Open Spaces

Given the property's extent and conservation significance, ecological corridors and open spaces have been included in the layout. In municipal planning documents, the northern boundary of the subdivided property, which borders the Walker Bay Nature Reserve, is designated as an Ecological Corridor / Open Space Corridor and this aligns with the proposed Public Open Space allocated in the development application. In addition, the remainder of the site east of the development area and R43 is not included in the development application. The proposed development is concentrated along the southwestern boundary directly alongside existing De Kelders residential area.



Figure 20. Proposed subdivisional area on the subject property



Figure 21. De Kelders Status quo. Source: OMSDF (2020)

#### **Commercial site**

The proposed commercial site will be placed at the entrance of the existing residential area of De Kelders (where the existing De Kelders residential area meets the proposed extension). This way the proposed commercial site (shop) can serve both the existing residential area and the proposed residential extension of De Kelders. The proposed commercial site will therefore have a local function. The commercial site is  $\pm$  5783 m<sup>2</sup> in extent and it is situated within the area earmarked in the Greater Gansbaai Structure Plan for commercial purposes. The location of the commercial site farthest from the R43 will ensure no unnecessary drive through of cars travelling on the R43 to Gansbaai. A site development plan will be submitted prior to the development of the commercial site (shop) for approval by the Overstrand Municipality.

## Community facility

The preferred layout includes provision for community facility. The community facility site is aimed to be subsequently positioned opposite the commercial site at the entrance of the existing residential area of De Kelders (where the existing De Kelders residential area meets the proposed extension). The proposed community facility will be  $\pm$  2417 m<sup>2</sup> in extent. The use of the proposed community facility will be determined by the market and a site development plan will be submitted prior to the development of the community facility.

## 7.2. Engineering alternatives

Various alternatives exist in the provision and utilisation of water, electricity, services, sewerage reticulation, storm water and sewage treatment. The contour plan indicates that a large number of individual elevation gains and troughs exist on the site naturally. These are likely historical dunes mounds and cause various depressed low areas which will in turn provide a large number of depressed low points in the vertical alignment of roads and service infrastructure. It is therefore proposed that these areas be levelled by means of a cut-to-fill operations, in order to create a general gradient according to the existing boundaries of the site. This will result in a general gradient into a north-westerly direction. The alternative which best complies with the sustainable approach, as well as being practically and financially viable will be carried forward along with the preferred alternative layout.

## 7.3. Water

The following bulk water reticulation items are required to proceed with the development of the site and to improve residual pressures in areas where problems are currently experienced during peak demand conditions:

- $\rightarrow$  2.2 ML reservoir
- → 300 mm diameter parallel pipe reinforcement (560 m) from the proposed reservoir to the branch of the existing De Kelders development and the proposed site
- $\rightarrow$  300 mm diameter future main (300 m) from the branch mentioned above and the proposed ring-main for the site
- → 200 mm diameter future main pipe (4 465 m) proposed ring-main for the site along the boundaries of the site and in the proposed roads (Road 2, R43).

It is also proposed that a variable speed booster pump be provided directly on the reticulation system as part of the bulk supply to ensure that the required residual pressure is maintained.

The internal network will be designed on a ring-main principle and will connect to the proposed bulk reticulation ring-main system at various positions around the boundaries of the site to complete the internal ring-mains.

The impact of the proposed development on the existing water reticulation system, including the reservoir capacity, will be determined by the Local Authority's consulting engineers, if required.

## 7.4. Electricity

Worley Parsons Engineers (previously known as Kwezi V3 Engineers) confirmed the following regarding the availability and capacity of electricity for the proposed development. Note that upgrades to existing infrastructure will still be required as per original approvals.

#### Bulk Electricity Supply

The inclusion of this development area into the Overstrand Municipal area of supply was approved by the National Energy Regulator of South Africa (NERSA) and the supply authority therefore will be Overstrand Municipality.

The maximum electricity demand for the planned 472 residential units is estimated at 2 000 kVA, with the average demand 1 200 kVA.

The electrical networks in the De Kelders area currently does not have adequate capacity for this additional load and a new bulk supply will therefore have to be installed.

The proposed bulk supply will consist of a new medium voltage cable from the Gansbaai Main switching station some 4.6 km away, via this development, linking up the Klipgat supply point and ending in De Kelders where it will be incorporated into the existing networks in Vyfer Street. The connection to De Kelders will ensure a secondary supply should the new primary cable fail.

In addition to the installation of this new bulk supply, an application will also be lodged with Eskom for an increase of 2 000 kVA in the Municipal supply point. This aspect will be done in liaison with the electricity department of Overstrand Municipality.

#### Internal Electricity Services

The internal services will consist of medium and low voltage underground cables, miniature substations, consumer distribution kiosks and single-phase erf connections.

Design of all new infrastructure will be done as per NRS 034 Specification and the latest design guidelines of the Overstrand Municipality.

Street lighting will be installed as per the architectural guidelines of the development and the design guidelines of the Overstrand Municipality.

#### 7.5. Storm water

Due to the topography of the site the subject property is divided into three main drainage areas. These drainage areas will therefore be the basis on which the drainage patterns will be determined.

The minor storm water system will consist of catch pits and underground concrete spigot and socket pipes, which will discharge as described above. The minimum pipe size will be 375 mm diameter and a self-cleaning velocity during 75 % of the 1:2 year recurrence interval storm event of 0.9 m/s will be maintained. The maximum distance between manholes and catch pits will be 90 m.

The major storm water system will be conveyed via the roads. Due to the proposed earthworks all erven will discharge onto roads and all roads will be graded without low points. Overland escape routes for the major storm event will be provided where required.

#### 7.6. Sewerage

The existing De Kelders area is not serviced with a sewerage reticulation system. Sewage is transported to the treatment works from conservancy tanks with trucks.

The site will be graded in order to ensure that the internal sewerage reticulation system can be collected at two positions within the proposed development. The sewage from the proposed development will be transported to the existing sewage

treatment plant via an underground piped system. The proposed external sewage pipe system will be designed to ensure that the existing De Kelders area can be connected to the proposed system.

## 7.7. Roads

The proposed development will gain access from the R43, where additional lanes will be provided and from Main Road in the existing De Kelders development.

All internal roads will be provided with an asphalt surface, mountable kerbs on both sides (CK5 and MK10), at a minimum cross fall of 2.0 % and sufficient substructure, according to the TRH4.

The proposed roads in the development were classified as follows:

It is recommended that the service capacities be confirmed in line with current legislation to take into account any changes which may have taken place since the previous process and subsequent approvals.

## 8. PROCESS TO DATE

Application for Environmental Authorisation (EA) via the Scoping and Environmental Impact Assessment (EIA) process, is underway.

## 8.1. Public participation

A Public Participation Process is an ongoing process being undertaken in accordance with the requirements of the NEMA EIA Regulations and the Guideline series.

Document Series: *Guideline on Public Participation* (2007, 2010). The issues and concerns raised during this Scoping Phase will be dealt with and assessed in the EIA phase of the application. Interested and Affected Parties' (I&AP's) will be notified by means of advertisements in local newspapers, notices at various locations in the affected area, and site notices placed on the site. In addition to the advertisement, local environmental groups, ratepayer's associations, landowners, individuals and other interest groups on existing I&AP databases will be contacted (registered mail notification) as part of the public participation process. After the project initiation, correspondence for the remainder of the EIA process is directed to I&AP's registered on the project database. Correspondence with registered I&AP's is via registered mail, email or newspaper adverts. All relevant organs of state will also be notified. All documentation will be in English. As part of the ongoing process, the following stakeholder groups have initially been identified as I&AP's:

#### Authorities and Organs of State

The following organs of state have been identified as applicable:

- $\rightarrow$  Cape Nature
- → Department of Environmental Affairs and Development Planning
- → Department of Agriculture
- → Overberg District Municipality
- $\rightarrow$  Overstrand Municipality

#### Other

- → Directly adjacent landowners
- → Ratepayers, conservation groups and other applicable organisations
- $\rightarrow$  Any other Interested and Affected Parties

The public participation for the project will be undertaken in line with Regulation 41(2) of the National Environmental Management Act (Act 107 of 1998) Environmental Impact Assessment Regulations (2014) as amended.

In summary, the following actions will be applied as required at various stages in the EIA process:

- 1. English advertisements will be placed in the local newspaper notifying potential Interested and Affected Parties (I&AP's) of the proposed development.
- 2. All relevant Organs of State will notified via their standard administrative processes and procedures

- 3. All potential I&AP's directly adjacent to the subject property, as well as relevant ratepayers' associations and conservation groups will be notified via email or other means, as required
- 4. English noticeboards will be placed at visible areas on site
- 5. A Register for all I&AP's will be opened
- 6. A Comments and Response Report, in order to formally record and respond to all I&AP comments, will also be opened.
- 7. A 30 day public participation period will be provided on this report

## 9. ENVIRONMENTAL ISSUES

The Scoping specialist assessments conducted to date have highlighted possible constraints on site. Any further issues raised during public participation will be included in the final Scoping Report and Environmental Impact Assessment Report (EIAR) and addressed accordingly.

## 9.1.Potential issues

Various considerations need to be assessed when applying for development approvals, these broadly include:

#### Biophysical

- → Botanical (impact of development footprint on the flora of the site, loss of biodiversity, loss of ecosystem functioning, ecological corridors the allowance of ecological processes to continue in an optimal manner via corridors and open spaces)
- → Faunal (importance of ecological corridors to facilitate movement of faunal species across and within the site, impact of perimeter fence and permeability thereof, construction of formal roads may result in faunal mortalities due to an increase in traffic and motor vehicle speed)

#### Heritage &Visual

- → Visual impacts, corridors, lighting, residential infrastructural design
- → Archaeological (Impact of proposed development on sensitive heritage resources on site)
- $\rightarrow$  Palaeontological (impact of the development on paleontological resources)
- $\rightarrow$  Permit from Heritage Western Cape is complete and valid.

#### Socio-economic

- → Socio-economic (contributions to job creation, poverty alleviation, integration, economic interventions, community projects)
- $\rightarrow$  Availability of external services.
- $\rightarrow$  Traffic impact (Impact on existing roads, primary access).

#### Need and desirability

 $\rightarrow$  A need for the proposed development, scale of development.

## 9.2. Cumulative impacts

Section 24(4) of the National Environmental Management Act (NEMA) requires the consideration of cumulative impacts as part of any environmental assessment process.

The most important impacts which are considered to be cumulative in nature include:

- → Cumulative impact on flora and ecological connectivity
- → Cumulative impact on faunal aspects
- $\rightarrow$  Cumulative impact on the hydrogeological environment
- $\rightarrow$  Cumulative impact on traffic
- $\rightarrow$  Cumulative impact on external services
- $\rightarrow$  Cumulative impact on the social environment
- $\rightarrow$  Cumulative impact on the economic environment
- → Cumulative impact on the visual, heritage and archaeological environment

#### 9.3. Construction Phase Impacts

The construction phase is likely to result in a number of impacts, these could potentially include:

- $\rightarrow$  Socio-economic benefits and impacts
- $\rightarrow$  Disturbance of flora / fauna and ecological integrity
- → Disturbance of visual aesthetics
- $\rightarrow$  Potential disturbance of archaeology and heritage
- $\rightarrow$  Noise and dust pollution

The significance of the construction phase impacts is likely to be limited by their relatively short duration. Construction phase impacts can be mitigated through the implementation of an Environmental Management Plan (EMP). During the Environmental Impact Report (EIR) phase, the construction phase impacts on the biophysical and socio-economic environment will be assessed.

#### Socio-economic impacts

Temporary and permanent job creation during the construction phase of the proposed development will occur. The existing informal parts of the property will no longer provide access this site. Commercial and small-scale business opportunities will be provided, to which the general public will have access.

#### Flora and ecological connectivity

Sensitive vegetation areas on site, identified by the Botanical Baseline Assessment are to be mitigated as per Botanical specialist recommendations.

#### Disturbance of visual aesthetics

Construction phase visual impacts are typical of any urban or peri urban development site. The proposed development area is currently flanked by urban development on its western boundary, and it is undeveloped, and with vacant farmland on its eastern boundary. During construction, effort to control the unnecessary disturbance of soils and vegetation outside approved development area on site, must be implemented. Construction areas must be kept tidy and controlled. Waste disposal areas must be screened and cleared as required. stockpile areas must be monitored and dispersal by wind and rain must be prevented.

All visual guidelines and principles are to be followed closely to prevent such impacts during both the construction and operational phases.

#### Potential disturbance of archaeology and heritage

Various Archaeological occurrences were mapped during the baseline assessment, suggesting an archeologically sensitive site. Various mitigation measures will be required in order to mitigate any potential impacts during construction and operational phases. More archaeological occurrences are expected during the site preparation, clearing and construction phases, and suitable response plans are required when this occurs.

#### Noise and dust pollution

Construction activities associated with the proposed development will result in both dust and noise pollution during this phase of development. These impacts will be short term, as long as the construction activities last and appropriate mitigation measures will be included in the Environmental Management Plan (EMP) for Construction.

## 9.4. Operational Phase Impacts

The proposed residential development will have a long-term Operational phase resulting in potential long-term impacts on the environment. Assessment of impacts that may result in the irreversible loss of sensitive habitat and ecological functioning is an important component of this EIA process. The following possible impacts were identified through specialist input:

#### Faunal / botanical aspects

The principles of implementing appropriate ecological corridors and subsequent maintenance and management thereof, is important for ensuring the long-term functioning of the natural system. All proposed conservation / natural areas are important and appropriate management will be required to ensure that these areas do not deteriorate over time. Suitable buffer is to be considered where required as appropriate, which may contribute to preservation of ecological corridors for the movement of faunal species between areas earmarked for conservation zone. Domestic pets may disturb naturally occurring fauna, and trampling of conservation areas and sensitive vegetation areas by users and domestic animals may occur.

#### Visual

Various Visual guidelines have been recommended to ensure that the operational phase does not cause any significant visual impacts during the phase. The characteristics of the property potentially allow for the creation of a model development based

on principles of sustainable settlement with conservation. In order to achieve this, the visual constraints and guidelines put forward are to be implemented and maintained throughout the Operational phase.

Lighting impacts may also occur at night from the proposed development, mitigation measures will be recommended in order to reduce this impact.

#### Heritage / Archaeological

The proposed development area exists in an archeologically sensitive landscape. Some intact heritage and archaeological resources exist on site and a management plan in order to avoid further degradation of these significant sites is to be implemented and monitored during the operational phase in order to minimise loss of these significant resources.

#### Socio-economic

Various socio-economic benefits are envisaged for the proposed development. Long- and short-term job creation will be generated during the operational phase.

#### Services

The proposed development and preferred site development was, however guided by the existence of municipal services some of which are crossing the site and will be expanded to the proposed development site. The site will be graded in order to ensure that the internal sewerage reticulation system can be collected at two positions within the proposed development. The sewage from the proposed development will be transported to the existing sewage treatment plant via an underground piped system. The proposed external sewage pipe system will be designed to ensure that the existing De Kelders area can be connected to the proposed system.

## 9.5. Studies to be completed during the EIA phase

Comprehensive baseline assessments were conducted during the Scoping phase of the project. All possible impacts will be assessed and rated by these qualified specialists in the Environmental Impact Assessment Report (EIAR). Mitigation measures for all possible impacts will be determined.

# **10. PLAN OF STUDY FOR EIA**

## 10.1. Tasks to be undertaken

The following is a list of tasks to be performed as part of the EIA Process. Should the process be modified significantly, DEA&DP and registered I&APs will be notified.

### Table 6. Project Plan for EIA

EIA PROCESS	DURATION	DATE
Submit Notice of Intent (NOI)	Completed	-
Compile Draft Scoping Report and Plan of Study for EIA	On going	March 2025
Public participation process on draft Scoping Report	30 days	April 2025
Preparation of Comments and Response report		May 2025
Preparation of Final Scoping Report		TBC
Submission of Application Form for EA		TBC
Public participation process on Final Scoping Report		TBC
Submit Final Scoping Report and Plan of Study for EIA to DEA&DP		TBC
Acceptance of Scoping Report and Plan of Study for EIA		TBC
Detailed specialist impact assessment studies		TBC
Compile Draft EIAR		TBC
Public participation process on Draft EIAR		TBC
Preparation of Comments and Response report		TBC
Finalize EIAR		TBC
Public Participation on Final EIAR		TBC
Submit Final EIAR to DEA&DP		TBC
Environmental Authorisation		TBC
Appeal Period		TBC
NEMA appeal		ТВС

## 10.2. Methodology to be followed

The Department of Environmental Affairs and Development Planning (DEA&DP) will be notified of the public participation opportunity. All registered I&AP's and all relevant Organs of State will be notified of the commenting period for the Final Scoping Report. This will be made available for a 30-day period. Once the final round of PPP is complete, the Final Scoping Report, along with the Plan of Study for EIA will be submitted to DEA&DP.

Once accepted, the Environmental Impact Assessment Report (EIAR) phase will commence. Full copies of the Draft Scoping Report will be available at the on the company's website (<u>www.lornay.co.za</u>) for public viewing. I&APs will be notified by means of registered mail and / or reliable email if applicable.

## **10.3.** Criteria for specialist assessment of impacts

Further specialist work will be undertaken during the EIA phase to provide information to address the concerns identified during the Scoping Process and identify and rate the impacts of the proposed development on the environment. The initial specialist input indicating opportunities and constraints for development on site have provided baseline information. This information has been used by the planning team to inform the current development proposal. The specialists are provided with set criteria for undertaking their assessments, to allow for comparative assessment of all issues and impacts. These criteria are detailed in the Terms of Reference to each specialist.

These criteria include:

#### Nature of the impact

This is an appraisal of the type of effect the construction, operation and maintenance of a development would have on the affected environment. This description should include what is to be affected and how.

#### Extent of the impact

The specialist should describe whether the impact will

- Be local, extending only as far as the development site area
- Be limited to the site and its immediate surroundings
- Will have an impact on the region
- Will have an impact on a national scale
- Will have an impact across international borders.

#### Duration of the impact

The specialist should indicate whether the lifespan of the impact would be short term (0-5 years), medium term (5-15 years), long term (16-30 years) or permanent.

#### Intensity

The specialist should establish whether the impact is destructive or benign and should be qualified as low, medium or high. The specialist study must attempt to quantify the magnitude of the impacts and outline the rationale used.

#### Probability of occurrence

The specialist should describe the probability of the impact actually occurring and should be described as improbable (low likelihood), probable (distinct possibility), highly probable (most likely) or definite (impact will occur regardless of any prevention measures).

The impacts should also be assessed in terms of the following aspects:

#### Legal requirements

The specialist should identify and list the relevant South African legislation and permit requirements pertaining to the development proposals. He / she should provide reference to the procedures required to obtain permits and describe whether the development proposals contravene the applicable legislation.

#### Status of the impact

The specialist should determine whether the impacts are negative, positive or neutral ("cost – benefit" analysis). The impacts are to be assessed in terms of their effect on the project and the environment. For example, an impact that is positive for the proposed development may be negative for the environment. It is important that this distinction is made in the analysis.

#### **Cumulative impact**

Consideration must be given to the extent of any cumulative impact that may occur due to the proposed development. Such impacts must be evaluated with an assessment of similar developments already in the environment. Such impacts will be either positive or negative, and will be graded as being of negligible, low, medium or high impact.

#### Degree of confidence in predictions

The specialist should state what degree of confidence (low, medium or high) is there in the predictions based on the available information and level of knowledge and expertise.

Based on a synthesis of the information contained in the above-described procedure, the specialist is required to assess the potential impacts in terms of the following significance criteria:

*No significance:* The impacts do not influence the proposed development and/or environment in any way.

*Low significance:* The impacts will have a minor influence on the proposed development and/or environment. These impacts require some attention to modification of the project design where possible, or alternative mitigation.

*Moderate significance:* The impacts will have a moderate influence on the proposed development and/or environment. The impact can be ameliorated by a modification in the project design or implementation of effective mitigation measures.

*High significance:* The impacts will have the "no-go" implication on the development or portions of the development regardless of any mitigation measures that could be implemented. This level of significance must be well motivated.

 Table 7. Criteria for evaluation of impacts

CRITERIA	CATEGORY	DESCRIPTION
EXTENT or Spatial influence of impact	Regional (R)	Beyond 5km of the proposed development
	Local (L)	Within 5 km of the proposed development
	Site specific (SS)	On site or within 100 m of the site boundary.
MAGNITUDE of NEGATIVE IMPACT (at the indicated spatial scale)	High (H)	Bio-physical and/ or social functions and/ or processes are <i>severely</i> altered.
	Medium (M)	Bio-physical and/ or social functions and/ or processes are <i>notably</i> altered.
	Low(L)	Bio-physical and/ or social functions and/ or processes are <i>slightly</i> altered.
	Very Low (VL)	Bio-physical and/ or social functions and/ or processes are <i>negligibly</i> altered
	Zero (Z)	Bio-physical and/ or social functions and/ or processes remain <i>unaltered</i> .
MAGNITUDE of POSITIVE IMPACT (at the indicated spatial scale)	High (H)	Bio-physical and/ or social functions and/ or processes are <i>vastly</i> enhanced.
	Medium (M)	Bio-physical and/ or social functions and/ or processes are <i>notably</i> enhanced.
	Low(L)	Bio-physical and/ or social functions and/ or processes are <i>slightly</i> enhanced.
	Very Low (VL)	Bio-physical and/ or social functions and/ or processes are <i>negligibly</i> enhanced.
	Zero (Z)	Bio-physical and/ or social functions and/ or processes remain <i>unaltered</i> .
DURATION of impact	Construction (C)	Up to 2 years.
	Short Term (S)	0-5 years (after construction).
	Medium Term (M)	5-15 years (after construction).
	Long Term (L)	More than 15 years (after construction).
of occurrence	Definite (D)	>95% chance of the potential impact occurring.

	Probable (Pr)	20% - 95% chance of the potential impact occurring
	Possible (Po)	5% - 20% chance of the potential impact occurring
	Improbable (Im)	<5% chance of the potential impact occurring.
CONFIDENCE	Certain (C)	More than adequate amount of information and understanding of
levels		the bio-physical and/ or social functions and/ or processes that
levels		the bio-physical and/ of social functions and/ of processes that
		may potentially influence the impact.
	Sure (S)	Reasonable amount of information and understanding of the
		biophysical and/ or social functions and/ or processes that may
		notentially
		influence the impact.
	Unsure (U)	Limited amount of information and understanding of the bio-
		nhysical and/or social function

## Table 8. Definition of significance ratings

SIGNIFICANCE RATINGS	LEVEL OF CRITERIA REQUIRED
High (H)	<ul> <li>High magnitude with a regional extent and long-term duration</li> </ul>
	<ul> <li>High magnitude with either a regional extent and medium-term duration or a local extent and long-term duration</li> </ul>
	<ul> <li>Medium magnitude with a regional extent and long-term duration.</li> </ul>
Medium (M	<ul> <li>High magnitude with a local extent and medium-term duration</li> </ul>
	<ul> <li>High magnitude with a regional extent and short-term duration or a site-specific extent and long-term duration</li> </ul>
	<ul> <li>High magnitude with either a local extent and short-term duration or a site-specific extent and medium-term duration</li> </ul>
	<ul> <li>Medium magnitude with any combination of extent and duration except site specific and short term or regional and long term</li> </ul>
	<ul> <li>Low magnitude with a regional extent and long-term duration.</li> </ul>
Low (L)	<ul> <li>High magnitude with a site-specific extent and short-term duration</li> </ul>
	<ul> <li>Medium magnitude with a site-specific extent and short-term duration</li> </ul>
	<ul> <li>Low magnitude with any combination of extent and duration except site specific and short term</li> </ul>
	<ul> <li>Very low magnitude with a regional extent and long-term duration.</li> </ul>
Very low (VL)	<ul> <li>Low magnitude with a site-specific extent and short-term duration</li> </ul>
	<ul> <li>Very low magnitude with any combination of extent and duration except regional and long term.</li> </ul>

Neutral (N)	<ul> <li>Zero magnitude with any combination of extent and duration</li> </ul>

### **10.4.** Briefs for Specialist Studies undertaken as Part of the EIA

Comprehensive baseline assessments were undertaken by each specialist as part of the Scoping Phase of the proposed development. Here the specialist input is mainly focused on gathering reference information regarding the respective disciplines and identifying conservation areas, potential developable areas and buffer zones. As part of the Environmental Impact Assessment Report (EIAR), specialists will be required to predict, assess and rate all potential impacts, including both positive and negative, of the proposed development and the various alternatives put forward. Management actions and monitoring programmes are to be recommended, which will be included in the EIAR as well as the Environmental Management Programme (EMPr). Impacts are to be rated, and mitigation measures put forward can range from layout / design alternatives, management options or potential trade-offs or offsets as applicable. Mitigation measures are to be feasible and auditable, thus capable of being measured.

Objectives of mitigation measures include:

- → Avoidance Avoiding activities that may result in adverse impacts, avoidance of certain types of resources, or areas
- → Minimisation Limiting the degree, extent, magnitude or duration of any predicted impacts
- → Rehabilitation Repair or enhancement of affected resources
- → Restoration Restoration of affected resources to an earlier stage, ideally pristine, or as acceptable
- → Compensation/Offset Creation, enhancement or protection of the same type of resource at another suitable and acceptable location, thereby compensating for lost resources.

#### **10.5.** Heritage Impact Assessment

The original Heritage Permit is still valid as confirmed by Heritage Western Cape in November 2024 and is valid for 5 years from this date. All recommended conditions of the approval of the Heritage Permit must be carried forward.

#### 10.6. Botanical and Ecological Impact Assessment

The Botanical Impact Assessment is to assess the alternatives put forward and identify any potential threats and impacts, including both positive and negative, that may arise from the preferred alternative. Furthermore mitigation measures for these impacts should be recommended and fed into the Environmental Management Plan (EMP), if these are not design related, in order to ensure minimal impact. Should alterations on the Site Development Plan (SDP) be required, these changes are to be reflected and will require reassessment by all specialists involved. All the potential negative as well as positive impacts on flora that would result from the proposed development and associated alternatives and will include mitigation measures to reduce significant negative impacts as well as measures that would enhance the positive impacts. All mitigation measures put forward are to be feasible and auditable.

Nick Helme is the appointed Botanical and Ecological Specialist for the project.

## 10.7. Aquatic Biodiversity

An Aquatic Biodiversity Compliance statement was undertaken during the Scoping phase, in line with the requirements of the Protocols and DFFE Screening Tool and Report. No watercourses or wetlands identified by the baseline study.

Delta Ecology conducted the Aquatic Biodiversity Compliance Statement. No further Freshwater Assessment will be required for the Environmental Impact Assessment process.

## 10.8. Visual Impact Assessment

The Visual Impact Assessment (VIA) will consider the potential negative as well as positive impacts, including cumulative impacts, that would result from the proposed development and will include mitigation measures to reduce the negative visual impacts as well as measures that would enhance the positive impacts. Impact identification and impact ratings are to be undertaken for all the alternatives put forward. Practical mitigation measures are to be recommended in order to reduce or enhance any potential impacts. Should these mitigation measures include design related measures, the entire specialist team is to review the new / amended alternatives.

The Visual Impact Assessment for the proposed project was undertaken by Bruce Eitzen of New World Associates. Since the Heritage Permit is still valid, the impact assessment will not be updated.

## 10.9. Archaeological and Paleontological Impact Assessment

The original Heritage Permit is still valid as confirmed by Heritage Western Cape in November 2024 and is valid for 5 years from this date. All recommended conditions of the approval of the Heritage Permit as well as the Archaeological Impact Assessment must be carried forward. A new Archaeological Impact Assessment and Paleontological Impact Assessment will not be required.

## 10.10. Socio-economic

The Socio-Economic Impact Statement aims to determine the potential socio-economic impact of the proposed residential development on the Overstrand Community and the suburb of De Kelders, Gansbaai. Potential benefits and negative impacts as a result of the proposed development will be examined. Methods for the optimization of positive impacts generated from the proposed development are to be explored further. Mitigation methods, from layout alternatives, management options and trade-offs are to be determined, and included in the EMP. It is recommended that the Socio-Economic report be updated to include current scenarios.

## **11. ENVIRONMENTAL MANAGEMENT PROGRAMME**

An Environmental Management Programme (EMPr) can be defined as "an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the project are enhanced", (Lochner 2005). The aim of the EMPr is to ensure that mitigation of negative impacts and the enhancement of positive impacts is achieved effectively during the entire project process. All management actions are to be clearly defined within the EMPr in order to ensure that the principles of effective environmental management are achieved throughout the project, including the construction, operation and decommissioning phases. The generic scope of an EMPr should ideally include the following in order to ensure that the objectives of the EMPr are met, these include:

- → Definition of the environmental management objectives to be realised during the life of the project from preconstruction, construction, operation and decommissioning there by ensuring maximization of positive impacts and reduction of negative impacts.
- $\rightarrow$  Description of the detailed actions required to achieve these objectives, including how these can be achieved.
- → Clarification of institutional structures, roles, communication and reporting processes required as part of the implementation of the EMPr.
- $\rightarrow$  Description of the link between the EMPr and associated legislated requirements.
- → Description of requirements for record keeping, reporting, review, auditing and updating of the EMPr. The EMPr will accompany the EIAR report and largely based on the mitigation measures proposed within the EIA report, as well as any additional requirements which may be stipulated as part of the Record of Decision (ROD).

The EMPr will be drafted and accompany the EIAR, including mitigation measures and recommendations described by the various specialists on the team. The EMPr is a legally binding document and forms an agreement between the local authority and the developer that all recommendations therein will be adhered to during either the construction or operational phases.

# **12. AUTHORITY CONSULTATION**

The relevant decision-making authority / Competent Authority for the purposes of the application in terms of section 24 of NEMA, Department of Environmental Affairs and Development Planning, as well as the National Department of Environmental Affairs (DEA) will be contacted during the following stages of the EIA Process:

- → Submission of Draft Scoping Report
- $\rightarrow$  Submission of Final Scoping Report
- $\rightarrow$  Submission of Draft EIA Report
- $\rightarrow$  Submission of Final EIA Report

# **13. CONCLUSIONS AND RECOMMENDATIONS**

The Scoping exercise was undertaken in order to present concept proposals to all potential Interested and Affected Parties (I&AP's) and identify all potential environmental issues and concerns regarding the proposed development. This Scoping Report summarises the process undertaken to date, and highlights further steps required to complete the Environmental Impact Assessment (EIA). The report presents and assesses the alternatives considered and uses the comprehensive baseline assessments as planning tools to guide the planning of the proposed development, in order to identify all potential opportunities and constraints onsite and ensure minimal impacts occur.

The major issues arising from the Scoping Process relate to the ecological sensitivity and the impact of the proposed development on the specific property and surrounds.

The following specialists will be consulted further during the application procedure. Note that some of these studies are existing and will merely require a confirmation from the original specialist relating to its validity to the current situation on the site and surrounds:

- → Botanical / Ecological
- $\rightarrow$  Faunal
- → Traffic Impact Assessment
- → Socio-Economic Impact Assessment
- → Engineering (Including Services and Electricity)

The significance of the positive and negative impacts associated with the alternatives proposed will be assessed in these specialist studies, as part of the EIA phase. Comments received will be used to inform the specialist's studies and will be addressed by the relevant specialists as part of the Final Scoping Report and the next phase of the EIA process. Once the impact assessment studies have been completed, they will be summarised in a Draft Environmental Impact Assessment Report (EIAR), which will integrate the findings of the assessment phase of the EIA.