











DRAFT BASIC ASSESSMENT REPORT

for

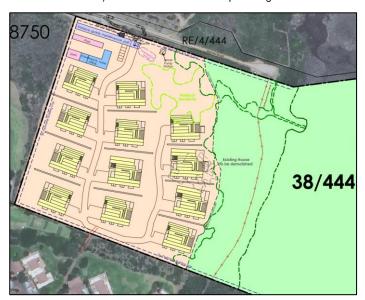
KEURBOOMS LIFESTYLE VILLAGE

on

Portion 38 of Farm Ganse Vallei 444, Plettenberg Bay

In terms of the

National Environmental Management Act (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations



<u>Prepared for Applicant:</u> Intergreen (Pty) Ltd

Date: 24 October 2024

<u>Appointed EAP:</u> Ms Louise-Mari van Zyl (EAPASA Reg: 2019/1444)

<u>Assisting Candidate EAP:</u> Mr François Byleveld (EAPASA Reg: 2023/6770)

Appointed EAP E-mail: louise@cape-eaprac.co.za

Assisting Candidate EAP E-mail: francois@cape-eaprac.co.za

Report Reference: BIT729/09

Department Reference: 16/3/3/1/D1/6/0035/24

Case Officer: Dorien Werth

Cape \mathcal{EAP} rac

Cape Environmental Assessment Practitioners

Tel: +27 44 874 0365 PO Box 2070, George 6530 Fax: +27 44 874 0432 17 Progress Street, George

www.cape-eaprac.co.za



APPOINTED ENVIRONMENTAL ASSESSMENT PRACTITIONER:

Cape EAPrac Environmental Assessment Practitioners

PO Box 2070

George

6530

Tel: 044-874 0365

<u>Appointed EAP:</u> **Ms Louise-Mari van Zyl** (MA Geography & Environmental Science [US]; EAPSA Registration Number **2019/1444**). Ms van Zyl has over twenty years' experience as an environmental practitioner.

<u>Assisted By - Candidate EAP:</u> **Mr Francois Byleveld** (MSc Geology [University of the Free State] (Candidate EAPASA Registration Number: **2023/6770**) in assistance to the Appointed EAP.

PURPOSE OF THIS REPORT:

Draft Basic Assessment Report

APPLICANT:

Intergreen (Pty) Ltd

CAPE EAPRAC REFERENCE NO:

BIT729/09

SUBMISSION DATE

24 October 2024

DRAFT BASIC ASSESSMENT REPORT

in terms of the

National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended & Environmental Impact Regulations 2014

Keurbooms Lifestyle Village

Portion 38 of Farm Ganse Vallei 444, Plettenberg Bay

Submitted for:

Stakeholder Review & Comment

This report is the property of the Author/Company, who may publish it, in whole, provided that: Written approval is obtained from the Author and that *Cape EAPrac* is acknowledged in the publication;

- Cape EAPrac is indemnified against any claim for damages that may result from any publication
 of specifications, recommendations or statements that is not administered or controlled by Cape
 EAPrac;
- The contents of this report, including specialist/consultant reports, may not be used for purposes of sale or publicity or advertisement without the prior written approval of Cape EAPrac;
- Cape EAPrac accepts no responsibility by the Applicant/Client for failure to follow or comply
 with the recommended programme, specifications or recommendations contained in this report;
- Cape EAPrac accepts no responsibility for deviation or non-compliance of any specifications or recommendations made by specialists or consultants whose input/reports are used to inform this report; and
- All figures, plates and diagrams are copyrighted and may not be reproduced by any means, in any form, in part or whole without prior written approved from *Cape EAPrac*.

Report Issued by:

Cape Environmental Assessment Practitioners

Tel: 044 874 0365 17 Progress Street

Web: www.cape-eaprac.co.za

6530

PO Box 2070

George

ORDER OF REPORT

Draft Basic Assessment Report

Appendix A1: Locality Maps

Appendix A2: Coastal Risk Zones

Appendix B1: Site Development Plan

Appendix B2: Site Development Plan With Environmental Sensitivities

Appendix C: Photographs

Appendix D: Biodiversity Overlay Maps

Appendix E1: Final Comment From HWC

Appendix E2: Comment From CapeNature

Appendix E3: Comment From BOCMA

Appendix E4: Comment From DEA Oceans and Coast

Appendix E5: Comment From DFFE

Appendix E6: Comment From WCG Transport and Public Works

Appendix E7: Comment From Department of Agriculture

Appendix E12: Comment From DEA&DP on Pre-App DBAR

Appendix E15: Comment From Bitou Municipality

Appendix E16: Confirmation of Services

Appendix E21: Zoning Map

Appendix F1: Registered I&AP List

Appendix F2: Adverts and Site Notices

Appendix F3: Stakeholder Notifications (to be updated for Final BAR)

Appendix F4: Stakeholder Comments

Appendix F5: Comments and Response Report

Appendix G1: Aquatic Biodiversity Compliance Statement

Appendix G2: Terrestrial Biodiversity Impact Assessment (Dr David Hoare)

Appendix G3: Terrestrial Biodiversity and Botanical Compliance Statement (Benjamin Walton)

Appendix G4: Botanical Compliance Statement

Appendix G5: Faunal Compliance Statement

Appendix G6: Heritage Impact Assessment

Appendix G7: Planning Report

Appendix G8: Engineering Services Report

Appendix G9: Traffic Impact Assessment

Appendix H: Draft Environmental Management Programme

Appendix I: Screening Tool Report

Appendix L: Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) Confirmation of the

designation of Portion 38 of Farm 444

Appendix M: Notice of Intent to Develop to Heritage Western Cape (Pipeline infrastructure in N2

and Rietvlei Road road reserves.

CONTENTS

7	GENERAL PROJECT DESCRIPTION	ЭE
22	SECTION A: ADMINISTRATIVE DETAILS	
	SECTION B: CONFIRMATION OF SPECIFIC PROJECT DETAILS AS II APPLICATION FORM	
32	SECTION C: LEGISLATION/POLICIES AND/OR GUIDELINES/PROTOCOLS	
40	SECTION D: APPLICABLE LISTED ACTIVITIES	
45	SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY	
61	SECTION F: PUBLIC PARTICIPATION	
81	SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT	
ERNATIVES96	SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALT	
SURES 115	SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEA	
120	SECTION J: GENERAL	
125	SECTION K: DECLARATIONS	

TABLE OF FIGURES

Figure 1: Locality map of Portion 38 of Farm Ganse Vallei 444 (CapeFarmMapper, 2023)8
Figure 2: Preferred site development plan (Marike Vreken Urban & Environmental Planners,
2023)9
Figure 3: Zoning map of Portion 38 of Farm Ganse Vallei 444 (BitouMunicipalityPublicGISViewer,
2023)
Figure 4: Minimum items required to accommodate the proposed development in the existing
Plettenberg Bay sewer system. The GLS report worked on the original 17 unit proposal which
has since been reduced following the outcome of the environmental process (GLS Consulting,
2022)11
Figure 5: N2 road reserve (left) and Rietvlei Road road reserve (right). Required sewage
infrastructure to be installed within the transformed areas of the road reserve

Figure 6: Minimum required upgrade to the existing 75mm diameter pipeline within the Rietvlei
Road road reserve to comply with the fire flow criteria. Note that the original 17 unit proposal
considered by GLS has since been reduced to 12 units but it still indicated as the original 17
units on their plans (GLS Consulting, 2022)12
Figure 7: 160mm diameter water pipeline to be installed aboveground from the Goose Valley
Reservoir to the existing distribution main in the N2 road reserve (red line) (GLS Consulting,
2023)
Figure 8: Proposed resurfacing of existing asphalt portions as well as placement of new asphalt
on gravel section of Rietvlei Road (Vita Consulting Engineers, 2023)25
Figure 9: Existing pedestrian trails and fence line with sensitivity designations
Figure 10: Extract from Bitou Spatial Development Framework (2021)52
Figure 11: Critical Biodiversity Area Map and Ecological Support Area map in relation to the
proposed development property (CapeFarmMapper, 2023)53
Figure 12: Coastal Protection Zone (orange line) and Coastal Management Line (pink line) in
reference to Portion 38 of Farm Ganse Vallei 44454
Figure 13: Site elevation showing the development area on the elevated portion of the site vs
the lower lying portion of the site where the site effectively becomes part of the estuary56
Figure 14: Delineated estuary with 33m buffer zone83
Figure 15: SANBI Red List of Ecosystems map in relation to the proposed development site
(CapeFarmMapper, 2023)88
Figure 16: Habitats identified on Portion 38 of Farm 444 (David Hoare Consulting, 2024)89
Figure 17: Terrestrial Biodiversity Sensitivities for Portion 38 of Farm 444 (David Hoare Consulting,
2024)89
Figure 18: Terrestrial Plant Species sensitivities identified for Portion 38 of Farm 444 (David Hoare
Consulting, 2024)
Figure 19: Protected tree survey. CW = Cheesewood. MW = Milkwood (David Hoare
Consulting)91
Figure 20: Two broad habitats identified within the road reserves being Transformed Habitat
(yellow area) and Disturbed Dune Thicket (green area)
Figure 21: Proposed site development plan (Marike Vreken Urban & Environmental Planners,
2023)
Figure 22: Original site development plan
Figure 23: Delineated estuary habitat with 33m buffer zone considered as No-Go areas 107



Department of Environmental Affairs and Development Planning

DRAFT BASIC ASSESSMENT REPORT

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

APRIL 2024



Department of Environmental Affairs and Development Planning

DRAFT BASIC ASSESSMENT REPORT

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

APRIL 2024

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

GENERAL PROJECT DESCRIPTION

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

Intergreen (Pty) Ltd, hereafter referred to as the Applicant, proposes to develop a **low density residential estate**, with private amenities, on **Portion 38 of Farm Ganse Vallei 444** (total property size 8.58ha), Plettenberg Bay (Bitou Municipality, Western Cape Province). The development allows for private, inhouse care and support should ill/elderly residents require such services.

The property is situated east of the N2 national road and is bordered by the Goose Valley Golf Estate (west/south), Keurbooms Estuary (east) and the Meadows Residential Estate (north-west), as well as private residential development directly north of the site.

<u>Status Quo:</u> A large **single residential dwelling** with landscaped gardens surrounding the structure overlooking the estuary is present on the property. There are also **existing stables** and **paddocks** in the south-western corner of the property that is significantly more transformed. The property was **historically** used for **keeping horses and grazing activities** (Figure 1).

Portion 38 of Farm Ganse Vallei 444 is currently zoned **Agriculture Zone I** (Figure 3) and it is the intention of the applicant to subdivide the property into two (2) portions and rezone these portion to:

- Residential Zone II portions for erven (3.17ha equating to 36% of the site) and
- Open Space Zone III portion as private nature area (5.41ha equating to 64% of the site) (Figure 2).

The proposed development within the **Residential Zone II portion** will entail the following infrastructure:

- Twelve (12) x sectional title group housing units, each with a double garage and two (2) additional parking bays. Each unit will cover ~655m² and will therefore calculate to 1.39 units per hectare over the entire site.
- Entrance gate (existing from Rietvlei Road).
- Guard house.
- Maintenance and staff rooms.
- Communal areas (clubhouse, conference room, gym, pool, doctor/nurse office and admin office).
- Six (6) x visitor parking bays at the communal buildings / facilities.
- Internal access roads (5.5m wide).
- External services (water line and sewer line within road reserves as part of Municipal infrastructure).

No development is proposed in the Open Space Zone portion (~5.41ha) although existing pedestrian trails will be maintained. Although not initially considered as an option by the Applicant as part of this application, there is also the option of considering a split zoning allowing for **Open Space III** along the slope down to the Estuary and **Open Space IV** (for the Very High Sensitive, lower lying portion of the property that extends to the Keurbooms Estuarine area that is technically deemed to be below the highwater mark of the sea).

Vehicular access to the proposed development will be directly from Rietvlei Road (Minor Road 7214) within the existing 9.45m wide right of way servitude (across Portion 4 of Farm 444) along the northern boundary of Portion 38 of Farm Ganse Vallei 444. The Rietvlei Road connects directly with the N2 National Road and is an existing tar road that provides access to numerous residential properties along this road. At the bottom of Rietvlei Road (cul-de-sac) there is an existing public parking area from where the general public access the Estuary on foot. The property currently has access off Rietvlei Road.

The proposed development will be a sectional title development (no subdivision), and therefore all the outdoor spaces are considered communal **open space** that must be **maintained by the development**

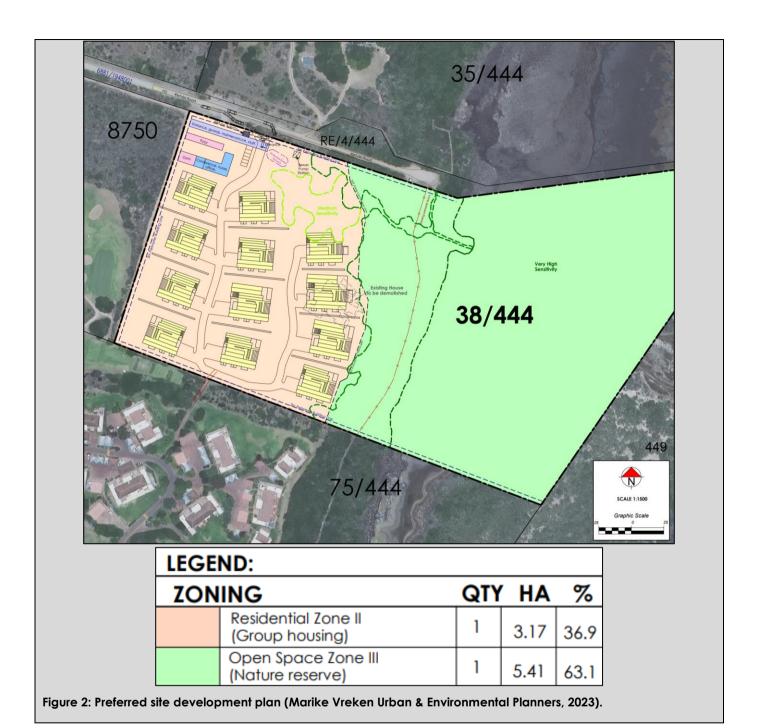
(Applicant/Managing Agent/Body Corporate) in perpetuity. The majority of the property remains undeveloped (~5.41 ha) and will be zoned Open Space with other internal recreational open space areas limited within the less sensitive Residential Zone II portion on the top flat portion of the site.

The proposed units have been specifically positioned within the transformed, flat portion of the site which avoids higher sensitive areas identified by the independent biodiversity / botanical / faunal/ aquatic specialist studies.

All existing buildings/structures which do not form part of the newly proposed development (paddocks, entrance gate, dwelling) will be demolished.



Figure 1: Locality map of Portion 38 of Farm Ganse Vallei 444 (CapeFarmMapper, 2023).



DRAFT BASIC ASSESSMENT REPORT: APRIL 2024

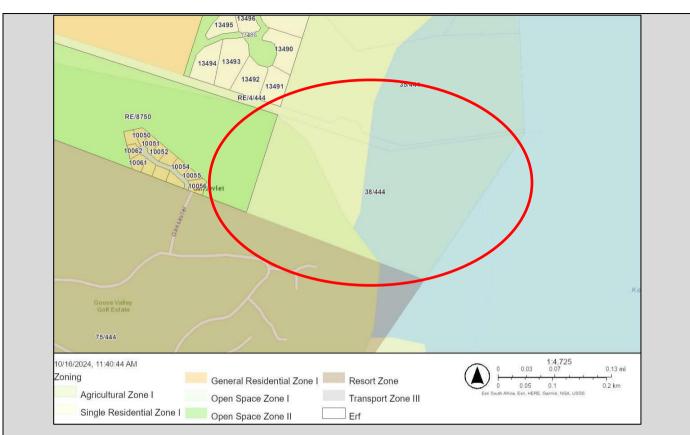


Figure 3: Zoning map of Portion 38 of Farm Ganse Vallei 444 (BitouMunicipalityPublicGISViewer, 2023).

<u>Sewage Network:</u> The proposed development will be accommodated within the existing Goose Valley Main pumping station drainage area. According to the appointed Engineer, the existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application, the following **additional infrastructure** will be required **to connect** the proposed development to the existing municipal sewer system (Figure 4):

- Private **pump station on Portion 38** of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- New rising main pipeline (75mm diameter, approximately **470m long**) in the **Rietvlei Road road** reserve (Item 5 in Figure 4).
- New outfall sewer pipeline (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).
- New outfall sewer pipeline (250mm diameter, approximately **445m long**) in the **N2 road reserve** (Item 7 in Figure 4) where it will connect to the existing Goose Valley main pump station.

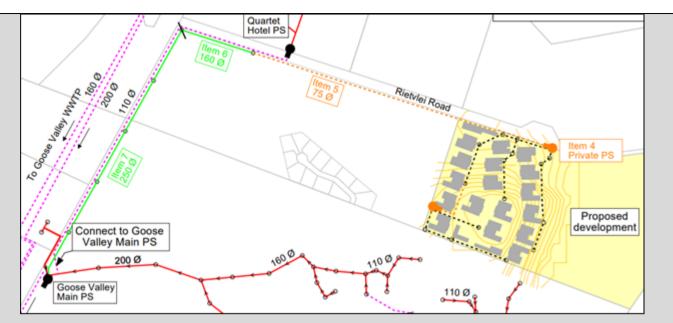


Figure 4: Minimum items required to accommodate the proposed development in the existing Plettenberg Bay sewer system. The GLS report worked on the original 17 unit proposal which has since been reduced following the outcome of the environmental process (GLS Consulting, 2022).



Figure 5: N2 road reserve (left) and Rietvlei Road road reserve (right). Required sewage infrastructure to be installed within the transformed areas of the road reserve.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6MI per day and is currently at an average daily discharge volume of 5.8MI (confirmed by Bitou Municipality). According to Bitou Municipality the remaining 0.2MI is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate most new developments. However, due to the small scale of the proposed development, **Bitou Municipality confirmed**, on 15 August 2024 that they **can still accommodate this proposed low residential development** on Pt 38/444 within the **available spare capacity** of the Ganse Vallei Wastewater Treatment Works without compromising the allocation for low cost housing projects.

The proposed internal sewage network (160mm diameter uPVC gravity pipe network with round precast concrete ring manholes) will drain towards the new proposed private sewer pumpstation on the northern boundary of Portion 38/444.

<u>Water Network:</u> The proposed development will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road Road reserve.

According to the GLS (municipal) services investigation, the existing **75mm diameter pipe** in Rietvlei Road Road reserve needs to be **upgraded to a 110mm diameter pipe** (extending approximately **220m** long) in the Rietvlei Road reserve in order to comply with the **fire flow criteria** (Item 1 in Figure 6).

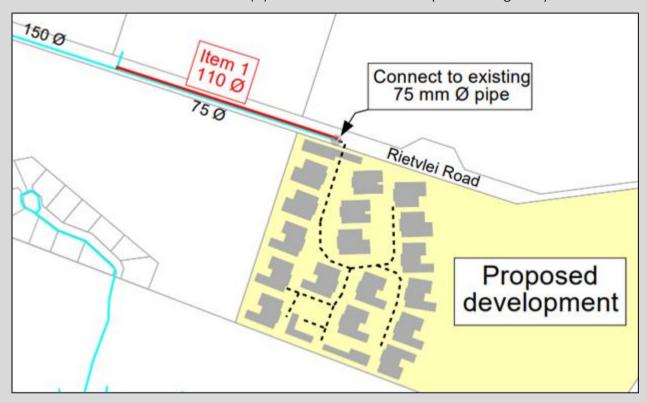


Figure 6: Minimum required upgrade to the existing 75mm diameter pipeline within the Rietvlei Road road reserve to comply with the fire flow criteria. Note that the original 17 unit proposal considered by GLS has since been reduced to 12 units but it still indicated as the original 17 units on their plans (GLS Consulting, 2022).

The internal water reticulation system will be a metered network consisting of a combined domestic and fire water reticulation network (75mm diameter uPVC Class 12 potable water main). Provision will be made inside erf boundaries of every property for individual water meters (located 1m inside each erf boundary).

Extract from Civil Engineering Report compiled by Vita Consulting Engineers regarding water supply to the proposed development: "The bulk water system to the Goose Valley, Wittedrift and Matjiesfontein reservoirs is at capacity and must be upgraded according to the Bitou master plan before additional developments within the reservoir supply areas can be accommodated".

GLS Consulting Engineers (on behalf of the Bitou Municipality), provided the following temporary solution as part of their master planning:

• Re-instatement of a temporary 160Ømm bulk main off the existing 160mm distribution main in the N2 road reserve, will free up 860kl/day water supply (there are two municipal water lines in the existing municipal water servitude running from the Reservoir back to the N2 connections, however one of the lines have been defunct/damaged for some time – reinstating this line on the surface will effectively replace the defunct pipeline – refer to footnote for more details).

• This capacity rectification will accommodate the development demand for Farm 444/38 (this application), Farm 304/32 and RE/6503¹.

According to Vita Consulting Engineers, implementation of this temporary solution is to be undertaken by the developer of Erf Portion 19 and 27 of Farm 444 (construction on this development commenced June 2024 and services infrastructure installation is scheduled for the remainder of 2024).

The GLS option for a temporary solution including a 160mm diameter pipeline of approximately 460m in length, is to be re-instated, till the Municipality has its bulk water supply network capacity funding for further upgrades. It will be installed above ground, following the existing water servitude that runs from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (Figure 7).

The existing servitude already contains a 200mm and 250mm diameter underground pipelines (of which one is defunct – refer to footprint for further details).

This temporary pipeline will be re-instated in short 2.4m sections that will be welded together on site. The implementation of the temporary solutions does not entail earthworks, or the removal of vegetation, although trimming of vegetation to clear the route is anticipated and must be monitored by an ECO.

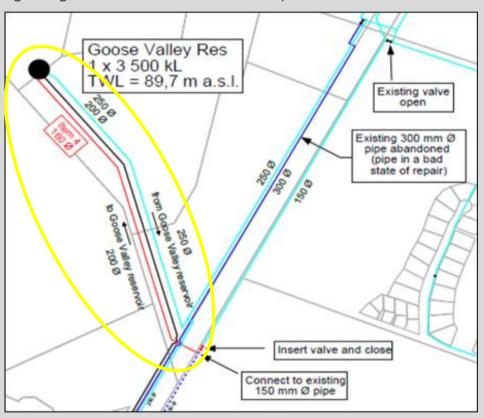


Figure 7: 160mm diameter water pipeline to be installed aboveground from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (red line) (GLS Consulting, 2023).

-

There are two existing water pipelines in the servitude. One meant to supply the reservoir of water and the other meant to distribute water from the reservoir out into the water network. One of the lines however is defunct and has not been functioning resulting in the Municipality having to rely on a single line for both supply (filling the reservoir with water) and distribution (getting water from the reservoir into the water network). The fact that one of the existing lines cannot be used requires the Municipality to use the one remaining line to fill the reservoir at night (associated with less to no demand) and then stopping supply to switch the same line to distribution during day hours (when there is continuous demand). As a result, there is always insufficient time to fill the reservoir completely resulting in water restriction. By installing the temporary surface line, the function of supply and distribution can be re-started again, hence the 860kl/day 'capacity' created in this manner, stems from the reservoir being able to be filled completely (to provide in distribution demands) coupled with no interruption between supply to the reservoir and distribution to the network.

Roads and Parking Areas:

The internal road network will be a **5.5m wide brick paved road** with formal kerbs/edgings, roadside channels and a stormwater drainage network. Internal roads will not be subdivided and will form part of the communal areas maintained by the Body Corporate of the proposed development.

It is proposed for **the gravel parts** of **Rietvlei Road** to be **hard surfaced** within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced should the Municipality require such as part of the services agreement details.

Existing access to Portion 38 of Farm Ganes Vallei 444 to be permanently closed and shifted slightly towards the south-east in order to be in line with engineering requirements.

Stormwater:

The pre-development site drains from the central portion (highest point on the property) towards the north-western and southern boundaries. No formal bulk municipal stormwater infrastructure is available in vicinity of the property. Due to the high permeability of the insitu dune sands, **stormwater runoff permeates into the subsoil layers** and therefore a formalised bulk stormwater connection is not required for the proposed development.

An **open swale stormwater network** will be designed which will have sufficient capacity to manage and convey up to a 1:5 year rainfall event. The open swale stormwater **network will follow the road network** and will have inlet structures and pipe culverts at road crossings. If a rainfall event with a return period larger than 1:5 year occurs, the internal roadways will act as **overland flow routes** which will convey stormwater run-off towards the lower lying eastern portion of the property.

Provision will be made for a **subsoil drainage network beneath the internal roads**. The subsoil drainage network will consist of a 110mm diameter perforated pipe network installed 800mm below the final road level.

Due to the poor cohesion of the dune sands, the following erosion preventative erosion measures will be included in the stormwater design:

- Minimize the concentration of stormwater to prevent high flow rates.
- Route run-off from hard surfaces into swales.
- Promote sheet flow into open swales.
- Formalise (armorflex) channels with an internal velocity more than 1m/s.
- Landscape unlined channels with appropriate vegetation.
- Install energy dissipation structures at high energy discharge points.

Solid Waste:

The collection of domestic waste from individual housing units will be **administrated by the homeowners association / body corporate** of the proposed development. Solid waste will be transferred to a small communal **refuse storage** located at the **entrance** of the proposed development from where it will be **removed as per the Municipal waste collection** schedule. Adequate turning space for a standard refuse truck has been incorporated in the proposed entrance design.

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

- 1. **The purpose** of this template is to provide a format for the Basic Assessment report as set out in Appendix 1 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), Environmental Impact Assessment ("EIA") Regulations, 2014 (as amended) in order to ultimately obtain Environmental Authorisation.
- 2. The Environmental Impact Assessment ("EIA") Regulations is defined in terms of Chapter 5 of the National Environmental Management Act, 19998 (Act No. 107 of 1998) ("NEMA") hereinafter referred to as the "NEMA EIA Regulations".
- 3. Submission of documentation, reports and other correspondence:

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

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

DEADPEIAAdmin@westerncape.gov.za

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

DEADPEIAAdmin.George@westerncape.gov.za

Directorate: Development Management (Region 3): Garden Route District Municipal area and Central Karoo District Municipal area

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

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

- 4. The required information must be typed within the spaces provided in this Basic Assessment Report ("BAR"). The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided.
- 5. All applicable sections of this BAR must be completed.
- 6. Unless protected by law, all information contained in, and attached to this BAR, will become public information on receipt by the Competent Authority. If information is not submitted with this BAR due to such information being protected by law, the applicant and/or Environmental Assessment Practitioner ("EAP") must declare such non-disclosure and provide the reasons for believing that the information is protected.
- 7. This BAR is current as of **April 2024**. It is the responsibility of the Applicant/ EAP to ascertain whether subsequent versions of the BAR have been released by the Department. Visit this

Department's website at http://www.westerncape.gov.za to check for the latest version of this BAR.

- 8. This BAR is the standard format, which must be used in all instances when preparing a BAR for Basic Assessment applications for an environmental authorisation in terms of the NEMA EIA Regulations when the Western Cape Government Department of Environmental Affairs and Development Planning ("DEA&DP") is the Competent Authority.
- 9. Unless otherwise indicated by the Department, one hard copy and one electronic copy of this BAR must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Reasonable access to copies of this Report must be provided to the relevant Organs of State for consultation purposes, which may, if so indicated by the Department, include providing a printed copy to a specific Organ of State.
- 10. This BAR must be duly dated and originally signed by the Applicant, EAP (if applicable) and Specialist(s) and must be submitted to the Department at the details provided below.
- 11. The Department's latest Circulars pertaining to the "One Environmental Management System" and the EIA Regulations, any subsequent Circulars, and guidelines must be taken into account when completing this BAR.
- 12. Should a water use licence application be required in terms of the National Water Act, 1998 (Act No. 36 of 1998) ("NWA"), the "One Environmental System" is applicable, specifically in terms of the synchronisation of the consideration of the application in terms of the NEMA and the NWA. Refer to this Department's Circular EADP 0028/2014: One Environmental Management System.
- 13. Where Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA") is triggered, a copy of Heritage Western Cape's final comment must be attached to the BAR.
- 14. The Screening Tool developed by the National Department of Environmental Affairs must be used to generate a screening report. Please use the Screening Tool link https://screening.environment.gov.za/screeningtool to generate the Screening Tool Report. The screening tool report must be attached to this BAR.
- 15. Where this Department is also identified as the Licencing Authority to decide on applications under the National Environmental Management: Air Quality Act (Act No. 29 of 2004) ('NEM:AQA"), the submission of the Report must also be made as follows, for-Waste Management Licence Applications, this report must also (i.e., another hard copy and electronic copy) be submitted for the attention of the Department's Waste Management Directorate (Tel: 021-483-2728/2705 and Fax: 021-483-4425) at the same postal address as the Cape Town Office.

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

CAPE TOWN OFFICE: DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 1) {City of Cape Town, West Coast District, Cape Winelands District & Overberg District} GEORGE REGIONAL OFFICE: DIRECTORATE: DEVELOPMENT MANAGEMENT (REGION 3) (Central Karoo District & Garden Route District)

The completed Form must be sent via electronic mail to:

DEADPEIAAdmin@westerncape.gov.za

Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: DEADPEIAAdmin@westerncape.gov.za Tel: (021) 483-5829

Western Cape Government
Department of Environmental Affairs and
Development Planning
Attention: Directorate: Development Management
(Region 1)
Private Bag X 9086
Cape Town,
8000

The completed Form must be sent via electronic mail to: DEADPEIAAdmin.George@westerncape.gov.za

Queries should be directed to the Directorate: Development Management (Region 3) at:

E-mail: <u>DEADPEIAAdmin.George@westerncape.gov.za</u> Tel: (044) 814-2006

Western Cape Government

Department of Environmental Affairs and Development

Planning

Attention: Directorate: Development Management

(Region 3)

Private Baa X 6509

George,

6530

MAPS

Provide a location map (see below) as Appendix A1 to this BAR that shows the location of the proposed development and associated structures and infrastructure on the property.

Locality Map:

The scale of the locality map must be at least 1:50 000.

For linear activities or development proposals of more than 25 kilometres, a smaller scale e.g., 1:250 000 can be used. The scale must be indicated on the map.

The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any:
- road names or numbers of all the major roads as well as the roads that provide access to the site(s)
- a north arrow;
- a legend; and
- a linear scale.

For ocean based or aquatic activity, the coordinates must be provided within which the activity is to be undertaken and a map at an appropriate scale clearly indicating the area within which the activity is to be undertaken.

Where comment from the Western Cape Government: Transport and Public Works is required, a map illustrating the properties (owned by the Western Cape Government: Transport and Public Works) that will be affected by the proposed development must be included in the Report

Provide a detailed site development plan / site map (see below) as Appendix B1 to this BAR; and if applicable, all alternative properties and locations.

Site Plan:

Detailed site development plan(s) must be prepared for each alternative site or alternative activity. The site plans must contain or conform to the following:

- The detailed site plan must preferably be at a scale of 1:500 or at an appropriate scale. The scale must be clearly indicated on the plan, preferably together with a linear scale.
- The property boundaries and numbers of all the properties within 50m of the site must be indicated on the site plan.
- On land where the property has not been defined, the co-ordinates of the area in which
 the proposed activity or development is proposed must be provided.
- The current land use (not zoning) as well as the land use zoning of each of the adjoining
 properties must be clearly indicated on the site plan.
- The position of each component of the proposed activity or development as well as any
 other structures on the site must be indicated on the site plan.
- Services, including electricity supply cables (indicate aboveground or underground), water supply pipelines, boreholes, sewage pipelines, storm water infrastructure and access roads that will form part of the proposed development <u>must</u> be clearly indicated on the site plan.
- Servitudes and an indication of the purpose of each servitude must be indicated on the site plan.
- Sensitive environmental elements within 100m of the site must be included on the site plan, including (but not limited to):
 - o Watercourses / Rivers / Wetlands
 - o Flood lines (i.e., 1:100 year, 1:50 year and 1:10 year where applicable);

	 Coastal Risk Zones as delineated for the Western Cape by the Department of Environmental Affairs and Development Planning ("DEA&DP"): Ridges; Cultural and historical features/landscapes; Areas with indigenous vegetation (even if degraded or infested with alien species). Whenever the slope of the site exceeds 1:10, a contour map of the site must be submitted. North arrow A map/site plan must also be provided at an appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred and alternative sites indicating any areas that should be avoided, including buffer areas.
Site photographs	Colour photographs of the site that shows the overall condition of the site and its surroundings (taken on the site and taken from outside the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached to this BAR as Appendix C . The aerial photograph(s) should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.
Biodiversity Overlay Map:	A map of the relevant biodiversity information and conditions must be provided as an overlay map on the property/site plan. The Map must be attached to this BAR as Appendix D .
Linear activities or development and multiple properties	GPS co-ordinates must be provided in degrees, minutes and seconds using the Hartebeeshoek 94 WGS84 co-ordinate system. Where numerous properties/sites are involved (linear activities) you must attach a list of the Farm Name(s)/Portion(s)/Erf number(s) to this BAR as an Appendix. For linear activities that are longer than 500m, please provide a map with the co-ordinates taken every 100m along the route to this BAR as Appendix A3 .

ACRONYMS

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

ATTACHMENTS

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

The following checklist of attachments must be completed.

APPENDIX			√ (Tick) or x (cross)			
	Maps					
	Appendix A1:	Appendix A1: Locality Map				
Appendix A:	Appendix A2:	Coastal Risk Zones as delineated in terms of ICMA for the Western Cape by the Department of Environmental Affairs and Development Planning	✓			
	Appendix A3:	Map with the GPS co-ordinates for linear activities	х			
	Appendix B1:	Site development plan(s)	✓			
Appendix B:	Appendix B2	A map of appropriate scale, which superimposes the proposed development and its associated structures and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffer areas;	√			
Appendix C:	Photographs	Photographs Biodiversity overlay map				
Appendix D:	Biodiversity over					
		Permit(s) / license(s) / exemption notice, agreements, comme State Department/Organs of state and service letters from the mur				
	Appendix E1:	Final comment/ROD from HWC	✓			
	Appendix E2:	Comment from Cape Nature	✓			
	Appendix E3:	Comment From BOCMA	✓			
Appendix E:	Appendix E4:	Comment from the DEA: Oceans and Coast	✓			
	Appendix E5:	Comment from the DFFE	√			
	Appendix E6:	Comment from WCG: Transport and Public Works	✓			
	Appendix E7:	Comment from WCG: DoA	✓			

	Appendix E8:	Comment from WCG: DH\$	x
	Appendix E9:	Comment from WCG: DoH	x
	Appendix E10:	Comment from DEA&DP: Pollution Management	x
	Appendix E11:	Comment from DEA&DP: Waste Management	x
	Appendix E12:	Comment from DEA&DP	✓
	Appendix E13:	Comment from DEA&DP: Air Quality	x
	Appendix E14:	Comment from DEA&DP: Coastal Management	x
	Appendix E15:	Comment from Bitou Municipality	✓
	Appendix E16:	Confirmation of all services (water, electricity, sewage, solid waste management)	✓
	Appendix E17:	Comment from the District Municipality	✓
	Appendix E18:	Copy of an exemption notice	x
	Appendix E19	Pre-approval for the reclamation of land	x
	Appendix E20:	Proof of agreement/TOR of the specialist studies conducted.	x
	Appendix E21:	Proof of land use rights	✓
	Appendix E22:	Proof of public participation agreement for linear activities	x
Appendix F:	register of I&APs, to of notices, advert	on information: including a copy of the the comments and responses Report, proof isements and any other public mation as is required.	✓
Appendix G:	Specialist Report(Specialist Report(s) EMPr	
Appendix H:	EMPr		
Appendix I:	Screening tool rep	port	✓

Appendix J: (See main report)	The impact and risk assessment for each alternative		
Appendix K: (See main report)	Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline	x	
Appendix L:	Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) Confirmation of the designation of Erf 2841	✓	
Appendix M:	Notice of Intent to Develop to Heritage Western Cape (Pipeline infrastructure in N2 and Rietvlei Road road reserves.	✓	

SECTION A: ADMINISTRATIVE DETAILS

	CAPE TOWN OFFICE: REGION 1			GEORGE OFFICE: BEGION 3		
Highlight the Departmental Region in which the intended application will fall	{City of Cape {Cape Winelands District & Overberg District}			(Central Karoo District & Garden Route District)		
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Intergreen (Pty) Ltd					
Name of contact person for Applicant/Proponent (if other):	Nils Brink van Zyl					
Company/ Trading name/State Department/Organ of State:	Intergreen (Pty) L	td				
Company Registration Number:	2002 / 01332 / 07					
Postal address:	PO Box 55265, No	orthlands				
			Post	al code: 2116		
Telephone:	()		Cell: 083 271 6095			
E-mail:	nils@intergreen.co.za christopher@intergreen.co.za		Fax:	Fax: ()		
Company of EAP:	Cape Environmental Assessment Practitioners (Cape EAPrac)					
Appointed EAP name:	Ms Louise-Mari van Zyl					
Assisting Candidate EAP name:	Mr Francois Bylev	eld				
Postal address:	PO Box 2070, Geo	orge				
			Postal code: 6530			
Telephone:	044 874 0365		Cell: 071 603 4132			
Appointed EAP E-mail:	louise@cape-eap	orac.co.za	Fax: ()			
Assisting Candidate EAP E-mail:	francois@cape-e	aprac.co.za	a			
Appointed EAP Qualifications:	MA Geography & Environmental Science (US)			ience (US)		
Assisting Candidate EAP Qualifications:	MSc Geology (UFS)					
Appointed EAP registration no:	2019/1444					
Assisting Candidate EAP registration no:	2023/6770					

Duplicate this section where there is more than one landowner Name of landowner:	True Motives 99 (Pty) Ltd			
Name of contact person for landowner (if other):	Nils Brink van Zyl			
Postal address:	PO Box 55265, Northlands			
	Postal code: 2116			
Telephone: E-mail:	()	Cell: 083 271 6095		
2	nils@intergreen.co.za	Fax: ()		
Name of Person in control of	Same As Applicant			
the land: Name of contact person for person in control of the land:				
Postal address:				
		Postal code:		
Telephone:	()	Cell:		
E-mail:		Fax: ()		
Duplicate this section where there is more than one Municipal Jurisdiction Municipality in whose area of jurisdiction the proposed activity will fall:	Bitou Municipality			
Contact person:	Chris Schlieman			
Postal address:				
		Postal code: 6600		
Telephone	044 501 3324	Cell:		
E-mail:	cschliemann@plett.gov.za			

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

1.	Is the proposed development (please tick):	New	✓	Expansion	İ
2. Is the proposed site(s) a brownfield of greenfie		eld site? Please exp	ain.		

Brownfield site.

Portion 38 of Farm Ganse Vallei 444 contains a large single residential dwelling (to be demolished) with extended landscaped/garden areas around the house. Existing stables and paddocks, as well as existing perimeter fencing, and an access road are in place.

Existing municipal services and access are already available servicing the primary dwelling. Limited upgrades will be required to allow for servicing of the 12 proposed units.

The property has previously been utilised for grazing, horse paddocks and contains natural vegetation in the areas not previously transformed.

3. For Linear activities or developments

3.1. Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:

Sewage pipelines (proposed extension along Rietvlei Road and N2):

Rietvlei Road road reserve (Portion 4 of Remainder of Farm 444).

Portion 128 of Farm 444 (N2 road reserve).

Portion 127 of Farm 444 (N2 road reserve).

Portion 126 of Farm 444 (N2 road reserve).

Portion 125 of Farm 444 (N2 road reserve).

Water pipeline upgrade of existing water line in Rietvlei Road road reserve:

Rietvlei Road road reserve (Portion 4 of Remainder of Farm 444).

Route for new link water pipeline installation to Goose Valley Reservoir:

Portion 72 of Farm 444.

Portion 73 of Farm 444.

Portion 122 of Farm 444 (N2 road reserve for connection to the existing municipal water line).

Resurfacing of existing asphalt and placement of new asphalt in Rietvlei Road:

Rietvlei Road road reserve (Portion 4 of Remainder of Farm 444).

3.2. Development footprint of the proposed development for all alternatives.

Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.

Sewage pipelines:

The following infrastructure will be required to connect the internal sewer system of the proposed development to the existing Municipal sewer system (Figure 4):

- New private pump station on Portion 38 of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- Rising main (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 4).
- Outfall sewer (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).

DRAFT BASIC ASSESSMENT REPORT: APRIL 2024

• Outfall sewer (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure 4).

Areas where the line need to be installed are transformed and fall within registered road reserves.

Water pipeline upgrade in Rietvlei Road road reserve:

Replace a portion of the existing 75mm diameter pipe in Rietvlei Road road reserve with a 110mm diameter pipe (approximately 220m long) in order to comply with the fire flow criteria (Item 1 in Figure 6).

Areas where the line need to be installed are fully transformed and fall within registered road reserves that are maintained by the roads authorities.

Water link pipeline installation at Goose Valley Reservoir:

Installation of 160mm (approximately 460m long) link line off the existing 160mm distribution main in the N2 road reserve up to the existing Goose Valley reservoir. This route will impact on natural vegetation along a steep slope.

Resurfacing of existing asphalt and placement of new asphalt in Rietvlei Road:

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced (Figure 8).

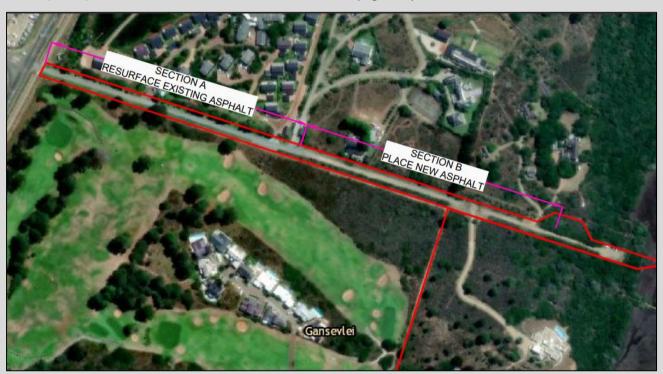


Figure 8: Proposed resurfacing of existing asphalt portions as well as placement of new asphalt on gravel section of Rietvlei Road (Vita Consulting Engineers, 2023).

3.4. Indicate how access to the proposed routes will be obtained for all alternatives.

Access to the proposed pipeline routes will be obtained from the Rietvlei Road as well as the N2 national road via the existing main access route on the property that currently serves the main dwelling.

	SG	Digit					
3.5.	codes	of					
	the						
	Farms/Farm						
	Portions/Erf						
	numbe	rs					

for alternativ	all es																					
Rietvlei Roo road reserv (Portion 4 Remainder of Farm 444).	e of	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	0	0	4	
Portion 128 (Farm 444 (N road reserve	2	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	1	2	8	
Portion 127 (Farm 444 (Noroad reserve	2	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	1	2	7	
Portion 126 (Farm 444 (Noroad reserve	2	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	1	2	6	
Portion 125 (Farm 444 (Noroad reserve	2	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	1	2	5	
Portion 72 (Farm 444.	of C	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	0	7	2	
Portion 73 (Farm 444.	of C	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	0	7	3	
Portion 122 of Farm 444 (No road reserve for connection to the existing municipal water line).	2 e o	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	1	2	2	
3.6. Starting	point	co-	ordino	ates f	or a	ll al	terno	ıtive	s (S	ewe	r Pip	eline	•)									
Latitude	(S)						34°						01′				26,28"					
Longitue	de (E)						23°						23′					1	3,82	2''		
Middle	oint c	:0-0	rdina	tes fo	r all	alt	erna	tive	s (Se	ewer	wer Pipeline)											
Latitude	(S)						34°						01′					2	21,08	3"		
Longitue	de (E)						23°				22'							5	54,3	l"		
End poi	nt co-c	ordii	nates	for a	ll alt	ern	ative	s (S	ewe	er Pip	elin	e)				ı						
Latitude	(S)						34°						01′				34,92"					

	23°	22'	45,70"					
Starting point co-ordin	ates for all alternatives (Wo	ater pipeline upgrades in R	ietvlei Road road reser					
Latitude (S)	34°	01'	26.08"					
Longitude (E)	23°	23'	12.80"					
Middle point co-ording	ates for all alternatives (Wa	ter pipeline upgrades in Ri	etvlei Road road reserv					
Latitude (S)	34°	01'	24.88"					
Longitude (E)	23°	23'	08.72"					
End point co-ordinates	for all alternatives (Water	pipeline upgrades in Rietv	lei Road road reserve)					
Latitude (S)	34°	01'	23.94"					
Longitude (E)	23°	23'	04.96"					
Starting point co-ordinates for all alternatives (Preferred Route: Water pipeline in: Valley Reservoir)								
Valley Reservoir)								
Latitude (S)	34°	01'	49.17"					
Longitude (E)	23°	22'	17.31"					
Middle point co-ordine Valley Reservoir)	ates for all alternatives (P	referred Route: Water pipe	eline installation at Go					
	ates for all alternatives (Pr	referred Route: Water pipe	eline installation at God 54.79"					
Valley Reservoir)								
Valley Reservoir) Latitude (\$) Longitude (E)	34° 23°	01'	54.79" 22.60"					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates	34° 23°	01' 22'	54.79" 22.60"					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir)	34° 23° for all alternatives (Preferr	01' 22' ed Route: Water pipeline in	54.79" 22.60" stallation at Goose Val					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir) Latitude (S)	34° 23° for all alternatives (Preferr	01' 22' ed Route: Water pipeline in	54.79" 22.60" stallation at Goose Val					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir) Latitude (S) Longitude (E)	34° 23° for all alternatives (Preferr	01' 22' ed Route: Water pipeline in 02' 22'	54.79" 22.60" stallation at Goose Val					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir) Latitude (S) Longitude (E)	34° 23° for all alternatives (Preferr 34° 23°	01' 22' ed Route: Water pipeline in 02' 22'	54.79" 22.60" stallation at Goose Val					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir) Latitude (S) Longitude (E) Starting point co-ordinates	34° 23° for all alternatives (Preferr 34° 23° ates for all alternatives (Up	01' 22' ed Route: Water pipeline in 02' 22'	54.79" 22.60" stallation at Goose Val 02.87" 25.15"					
Valley Reservoir) Latitude (S) Longitude (E) End point co-ordinates Reservoir) Latitude (S) Longitude (E) Starting point co-ordinates Co-ordin	34° 23° for all alternatives (Preferr 34° 23° ates for all alternatives (Up	oli 22' ed Route: Water pipeline in 02' 22' grade of Rietvlei Road) 01' 23'	54.79" 22.60" stallation at Goose Val 02.87" 25.15"					

	Longitude (E)	23°	23'	05.16"							
	End point co-ordinates for all alternatives (Upgrade of Rietvlei Road)										
	Latitude (S)	34°	01'	20.84"							
	Longitude (E)	23°	22'	54.36"							
Note	Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must										

be attached to this BAR as Appendix A3.

4.	Other developments	
4.1.	Property size(s) of all proposed site(s):	8.58ha
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable):	
4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	~3.17ha
	Provide a detailed description of the proposed development and its associated infrastructure (This must include de	etails of e.a.

4.4. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities). Intergreen (Pty) Ltd, hereafter referred to as the Applicant, proposes to develop a low density residential estate, with private amenities, on Portion 38 of Farm Ganse Vallei 444 (8.58ha), Plettenberg Bay (Bitou

Municipality, Western Cape Province). The development allows for private, in-house care and support should ill/elderly residents require such services.

The property is situated east of the N2 national road and is bordered by the Goose Valley Golf Estate (west/south), Keurbooms Estuary (east) and the Meadows Residential Estate (north-west), as well as private residential development directly north of the site.

A large single residential dwelling with landscaped gardens surrounding the structure overlooking the estuary exist on the property. There are also existing stables and paddocks in the south-western corner of the property that is significantly more transformed. The property was historically used for keeping horses and grazing activities (Figure 1).

Portion 38 of Farm Ganse Vallei 444 is currently zoned Agriculture Zone I and it is the intention of the applicant to subdivide the property into two (2) portions and rezone these portion to:

- Residential Zone II portion (3.17ha equating to 36% of the site) and
- Open Space Zone III portion (5.41 ha equating to 64% of the site) likely to be restricted to the slope town towards the Estuary (technically the remainder below the high-water-mark could be deemed as State Land) (Figure 2).

The proposed development within the **Residential Zone II portion** will entail the following infrastructure:

- Twelve (12) x sectional title group housing units (single storey), each with a double garage and two (2) additional parking bays. Each unit will cover ~655m² and will therefore calculate to 1.39 units **per hectare** over the entire site.
- Entrance gate (from Rietvlei Road).
- Guard house.
- Maintenance and staff rooms.
- Communal areas (clubhouse, conference room, gym, pool, doctor/nurse office and admin office).
- Six (6) x visitor parking bays at the communal buildings / facilities.
- Internal access roads (5.5m wide).
- External services (water line and sewer line within road reserves as part of Municipal infrastructure).

Importantly no formal development is proposed in the Open Space Zone III portion (~5.41ha) although existing pedestrian trails will be maintained.

Vehicular access to the proposed development will be directly from Rietvlei Road (Minor Road 7214) within a 9.45m wide right of way servitude (Portion 4 of Farm 444) along the northern boundary of Portion 38 of Farm Ganse Vallei 444. The Rietvlei Road connects directly with the N2 National Road and is an existing tar road. At the bottom of Rietvlei Road there is an existing public parking area from where the general public can access the estuary.

The proposed development will be a sectional title development (no subdivision), and therefore all the outdoor spaces are considered communal open space that must be maintained by the development (Applicant/Managing Agent/Body Corporate) in perpetuity. Given that a large portion (~5.41 ha) of the property will be zoned 'Open Space Zone' with other internal recreational open space areas limited within the proposed Residential Zone II portion on the top flat portion of the site.

The proposed units have been specifically positioned within the transformed, flat portion of the site which avoids higher sensitive areas identified by the independent biodiversity / botanical / faunal/ aquatic specialist studies, as well as on-site input from Department of Forestry (joint site inspection with Mrs Melanie Koen, inspection undertaken on 22 July 2024).

All existing buildings/structures which do not form part of the newly proposed development (paddocks, entrance gate, dwelling) will be demolished.

<u>Sewage Network:</u> The proposed development will be accommodated within the existing Goose Valley Main pumping station drainage area. The existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application, the following additional infrastructure will be required to connect the proposed development to the existing municipal sewer system:

- Private pump station on Portion 38 of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- Rising main (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 4).
- Outfall sewer (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).
- Outfall sewer (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure
 4) where it will connect to the existing Goose Valley main pump station.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6MI per day and is currently at an average daily discharge volume of 5.8MI. According to Bitou Municipality the remaining 0.2MI is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed on 15 August 2024 that it can accommodate the proposed development on Pt 38/444 within the Ganse Vallei Wastewater Treatment Works without compromising the spare capacity allocations for low-cost housing.

The proposed internal sewage network (160mm diameter uPVC gravity pipe network with round precast concrete ring manholes) will drain towards the new proposed private sewer pumpstation on the northern boundary of Portion 38/444.

<u>Water Network:</u> The proposed development will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road road reserve.

According to the GLS (municipal) services investigation, the 75mm diameter pipe in Rietvlei Road road reserve needs to be upgraded to a 110mm diameter pipe (extending approximately 220m long) in the Rietvlei Road reserve in order to comply with the fire flow criteria (Item 1 in Figure 6).

The internal water reticulation system will be a metered network consisting of a combined domestic and fire water reticulation network (75mm diameter uPVC Class 12 potable water main). Provision will be made inside erf boundaries of every property for individual water meters (located 1m inside each erf boundary).

Extract from Civil Engineering Report compiled by Vita Consulting Engineers regarding water supply to the proposed development: "The bulk water system to the Goose Valley, Wittedrift and Matjiesfontein reservoirs is at capacity and must be upgraded according to the Bitou master plan before additional developments within the reservoir supply areas can be accommodated".

GLS Consulting Engineers (on behalf of the Bitou Municipality), provided the following temporary solution as part of their master planning:

- Installation of a temporary 160\pmm bulk main off the existing 160mm distribution main in the N2 road reserve, will free up 860kl/day² water supply.
- This capacity rectification will accommodate the development demand for Farm 444/38 (this application), Farm 304/32 and RE/6503.

According to Vita Consulting Engineers, implementation of this temporary solution is to be undertaken by the developer of Erf Portion 19 and 27 of Farm 444 (construction on this development commenced June 2024).

The 160mm diameter pipeline of approximately 460m in length, is to be installed as a temporary measure till the Municipality has its bulk water supply network capacity funding for further upgrades. It will be installed above ground, following the existing water servitude that runs from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (Figure 7).

The existing servitude already contains a 200mm and 250mm diameter underground pipelines (of which one is defunct).

The temporary pipeline is to be installed in short 2.4m sections that will be welded together on site. The implementation of the temporary solutions does not entail earthworks, or the removal of vegetation, although trimming of vegetation to clear the route is anticipated.

Roads and Parking Areas:

The internal road network will be a 5.5m wide brick paved road with formal kerbs/edgings, roadside channels and a stormwater drainage network. Internal roads will not be subdivided and will form part of the communal areas maintained by the Body Corporate of the proposed development.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced (Figure 8).

Stormwater:

The pre-development site drains from the central portion (highest point on the property) towards the north-western and southern boundaries. No formal bulk municipal stormwater infrastructure is available in vicinity of the property. Due to the high permeability of the insitu dune sands, stormwater runoff permeates into

DRAFT BASIC ASSESSMENT REPORT: APRIL 2024 Page 30 of 127

the subsoil layers and therefore a formalised bulk stormwater connection is not required for the proposed development.

An open swale stormwater network will however be designed which will have sufficient capacity to manage and convey up to a 1:5 year rainfall event. The open swale stormwater network will follow the road network and will have inlet structures and pipe culverts at road crossings. If a rainfall event with a return period larger than 1:5 year occurs, the internal roadways will act as overland flow routes which will convey stormwater run-off towards the lower lying eastern portion of the property.

Provision will be made for a subsoil drainage network beneath the internal roads. The subsoil drainage network will consist of a 110mm diameter perforated pipe network installed 800mm below the final road level.

Due to the poor cohesion of the dune sands, the following erosion preventative measures will be included in the stormwater design:

- Minimize the concentration of stormwater to prevent high flow rates.
- Route run-off from hard surfaces into swales.
- Promote sheet flow into open swales.
- Formalise (armorflex) channels with an internal velocity more than 1m/s.
- Landscape unlined channels with appropriate vegetation.
- Install energy dissipation structures at high energy discharge points.

Solid Waste:

The collection of domestic waste from individual housing units will be administrated by the homeowners association / body corporate of the proposed development. Solid waste will be transferred to a communal refuse storage located at the entrance of the proposed development from where it will be removed as per the Municipal waste collection schedule. Adequate turning space for a standard refuse truck has been incorporated in the proposed entrance design.

4.5. Indicate how access to the proposed site(s) will be obtained for all alternatives.

Access to the proposed development will be obtained from the Rietvlei Road as well as the N2 national road via the existing main access route on the property that currently serves the main dwelling. The existing entrance to Portion 38 of Farm 444 is to be closed permanently. The proposed new entrance is located slightly towards the east of the existing entrance, to be in line with the engineering requirements for the proposed development. Hard surfacing of Rietvlei Road will extend up to the point of the newly proposed access intersection.

	4.6.	SG Digit code(s) of the proposed site(s) for all alternatives:	С	0	3	9	0	0	0	0	0	0	0	0	0	4	4	4	0	0	0	3	8
		Coordinates of the proposed site(s) for all alternatives:																					
4.7.	4.7.	Latitude (S)										3	3 4 °	01'					29.47"				
		Longitude (E)								23° 23'							14.22"						

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

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

1	Has exemption been applied for in terms of the NEMA and the NEMA EIA Regulations. If yes, include a copy	VEC	NO
	of the exemption notice in Appendix E18.	+113	NO

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

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	YES	NO
The National Heritage Resources Act, 1999 (Act No. 25 of 1999) ("NHRA"). If yes, attach a copy of the comment from Heritage Western Cape as Appendix E1.	YES	OH
The National Water Act, 1998 (Act No. 36 of 1998) ("NWA"). If yes, attach a copy of the comment from the DWS as Appendix E3.	YES	NO
The National Environmental Management: Air Quality Act, 2004 (Act No. 39 of 2004) ("NEM:AQA"). If yes, attach a copy of the comment from the relevant authorities as Appendix E13.	YES	NO
The National Environmental Management Waste Act (Act No. 59 of 2008) ("NEM:WA")	YES	NO
The National Environmental Management Biodiversity Act, 2004 (Act No. 10 of 2004 ("NEMBA").	YES	NO
The National Environmental Management: Protected Areas Act, 2003 (Act No. 57 of 2003) ("NEMPAA").	YES	NO
The Conservation of Agricultural Resources Act, 1983 (Act No. 43 of 1983). If yes, attach comment from the relevant competent authority as Appendix E5.	YES	NO

3. Other legislation

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

Land Use Planning Application (rezoning) in terms of SPLUMA.

Portion 38 of Farm Ganse Vallei 444 is currently zoned **Agriculture Zone I** (Figure 3) and it is the intention of the applicant to subdivide the property into two (2) portions and rezone these portion to:

- Residential Zone II portions for erven (3.17ha equating to 36% of the site) and
- Open Space Zone portion as private nature area (5.41ha equating to 64% of the site) (Figure 2).

<u>National Forest Act, Act No. 84 of 1998, as amended:</u> The final preferred SDP was purposefully informed by identified individual trees as well as clumps of protected trees.

Although care has been taken to avoid the majority of the surveyed protected trees and clumps, **micrositing** of units/structures and infrastructure, is a recommendation of this environmental assessment process to ensure that units/roads/structures and/or infrastructure **do not result in the damage or removal of protected trees found across the study site.**

From experience it is noted that time lapse from when the protected tree survey is undertaken, to inform the environmental/planning applications, till implementation, could be a number of years during which time germination of more protected tree species may occur and/or surveyed trees would have grown larger. It is therefore a recommendation that the actual footprints of each unit be checked by an ECO for any 'new' protected trees, prior to final construction.

In the event that trees may require pruning or trimming to accommodate a unit, the Holder of the EA at the time will be responsible for obtaining the necessary license prior to impacting on the tree(s).

The property falls within the **OSCA Regulated area** for which Bitou Municipality is the Competent Authority. This Basic Assessment application process is inclusive of detailed biophysical specialist studies that have informed the preferred site development plan and considers the impact of (a) vegetation removal, as well as (b) construction related activities i.e. earthworks. It is therefore assumed that Bitou Municipality will be in a position to issue an OSCA Exemption for this development.

Page 32 of 127

DRAFT BASIC ASSESSMENT REPORT: APRIL 2024

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.

4.1. Western Cape Provincial SDF (2014)

The Western Cape Provincial Spatial Development Framework (PSDF) was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda".

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

- Greater productivity, competitiveness, and opportunities within the spatial economy (optimising urban development within the urban edge).
- More inclusive developments and strengthening the economy in rural areas (Plettenberg Bay is a prominent urban node and smaller erven with smaller units are deemed to be in demand).
- Strengthening resilience and sustainable development (the property is not being utilised for its original intended purposes and poses a management and safety challenge).

The following policies laid down by the PSDF were also considered (refer to the specialist planning report for a more detailed description, Appendix G6):

1. Policy R1: Protect Biodiversity & Ecosystem Services

- The proposed development did consider the CBA areas and all other sensitive areas.
- The proposed layout of the development stayed clear of the sensitive areas.

2. Policy E3: Revitalise and Strengthen Urban Space-Economies as the Engine of Growth

• The proposed development creates additional employment & housing opportunities.

3. Policy S1: Protect, Manage and Enhance sense of Place, Cultural and Scenic Landscapes

• The proposed development is infill development, preventing urban sprawl (within the urban edge).

4. Policy S3: Promote Compact, Mixed-use and Integrated Settlements

- The proposal constitutes infill development within an existing urban environment.
- The proposed activity will contribute to the provision of additional housing opportunities.

5. <u>Policy R3: Safeguard the Western Cape's Agricultural and Mineral Resources, and Manage their sustainable use</u>

- The property has low potential agricultural land. It is earmarked for urban development.
- The proposed activity is exempted from the provisions of Act 70 of 1970.

6. Policy R5: Safeguard Cultural and Scenic Assets

The proposed development layout stayed clear of protected areas.

7. Policy S5: Promote Sustainable, Integrated and Inclusive Housing in Formal and Informal Markets

- The proposal will contribute to a different range of housing opportunities.
- The proposed activity will increase the density of the area.
- For the most part the development can be service via existing municipal service networks although limited upgrades and interventions are necessary to ensure link services and capacity so as not to overload the municipal network.

4.2. Eden Spatial Development Framework (2017)

The Eden District Spatial Development Framework was approved in 2017 and aims to establish a strong strategic direction and vision, towards increasing levels of detail in the spatial recommendations that are directive rather than prescriptive and providing guidance to local municipalities in the district regarding future spatial planning, strategic decision making and regional integration.

The vision and strategic direction identify four key drivers of spatial change within the district. These four strategies lie at the heart of this SDF and the problem statement, spatial concept, spatial proposals, and implementation are organised around these directives.

According to the Eden SDF, Plettenberg Bay is categorised as a "Specialised Coastal Centre" and the function or role of Plettenberg Bay is an "exclusive tourism" orientated town. The proposed activity complies with the following Policy Statements:

- <u>Policy 3.1.</u> Direct and encourage growth to match capacity, resources and opportunity in relation to the regional socio-economic hierarchy of cities and towns.
- <u>Policy 3.3.</u> Optimise existing infrastructure capacity and economic opportunity by directing mixed use, higher density development to areas of opportunity.
 - o For the most part the development can be service via existing municipal service networks although limited upgrades and interventions are necessary to ensure link services and capacity so as not to overload the municipal network.

5. Guidelines

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

5.1. Guideline on Need and Desirability, DEA (2017)

Refer to section E(12) for a detailed Need & Desirability project description.

5.2. Guideline for the Review of Specialist input in the EIA process (June 2005)

The guideline was followed to:

- Ensure that the specialists inputs meet the terms of reference.
- Ensure that specialist inputs are provided in a form and quality that can be incorporated into the integrated report and can be understood by non-specialists.

5.3. Guideline for Environmental Management Plans (June 2005)

The EMPr has been included with this Pre-Application Draft Basic Assessment to provide practical and implementable actions to ensure that the development maintains sustainability and minimise impacts through all its phases. The document is finalised as per the Guidelines and requirements of NEMA.

5.4. Guideline on generic terms of Reference for EAPs and Project Schedules (March 2013)

Followed guidance on:

- Generic Requirements for EAPs (what an EAP must manage).
- Generic Requirements for persons compiling a specialist report.
- Scope of Work (project description, primary responsibility, anticipated inputs etc.).

5.5. Guideline for determining the scope of specialist involvement in the EIA process (June 2005)

This Guideline was used to determine the timing, scope and quality of specialist inputs in the EIA process along with the Specialist Protocol requirements.

5.6. Guideline on Alternatives (March 2013)

Refer to section H for a detailed Alternatives comparison for the proposed project.

5.7. Guideline for involving biodiversity specialists in the EIA process (June 2005)

This guideline was used to identify the key triggers and issues which will require specialist input on biodiversity in addition to the Specialist Protocols. Refer to section C(6) for a detailed motivation for including/excluding specific specialist studies during the project.

5.8. Guideline for involving social assessment specialists in the EIA process (February 2007)

Refer to section C(5) for an information on the socio-economic description.

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form

According to the DEA&DP series of guidelines for the involvement of specialists in the EIA process (2005), one of the underpinning generic principles is to **eliminate the unnecessary specialist involvement** through proactive project planning and design to avoid or sufficiently reduce negative impacts. Another is to **maximise the use of existing relevant information** prior to involving a specialist. This includes the input from the EAP and specialists, in the form of site photographs and site inspections. These principles apply to the specialist studies that have been identified in the screening tool and motivated as not necessary in this report.

According to the Screening Tool the following themes have been identified as sensitive (note that the original as well as an updated version of the Screening Tool is attached to this report).

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

Agriculture (High Sensitivity) - The property is zoned Agriculture Zone I. The majority of the western portion of the property is indicated as High Sensitivity, with a small portion of Medium Sensitivity. The eastern portion of the property is indicated as having a Very High Sensitivity. The eastern portion indicated as Very High Sensitivity is located within the estuarine functional zone and is therefore not considered a feasible agricultural unit. The remainder of the property (western portion; ~3.17ha in size), is small and contains hardened surfaces (driveway and internal access road as well as a residential dwelling).

The Department of Environmental Affairs and Development Planning confirmed that Portion 38 of the Farm Ganse Vallei 444 in Plettenberg Bay was indeed included in the Knysna, Wilderness and Plettenberg Bay Regional Structure Plan and that the property was designated for 'Recreational'. It is

therefore the view of the DEA&DP (Planning Directorate) that the property is exempt from the provisions of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) (Appendix L).

The Western Cape Department of Agriculture: Land Use Management also confirmed that the property is not a spatially viable agricultural unit even though it is zoned as Agriculture Zone I. The WC DoA deemed that an Agricultural Impact Assessment would not be necessary (Appendix E7).

The Western Cape Department of Agriculture will remain a registered stakeholder for the remainder of the Basic Assessment Process.

Animal Species (High Sensitivity) - The screening tool identified the sensitivity for animal sp (fauna/invertebrate) as mostly "**Medium**" for the western portion of the site where the majority of development footprint is proposed, '**High**' for the middle portion of the site which is part of old paddocks and where the primary dwelling is situation and '**Very High**' for the lower lying estuarine port

Dr David Hoare from David Hoare Consulting (Pty) Ltd conducted a biodiversity sensitivity analysis of the property and confirmed that the eastern portion of the site is deemed highly sensitive both from a botanical and faunal perspective due to its mostly natural condition still.

Faunal Compliance Statement (David Hoare Consulting): The Faunal Compliance Statement stipulated the following:

- The proposed development footprint area is **not suitable** or critical habitat for any of the animal species identified in the Screening Tool Report.
- Areas outside the development footprint that have a Very High Site Ecological Importance will
 not be affected by the proposed development.
- The eastern portion of the proposed development site containing **thicket** have a moderate to high probability of the **Knysna Warbler** (Vulnerable) to occur, however, **no development** is proposed in the eastern portion of the property.
- The Crowned Eagle (Near Threatened) is unlikely to occur on the proposed development site
 even though the Mesic Thicket in the eastern portion of the property may constitute part of
 their general foraging range.
- Small antelope species could potentially find a suitable habitat in the **Mesic Thicket** in the eastern portion of the property. However, due to landscape connectivity issues, the small antelope species are unlikely to be present.

It is **verified** that the Animal Species Theme has a Medium sensitivity for the proposed development site. A **Terrestrial Animal Species Compliance Statement** was therefore completed and forms part of this Basic Assessment Process (Appendix G4).

CapeNature remains a registered stakeholder for the remainder of the Basic Assessment Process.

Aquatic Biodiversity (Very High Sensitivity) – The Screening Tool Report identified the proposed development site to have a 'Very High' sensitivity for the Aquatic Biodiversity Theme.

The proposed development site is located in close proximity to the Keurbooms Estuary. There are no watercourse features identified on the portion proposed for development.

The sensitivity rating of Very High is **refuted** and the EAP is of the opinion that a more appropriate sensitivity rating of **Low** should apply to the Aquatic Biodiversity Theme. Due to the proposed development being limited to the western portion of the property, avoiding all estuarine features identified, it is submitted that an Aquatic Biodiversity Compliance Statement will be sufficient. The **Aquatic Biodiversity Compliance Statement** confirmed the Low sensitivity rating for the proposed development site (Appendix G1).

BOCMA remains a registered stakeholder for the remainder of the Basic Assessment Process.

Archaeological and Cultural Heritage (Including Palaeontology) (Very High Sensitivity) - During 2009, a NID application in relation to the proposed development of a boutique hotel on Portion 38 of Farm Ganse Vallei 444 was submitted to HWC by Perception Planning on behalf of the previous landowner. In response to the NID submission, HWC required that an Archaeological Impact Assessment (AIA) & Desktop Palaeontology Impact Study (PIA) be undertaken. No development took place after the 2009 NID application.

A new Notice of Intent to Develop has been submitted to Heritage Western Cape on 19 October 2022. HWC, in their response to the 2022 NID, confirmed that an Integrated Heritage Impact Assessment is required due to the observation of what (at the time) was highlighted as two small stone heaps (typically indicative of informal graves) (Appendix G5).

The two potential burial sites were investigated during the 2022 Archaeological Impact Assessment which led to the following conclusion:

- No evidence of any pre-colonial or colonial period archaeology on the property.
- Slight possibility of archaeological material under the dune which covers the southern portion of the property.
- The two stone features consist of quartzite cobbles which are small in size and overgrown with indigenous brush (4m apart).
- Similar quartzite cobbles are distributed throughout the area in the undergrowth next to Rietvlei Road and the pathways leading to the estuary.
- The quartzite cobbles are part of an old beach terrace.
- It cannot be confirmed whether the stone features represent graves (unless ground penetrating radar is applied which is a very costly exercise).

The Committee approved the HIA compiled by Perception Planning dated March 2023 with the following conditions:

- In the absence of verification of the stone heaps not being graves, a 5m buffer must be adhered to around the two stone features which must also be fenced during earth moving activities and must not be disturbed during operational phase.
- An archaeologist must be on site to monitor earth moving activities in proximity to these
 features. If any human remains or significant archaeological materials are exposed during
 development activities, the find should be protected from further disturbance and work in the
 immediate area should be halted and Heritage Western Cape must be notified immediately.

HWC remains a registered stakeholder for the remainder of the Basic Assessment Process.

Civil Aviation (High Sensitivity) – The development of a residential estate, within an urban area, will not exceed any of the Civil Aviation Regulations in terms of height and does not pose a threat to air traffic in terms of any obstruction. The only reason for Civil Aviation being highlighted in the Screening Tool is due to the site being ~8.9km from the Plettenberg Bay Airport.

The sensitivity rating is **refuted**, and the EAP is of the opinion that the theme is **not applicable** to this application. Since there is no provision in the Protocols for 'not applicable' the lowest possible rating level of **Low** remains. There are no reasonable grounds for any specialist studies to confirm this.

The SACAA remains a registered stakeholder for the remainder of the Basic Assessment Process.

Defence (Low Sensitivity) – The development will pose no threat to military or defence forces of South Africa. The site is not situated near any military facilities. The EAP is of the opinion that the theme is **not applicable** to this application. Since there is no provision in the Protocols for 'not applicable' the lowest

possible rating level of Low remains. There are no reasonable grounds to conduct any specialists' studies to affirm this and further consultation with Department of Defence is not necessary.

Plant Species (Medium Sensitivity) – The Screening Tool Report identified the proposed development site to have a 'Medium' sensitivity for the Plant Species Theme.

The proposed development footprint is concentrated in areas classified as being secondary fynbos, degraded thicket and secondary thicket. It is the opinion of the EAP that the site sensitivity theme as indicated in the Screening Tool Report is accurate and that Medium and Low sensitivity ratings apply. A **Botanical Compliance Statement** will be sufficient for the proposed development. The Botanical Compliance Statement undertaken by Dr David Hoare from David Hoare Consulting (Pty) Ltd verified the Medium Sensitivity for the proposed development site.

Botanical Compliance Statement (David Hoare Consulting): The Botanical Compliance Statement (Appendix G3) Stipulated the following:

- No plant species of concern were identified on site.
- The estuarine habitat (eastern portion of the property) is a known habitat for *Zostera capensis* (Least Concern). This species is ecologically important and listed as a sensitive species. The estuarine habitat has a **Site Ecological Importance** of **Very High**:
 - No development is proposed in the identified estuarine habitat (eastern portion of the property).
- Two protected tree species were identified on site namely *Pittosporum viridflorum* and *Sideroxylon inerme*. The exact location of the protected trees were marked with GPS coordinates.
 - The site development plan was amended to avoid all the identified protected tree species.
 - Micro-siting to be done for these two houses in closest proximity to the existing protected trees surveyed.

CapeNature and DFFE remains registered stakeholders for the remainder of this Basic Assessment Process.

Terrestrial Biodiversity (Very High Sensitivity) – The Screening Tool Report identified the proposed development site to have a 'Very High' sensitivity for the Terrestrial Biodiversity Theme.

The following aspects are considered:

- The site does not form part of a formally protected area;
- It is not a highly dynamic/unstable/mobile ecosystem i.e. dune system/marine system;
- The property is earmarked for infill development within the urban edge (development envelope) with the high conservation area namely the estuary falling outside the development area;
- The project will not introduce any direct/indirect threat to biodiversity through means of hazardous installations, contamination or pollution;
- The proposed development will not impact negatively on important ecosystem goods or services in the area which supports livelihoods as the conservation worthy estuarine habitat will not be developed;
- The development footprint is focused on areas mostly transformed through historical and ongoing agricultural practices, whilst the remaining natural habitats along the estuary will not be affected;
- The remaining natural areas along the estuary will continue to function as an ecological corridor and link to remaining natural system (it is noted that the portion of property below the

- high-water-mark of the Estuary is technically State Land and is the responsibility of the State ito long-term maintenance;
- Biodiversity specialist has confirmed the site sensitivity to be of 'medium' and 'low' sensitivity for the area where development is proposed.

It is the opinion of the EAP that the Screening Tool's sensitivity theme of 'Very High' does not reflect the site specific biodiversity sensitivity levels accurately. A more correct sensitivity rating, which is supported by the findings of the specialist is for a 'Medium' sensitivity rating. A Biodiversity Impact Assessment has been undertaken to inform the Basic Assessment process (Appendix G2).

CapeNature remains a registered stakeholders for the remainder of this Basic Assessment Process.

Additional protocols identified in the Screening Tool Report:

Landscape/Visual Impact Assessment: The proposed development site is located on an isolated portion of land. The proposed development will not exceed two storeys with development only proposed on already transformed/disturbed grassland areas. The surrounding community already contains similar height residential units. The proposed development will therefore not result in a significant change in land use compared to the existing surrounding uses. The development of additional residential units in the community will increase the character/value of the greater area and would therefore not require a landscape/visual impact assessment.

Socio-Economic Assessment: A socio-economic study has not been undertaken for this application mainly due to the compatibility of the land use with surrounding land uses and alignment with the local spatial planning for the area.

Consideration was given to the following key triggers for a socio-economic impact assessment, as these are stipulated in the Guideline for Social Impact Assessment as drawn up for the Department of Environmental Affairs by Tony Barbour (2007).

- Consideration of the nature of the receiving environment, in particular whether vulnerable community, or areas with high poverty/unemployment, or areas where livelihoods depend on existing social relationships and income generating patterns, will be affected;
 - o The study area does not qualify in terms of these characteristics the proposed development site area forms part of the urban landscape. The community of the surrounding area is not vulnerable and/or an area with high poverty/unemployment.
- Areas where access to services, mobility/community networks are affected, or where livelihoods depend on access to and use of environmental resources and services;
 - o The property is not utilised for ecosystem services at a communal scale. Care has been taken to place infrastructure in areas that do not contain sensitive estuarine habitat, and the remaining natural areas will continue to function as normal.
- Areas where the proposed land use will alter the sense of place or character of the area, or where the project represents a significant change in land use from the prevailing use;
 - Development of residential units within an urban context, will not change the character
 of the area (although the vacant status of the property itself will change) and as such
 will not result in a significant change in the land use compared to the prevailing urban
 use;
- Projects that require large workforce relative to the size of the existing workforce such as dams, railways, roads;

- o The development will not require a larger workforce compared to similar developments in the surrounding area. The proposed development will provide employment opportunities for the local community during the construction and operational phases.
- Areas of important tourism or recreational value should conflicting land uses be introduced;
 - o The coastal community/suburbs of Plettenberg Bay are characterised by a combination of primary dwellings, secondary (holiday) homes, as well as resort type developments mainly due to its proximity to the ocean/beach/Keurbooms Estuary. Development of residential units is not considered a conflicting land use but rather compatible with the tourism/recreational/residential qualities of the area;

Having considered the above-mentioned key triggers that would typically indicate the need for a socio-economic impact assessment to be undertaken to inform decision-making, it was determined that the proposal is not the type of activity (both in nature and in scale) for which such a study is required.

SECTION D: APPLICABLE LISTED ACTIVITIES

List the applicable activities in terms of the NEMA EIA Regulations

Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 1	Describe the portion of the proposed development to which the applicable listed activity relates.
17	Development— (i) in the sea; (ii) in an estuary;	The eastern portion of the proposed development site falls within 100m from the
	(iii) within the littoral active zone;	highwater mark of the Keurbooms Estuary.
	(iv) in front of a development setback; or (v) if no development setback exists,	
	within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater;	
	in respect of—	
	(a) fixed or floating jetties and slipways;	
	(b) tidal pools;	
	(c) embankments;	
	(d) rock revetments or stabilising structures including stabilising walls; or	
	(e) infrastructure or structures with a development footprint of 50 square metres or more —	
	but excluding—	
	(aa) the development of infrastructure and structures within existing ports or harbours that will not increase the	

	development footprint of the port or harbour; (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies; (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development	
	and where coral or indigenous vegetation will not be cleared; or (dd) where such development occurs within an urban area.	
19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—	
	(i) the seashore;	
	(ii) the littoral active zone, an estuary or a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever distance is the greater; or	
	(iii) the sea; —	
	but excluding where such infilling, depositing, dredging, excavation, removal or moving—	
	(f) will occur behind a development setback;	
	(g) is for maintenance purposes undertaken in accordance with a maintenance management plan;	
	(h) falls within the ambit of activity 21 in this Notice, in which case that activity applies;	
	(i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (Publisher's note - Numbering as	
	published in Gazette No. 40772) where	
	such development is related to the	

	development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.	
27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation, except where such clearance of indigenous vegetation is required for— (i) the undertaking of a linear activity; or (ii) maintenance purposes undertaken in accordance with a maintenance management plan.	The proposed development entails the clearance of more than one hectare of indigenous vegetation (dune thicket and secondary fynbos) with remaining landscaped/natural open space areas within the development footprint area.
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 proposed development entails the development of 5.5m wide internal access roads in an area containing indigenous vegetation outside an urban area.
Activity No(s):	Provide the relevant Basic Assessment Activity(ies) as set out in Listing Notice 3	Describe the portion of the proposed development to which the applicable listed activity relates.
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	The proposed development entails the development of 5.5m wide internal access roads in an area containing indigenous vegetation outside an urban edge.

	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.	
12	The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan. i. Western Cape 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; ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas; iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.	The SANBI Red List of Ecosystems (2022) indicate that only the western portion of the proposed development site contains Garden Route Shale Fynbos. The Terrestrial Biodiversity Impact Assessment concluded that the habitat within the proposed development footprint is fynbos, thicket, and degraded or transformed areas. The remnant fynbos is in poor condition and appears from the species composition and structure to be either secondary or degraded. A portion of the proposed development footprint is located in mapped Goukamma Dune Thicket (Least Concern Threat Status: 2022).

14

The development of—

(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or

(ii) infrastructure or structures with a physical footprint of 10 square metres or more;

where such development occurs—

(a) within a watercourse;

(b) in front of a development setback; or

Lif no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;

excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.

i. Western Cape

i. Outside urban areas:

(aa) A protected area identified in terms of NEMPAA, excluding conservancies;

(bb) National Protected Area Expansion Strategy Focus areas;

(cc) World Heritage Sites;

(dd) Sensitive areas as identified in an environmental management framework as contemplated in chapter 5 of the Act and as adopted by the competent authority;

(ee) Sites or areas listed in terms of an international convention;

(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;

(gg) Core areas in biosphere reserves; or

The DEA&DP requested clarity regarding the exclusion of Activity 14 of Listing Notice 3 in comment on the Notice of Intent.

The proposed development will not have any physical infrastructure within 32m of a watercourse.

The eastern housing units are approximately between 50m and 100m from the highwater mark of the Keurbooms Estuary.

The National Water Act (NWA, 1998) stipulates that 'Watercourse' means:

- A river or spring;
- A natural channel in which water flows regularly or intermittently;
- A wetland, lake or dam, into which or from which, water flows; and
- Any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.

An estuary is therefore not defined as a watercourse. The development will therefore not take place within the regulated area of a watercourse as stipulated in the Aquatic Compliance Statement completed by Confluent Environmental in 2023.

(hh) Areas on the estuary side of the	
development setback line or in an	
estuarine functional zone where no such	
setback line has been determined.	

Note:

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

Where additional listed activities have been identified, that have not been included in the application form, and amended application form must be submitted to the competent authority.

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

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

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

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

SECTION E: PLANNING CONTEXT AND NEED AND DESIRABILITY

1. Provide a description of the preferred alternative.

Preferred Alternative

The applicant proposes to develop a low density residential estate, with private amenities, on Portion 38 of Farm Ganse Vallei 444 (8.58ha), Plettenberg Bay (Bitou Municipality, Western Cape Province). The development allows for private, in-house care and support should ill/elderly residents require such services.

The property is situated east of the N2 national road and is bordered by the Goose Valley Golf Estate (west/south), Keurbooms Estuary (east) and the Meadows Residential Estate (north-west), as well as private residential development directly north of the site.

A large single residential dwelling with landscaped gardens surrounding the structure overlooking the estuary exist on the property. There are also existing stables and paddocks in the south-western corner of the property that is significantly more transformed. The property was historically used for keeping horses and grazing activities (Figure 1).

Portion 38 of Farm Ganse Vallei 444 is currently zoned Agriculture Zone I and it is the intention of the applicant to subdivide the property into two (2) portions and rezone these portion to:

- Residential Zone II portion (3.17ha equating to 36% of the site) and
- Open Space Zone portion (5.41ha equating to 64% of the site) (Figure 2).

The proposed development within the **Residential Zone II portion** will entail the following infrastructure:

- Twelve (12) x sectional title group housing units (single storey), each with a double garage and two (2) additional parking bays. Each unit will cover ~655m² and will therefore calculate to 1.39 units per hectare over the entire site.
- Entrance gate (from Rietvlei Road).
- Guard house.

- Maintenance and staff rooms.
- Communal areas (clubhouse, conference room, gym, pool, doctor/nurse office and admin
 office).
- Six (6) x visitor parking bays at the communal buildings / facilities.
- Internal access roads (5.5m wide).
- External services (water line and sewer line within road reserves as part of Municipal infrastructure).

Importantly no formal development is proposed in the Open Space Zone portion (~5.41ha) although existing pedestrian trails will be maintained and so will the existing fence.

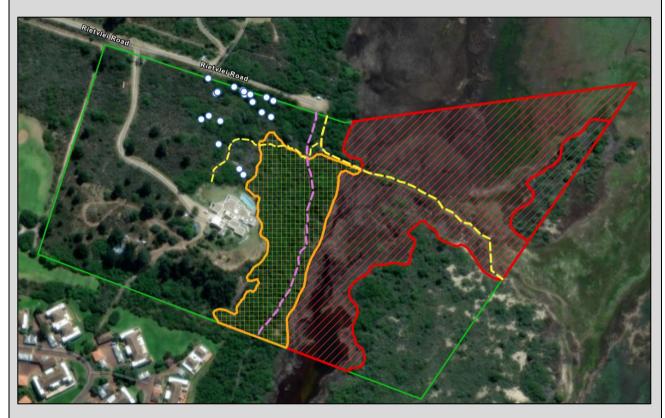


Figure 9: Existing pedestrian trails and fence line with sensitivity designations.

- The existing eastern property boundary fence runs along the PINK line indicated in the above-figure. This fence is accessible on foot and will be monitored ito long-term security requirements. The track along the fence is an existing footpath that will be maintained by the Applicant / Holder of the Authorisation / Managing Agent.
- There are also two other existing pedestrian tracks that provides access to the Estuary (both indicated in YELLOW). These tracks will continue to be maintained by the Applicant / Holder of the Authorisation / Managing Agent. The exception being the lower-lying area deemed Highly Sensitive by the Biodiversity Specialist that falls below the high-water-mark which is technically deemed to be State Land. This particular track is a historic (public) access to the Estuary (from the existing cul-de-sac at the bottom of Rietvlei Road. This application will not result in the closure of this track (to the general public) and it is a recommendation from Bitou Municipality that a Servitude be registered across the property in favour of the public to ensure continued accessibility by members of the public to the estuary.

Vehicular access to the proposed development will be directly from Rietvlei Road (Minor Road 7214) within a 9.45m wide right of way servitude (Portion 4 of Farm 444) along the northern boundary of Portion 38 of Farm Ganse Vallei 444. The Rietvlei Road connects directly with the N2 National Road

and is an existing tar road. At the bottom of Rietvlei Road there is an existing public parking area from where the general public can access the estuary.

The proposed development will be a sectional title development (no subdivision), and therefore all the outdoor spaces are considered communal open space that must be maintained by the development (Applicant/Managing Agent/Body Corporate) in perpetuity. Given that a large portion (~5.41 ha) of the property will be zoned private 'Open Space Zone' with other internal recreational open space areas limited within the proposed Residential Zone II portion on the top flat portion of the site.

The proposed units have been specifically positioned within the transformed, flat portion of the site which avoids higher sensitive areas identified by the independent biodiversity / botanical / faunal/aquatic specialist studies, as well as on-site input from Department of Forestry (joint site inspection with Mrs Melanie Koen, inspection dated 22 July 2024).

All existing buildings/structures which do not form part of the newly proposed development (paddocks, entrance gate, dwelling) will be demolished.

<u>Sewage Network:</u> The proposed development will be accommodated within the existing Goose Valley Main pumping station drainage area. The existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application, the following additional infrastructure will be required to connect the proposed development to the existing municipal sewer system:

- Private pump station on Portion 38 of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- Rising main (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 4).
- Outfall sewer (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).
- Outfall sewer (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure 4) where it will connect to the existing Goose Valley main pump station.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6MI per day and is currently at an average daily discharge volume of 5.8MI. According to Bitou Municipality the remaining 0.2MI is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed on 15 August 2024 that it can accommodate the proposed development on Pt 38/444 within the Ganse Vallei Wastewater Treatment Works without compromising the spare capacity allocations for low-cost housing.

The proposed internal sewage network (160mm diameter uPVC gravity pipe network with round precast concrete ring manholes) will drain towards the new proposed private sewer pumpstation on the northern boundary of Portion 38/444.

<u>Water Network:</u> The proposed development will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road road reserve.

According to the GLS (municipal) services investigation, the 75mm diameter pipe in Rietvlei Road road reserve needs to be upgraded to a 110mm diameter pipe (extending approximately 220m long) in the Rietvlei Road reserve in order to comply with the fire flow criteria (Item 1 in Figure 6).

The internal water reticulation system will be a metered network consisting of a combined domestic and fire water reticulation network (75mm diameter uPVC Class 12 potable water main). Provision will be made inside erf boundaries of every property for individual water meters (located 1m inside each erf boundary).

Extract from Civil Engineering Report compiled by Vita Consulting Engineers regarding water supply to the proposed development: "The bulk water system to the Goose Valley, Wittedrift and Matjiesfontein reservoirs is at capacity and must be upgraded according to the Bitou master plan before additional developments within the reservoir supply areas can be accommodated".

GLS Consulting Engineers (on behalf of the Bitou Municipality), provided the following temporary solution as part of their master planning:

- Installation of a temporary 1600mm bulk main off the existing 160mm distribution main in the N2 road reserve, will free up 860kl/day³ water supply.
- This capacity rectification will accommodate the development demand for Farm 444/38 (this application), Farm 304/32 and RE/6503.

According to Vita Consulting Engineers, implementation of this temporary solution is to be undertaken by the developer of Erf Portion 19 and 27 of Farm 444 (construction on this development commenced June 2024).

The 160mm diameter pipeline of approximately 460m in length, is to be installed as a temporary measure till the Municipality has its bulk water supply network capacity funding for further upgrades. It will be installed above ground, following the existing water servitude that runs from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (Figure 7).

The existing servitude already contains a 200mm and 250mm diameter underground pipelines (of which one is defunct).

The temporary pipeline is to be installed in short 2.4m sections that will be welded together on site. The implementation of the temporary solutions does not entail earthworks, or the removal of vegetation, although trimming of vegetation to clear the route is anticipated.

Roads and Parking Areas:

The internal road network will be a 5.5m wide brick paved road with formal kerbs/edgings, roadside channels and a stormwater drainage network. Internal roads will not be subdivided and will form part of the communal areas maintained by the Body Corporate of the proposed development.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced (Figure 8).

Stormwater:

The pre-development site drains from the central portion (highest point on the property) towards the north-western and southern boundaries. No formal bulk municipal stormwater infrastructure is available in vicinity of the property. Due to the high permeability of the insitu dune sands, stormwater runoff permeates into the subsoil layers and therefore a formalised bulk stormwater connection is not required for the proposed development.

.

An open swale stormwater network will however be designed which will have sufficient capacity to manage and convey up to a 1:5 year rainfall event. The open swale stormwater network will follow the road network and will have inlet structures and pipe culverts at road crossings. If a rainfall event with a return period larger than 1:5 year occurs, the internal roadways will act as overland flow routes which will convey stormwater run-off towards the lower lying eastern portion of the property.

Provision will be made for a subsoil drainage network beneath the internal roads. The subsoil drainage network will consist of a 110mm diameter perforated pipe network installed 800mm below the final road level.

Due to the poor cohesion of the dune sands, the following erosion preventative measures will be included in the stormwater design:

- Minimize the concentration of stormwater to prevent high flow rates.
- Route run-off from hard surfaces into swales.
- Promote sheet flow into open swales.
- Formalise (armorflex) channels with an internal velocity more than 1m/s.
- Landscape unlined channels with appropriate vegetation.
- Install energy dissipation structures at high energy discharge points.

Solid Waste:

The collection of domestic waste from individual housing units will be administrated by the homeowners association / body corporate of the proposed development. Solid waste will be transferred to a communal refuse storage located at the entrance of the proposed development from where it will be removed as per the Municipal waste collection schedule. Adequate turning space for a standard refuse truck has been incorporated in the proposed entrance design.

2. Explain how the proposed development is in line with the existing land use rights of the property as you have indicated in the NOI and application form? Include the proof of the existing land use rights granted in Appendix E21.

The proposed development is not in line with the existing land use rights (which is Agriculture 1).

It is therefore the intention of the applicant to subdivide and **rezone** the property to **Residential Zone**II and **Open Space Zone** to bring the proposal in line with land use right requirements. The most appropriate zoning will be Open Space III for the portion of the property down to the high-watermark (of Very High Sensitive) area where the remainder of the property technically reverts to State Land (being below the HWM).

It was confirmed by the Department of Environmental Affairs and Development Planning that Portion 38 of the farm Ganse Vallei, Plettenberg Bay was included in the Knysna, Wilderness and Plettenberg Bay Regional Structure Plan. This portion was designated as 'Recreational'. Portion 38 of the farm Ganse Vallei 444 is therefore exempt from the provisions of the Subdivision of Agricultural Land Act, 1970 (Act 70 of 1970) (Appendix L).

3. Explain how potential conflict with respect to existing approvals for the proposed site (as indicated in the NOI/and or application form) and the proposed development have been resolved.

Not to the knowledge of the EAP.

Should the Department of Environmental Affairs and Development Planning have copies of any previous environmental application that may have bearing on this application, Cape EAPrac kindly request access to documents that may have been in the public domain to ensure that all relevant and applicable information can be considered.

4. Explain how the proposed development will be in line with the following?

4.1 The Provincial Spatial Development Framework.

Western Cape Provincial SDF (2014)

The Western Cape Provincial Spatial Development Framework (PSDF) was approved in 2014 by the Western Cape Parliament and serves as a strategic spatial planning tool that "communicates the provinces spatial planning agenda".

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

- Greater productivity, competitiveness, and opportunities within the spatial economy (optimising urban development within the urban edge).
- More inclusive developments and strengthening the economy in rural areas (Plettenberg Bay is a prominent urban node and smaller erven with smaller units are deemed to be in demand).
- Strengthening resilience and sustainable development (the property is not being utilised for its original intended purposes and poses a management and safety challenge).

The following policies laid down by the PSDF were also considered (refer to the specialist planning report for a more detailed description):

1. Policy R1: Protect Biodiversity & Ecosystem Services

- The proposed development did consider the CBA areas and all other sensitive areas.
- The proposed layout of the development stayed clear of the protected areas.
- 2. Policy E3: Revitalise and Strengthen Urban Space-Economies as the Engine of Growth
 - The proposed development creates additional employment & housing opportunities.
- 3. Policy S1: Protect, Manage and Enhance sense of Place, Cultural and Scenic Landscapes
 - The proposed development is an infill development, preventing urban sprawl (within the urban edge).
- 4. Policy S3: Promote Compact, Mixed-use and Integrated Settlements
 - The proposal constitutes infill development within an existing urban environment.
 - The proposed activity will contribute to the provision of additional housing opportunities.
- 5. <u>Policy R3: Safeguard the Western Cape's Agricultural and Mineral Resources, and Manage their sustainable use</u>
 - The property has low potential agricultural land. It is earmarked for urban development.
 - The proposed activity is exempted from the provisions of Act 70 of 1970.
- 6. Policy R5: Safeguard Cultural and Scenic Assets
 - The proposed development layout stayed clear of protected areas.
- 7. <u>Policy S5: Promote Sustainable, Integrated and Inclusive Housing in Formal and Informal Markets</u>
 - The proposal will contribute to a different range of housing opportunities.
 - The proposed activity will increase the density of the area.
- 4.2 The Integrated Development Plan of the local municipality.

Bitou Integrated Development Plan (2017-2022)

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

Bitou Municipality has adopted strategic objectives to deliver on its vision and to help realize the objectives of the district economic development, provincial strategic goals and national development plan. Strategic objectives that are relevant to the proposed development:

- Provide excellent service delivery to the residents of Bitou Municipality.
- Re-establish, grow and expand tourism within Bitou Municipality.
- Facilitate growth, jobs and empowerment of the people of Bitou.
- To ensure the safety of residents and visitors of Bitou Municipality.
- To build institutional and financial sustainability.

The property is in Ward 2 of the Bitou Municipality. The following Ward based planning interventions are applicable to the land development application:

Economic Development

Make development more accessible and expedite applications (rezoning and building plans) make industrial and commercial development possible.

Extract from Specialist Planning Report (Marike Vreken Town and Regional Planners, 2023): The IDP is a municipal planning tool to integrate municipal planning and allocate municipal funding to achieve strategic objectives that will contribute to the overall municipal vision. Although this application is not considered to be an important strategic objective it can be motivated that the development of the land supports important municipal interventions amongst others creating economic jobs within the ward. Further to the above the proposed development will contribute to the economic expenditure in the area, providing housing opportunities, create employment and the make use of existing services network. It is the considered opinion that the proposed development will contribute to the strategic objectives within Ward 2.

4.3. The Spatial Development Framework of the local municipality.

Bitou Spatial Development Framework (2017)

The updated Bitou SDF was approved by the Bitou Municipal Council in May 2017. The SDF, is therefore, the primary spatial tool for guiding development within the municipal area.

The proposed development complements the Bitou SDF goals in regards to the following aspects:

- The portion to be developed is earmarked as 'existing urban development' (Figure 10).
- The portion to be developed is situated inside the urban edge.
- The development will impact as little as possible on the environmental integrity by promoting:
 - o A large portion of land (5.41ha) is proposed to be zoned as Open Space III.
 - The majority of the CBA area will remain intact and will remain undeveloped.
 - Development is proposed on elevated, already transformed and disturbed areas earmarked for development.
 - o The development will not have negative visual impacts as it is surrounded by similar developments within the designated urban edge.

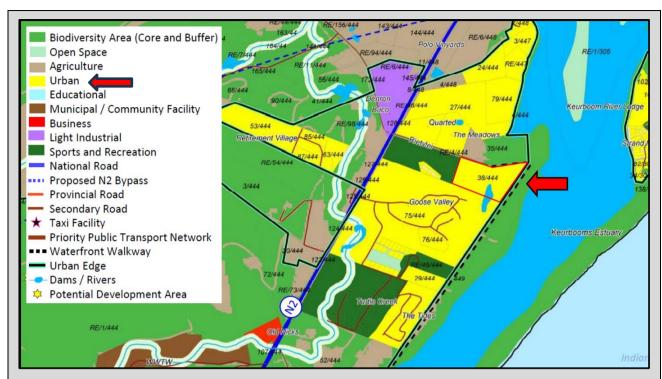


Figure 10: Extract from Bitou Spatial Development Framework (2021).

4.4. The Environmental Management Framework applicable to the area.

Not applicable.

5. Explain how comments from the relevant authorities and/or specialist(s) with respect to biodiversity have influenced the proposed development.

Aquatic Biodiversity Compliance Statement (Confluent Consulting): The Aquatic Biodiversity Compliance Statement stipulated the following:

- An estuary habitat was delineated in the eastern portion of the proposed development property.
 - Mitigation: The proposed development layout avoids the entire delineated estuary habitat in the eastern portion of the property. Development infrastructure will be focussed on the elevated western portion of the property which avoids the steep slope and remaining thicket habitat.
- An estuary buffer of 33m is recommended.
 - Mitigation: The 33m estuary buffer will be adhered to as this will protect the Keurbooms Estuary from direct impacts and will provide a level of connectivity between the terrestrial and estuarine areas through the remaining thicket extending to the estuary.

Terrestrial Biodiversity Impact Assessment (David Hoare Consulting): The Terrestrial Biodiversity Impact Assessment stipulated the following:

- The habitats on the property with the highest sensitivity and ecological value (estuarine habitats and mesic thicket) are completely excluded from the development footprint.
 - Mitigation: The proposed development layout avoids all habitats with a high sensitivity and ecological value. The development footprint is focussed on secondary or degraded habitats and additional micro-siting is recommended to avoid protected trees.

6. Explain how the Western Cape Biodiversity Spatial Plan (including the guidelines in the handbook) has influenced the proposed development.

The Western Cape Biodiversity Spatial Plan (WCBSP) is a spatial tool that comprises the Biodiversity Spatial Plan Map (BSP Map) of biodiversity priority areas, accompanied by land use guidelines, development planning, environmental assessment & regulation, and natural resource management.

The eastern portion of Portion 38 of Farm Ganse Vallei Farm 444 is located in a designated Critical Biodiversity Area, specifically a estuary area (Figure 11). A very small portion of the property contains designated Ecological Support Areas, specifically ESA2 (restore from other land use). No development is proposed in the critical biodiversity areas.

Critical Biodiversity Area 1

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

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

Critical Biodiversity Area 2

<u>Definition:</u> Areas in a degraded or secondary condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.

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

Ecological Support Area 2

<u>Definition:</u> Not essential for meeting biodiversity targets. Important in supporting functioning of PAs or CBAs. Often vital for ecosystem services.

<u>Objective:</u> Restore/minimise impact on ecological infrastructure functioning, especially soil and water-related services.



Figure 11: Critical Biodiversity Area Map and Ecological Support Area map in relation to the proposed development property (CapeFarmMapper, 2023).

7. Explain how the proposed development is in line with the intention/purpose of the relevant zones as defined in the ICMA.

Considerations regarding the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"):

- Whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development or activity is consistent with the purpose for establishing and protecting those areas.
 - The proposed development is not located in coastal public property and will have no detrimental affect on surrounding coastal public properties.
 - o Portion 38 of Farm Ganse Vallei 444 is not designated as coastal access land.
 - O However, the proposed development site is partially located in the Coastal Protection Zone where development will be limited to already disturbed, higher lying area of the property while preserving/maintaining the remaining slope that and habitat that extends into the highly sensitive, lower lying estuary. By avoiding the sensitive areas the Applicant continues to conserve the elevated slope that separates the site from the estuary (eastern portion of property) (Figure 12) thereby ensuring long-term sustainability ito potential future coastal processes.

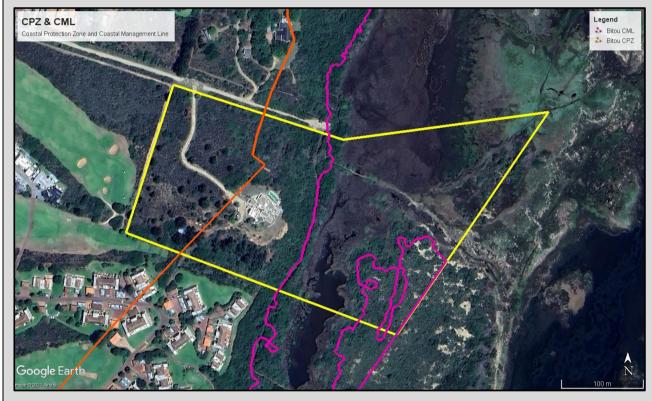


Figure 12: Coastal Protection Zone (orange line) and Coastal Management Line (pink line) in reference to Portion 38 of Farm Ganse Vallei 444.

- The estuarine management plans, coastal management programmes and coastal management objectives applicable in the area.
 - The Keurbooms Estuary is of high conservation value and in terms of the management objectives, the Keurbooms-Bitou Estuarine Management Plan (K-BEMP) stipulates that formal protections mechanisms to obtain conservation status for land parcels within or spanning the estuarine functional zone (EFZ) must be investigated. The following guidelines are provided in the K-BEMP and are relevant to the proposed land-use and infrastructure:
 - Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (wetlands, supratidal saltmarshes and

- indigenous vegetation) occur. The implementation of the coastal management lines (CML), coastal protection zones (CPZ), flood lines and the inclusion of CBA's within all planning schemes will allow for compliance with this guideline. The proposed development layout will allow for the maintenance/preservation of the riparian zone located in the eastern portion of Portion 38 of Farm Ganse Vallei 444.
- Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary process and cycles. The proposed development will not discharge any effluent water in the estuarine area and will therefore not alter the water quality.
- Socio-Economic impact if the activity is authorised / not authorised.
 - o If the proposed development is authorised, it will have the following impacts relating to socio-economics:
 - Create temporary and permanent employment opportunities during construction and operational phase.
 - Preserve and maintain the riparian zone in the eastern portion of the proposed development site.
 - Optimise vacant land in an urban setting, therefore increasing the holistic financial sustainability of Bitou Municipality.
 - Meet the management objectives of the Keurbooms-Bitou Estuarine Management Plan.
 - o If the proposed development is not authorised, it will have the following impacts relating to socio-economics:
 - Property remains vacant and will therefore not increase the holistic financial sustainability of Bitou Municipality.
 - Property will not be maintained in such a way as to support the management objectives of the Keurbooms-Bitou Estuarine Management Plan.
 - No employment opportunities will be created for the local community of Bitou Municipality.
- The likely impact of the proposed activity on the coastal environment, including the cumulative effect of its impact together with those of existing activities.
 - o The proposed development will be limited to already disturbed areas on Portion 38 of Farm Ganse Vallei 444, therefore applying avoidance mitigation to the riparian zone. An environmental management programme will be adhered to for the proposed development which will aim to preserve/maintain the natural coastal environment.
- The likely impact of coastal environmental processes on the proposed activity.
 - o The proposed development will not be affected by coastal processes such as wave, current and wind action, erosion, accretion, sea-level rise, storm surges and flooding due to its elevated position as well as the remaining natural vegetation that acts as a buffer to potential future coastal processes that may include flooding/storm surges and coastal erosion. The eastern portion of the proposed development site will be maintained in its natural state which will provide a sizeable buffer between the development activities and the Keurbooms Estuary.

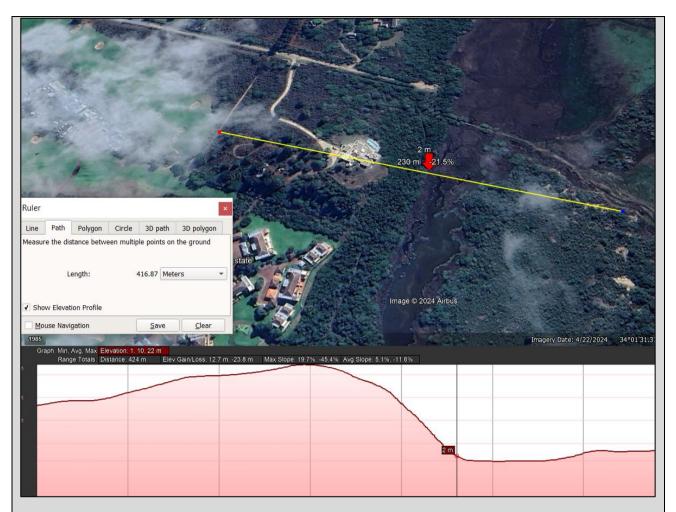


Figure 13: Site elevation showing the development area on the elevated portion of the site vs the lower lying portion of the site where the site effectively becomes part of the estuary.

It is evident from the considerations regarding the **NEM:ICMA** mentioned above, that the proposed development will not prejudice the achievement of any coastal management objectives/processes and is not in contrary to the interests of the surrounding community. The proposed development will not cause irreversible or long-lasting adverse affects to any aspect of the coastal environment, coastal erosion management requirements or coastal processes. The proposed development will not deny the public access to the coastal environment.

8. Explain whether the screening report has changed from the one submitted together with the application form. The screening report must be attached as Appendix I.

The screening tool report has not changed since the submission of the Application Form.

9. Explain how the proposed development will optimise vacant land available within an urban area.

The property is currently largely vacant and makes no contribution to the local economy of the town. The proposed development promotes smart growth by ensuring the efficient use of the land and infrastructure, by containing urban sprawl and prioritising infill, intensification and redevelopment within settlements/designated urban areas.

10. Explain how the proposed development will optimise the use of existing resources and infrastructure.

Access to the proposed development site will be from an existing public road (Rietvlei Road). The proposed development will connect to the existing municipal sewer and water infrastructure with limited upgrades/link services required.

Explain whether the necessary services are available and whether the local authority has confirmed sufficient, spare, unallocated service capacity. (Confirmation of all services must be included in Appendix E16).

<u>Sewage Network:</u> The proposed development will be accommodated within the existing Goose Valley Main pumping station drainage area. The existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application, the following additional infrastructure will be required to connect the proposed development to the existing municipal sewer system:

- Private pump station on Portion 38 of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- Rising main (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 4).
- Outfall sewer (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).
- Outfall sewer (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure 4) where it will connect to the existing Goose Valley main pump station.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6Ml per day and is currently at an average daily discharge volume of 5.8Ml. According to Bitou Municipality the remaining 0.2Ml is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed on 15 August 2024 that it can accommodate the proposed development on Pt 38/444 within the Ganse Vallei Wastewater Treatment Works without compromising the spare capacity allocations for low-cost housing.

The proposed internal sewage network (160mm diameter uPVC gravity pipe network with round precast concrete ring manholes) will drain towards the new proposed private sewer pumpstation on the northern boundary of Portion 38/444.

<u>Water Network:</u> The proposed development will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road road reserve.

According to the GLS (municipal) services investigation, the 75mm diameter pipe in Rietvlei Road road reserve needs to be upgraded to a 110mm diameter pipe (extending approximately 220m long) in the Rietvlei Road reserve in order to comply with the fire flow criteria (Item 1 in Figure 6).

The internal water reticulation system will be a metered network consisting of a combined domestic and fire water reticulation network (75mm diameter uPVC Class 12 potable water main). Provision will be made inside erf boundaries of every property for individual water meters (located 1m inside each erf boundary).

Extract from Civil Engineering Report compiled by Vita Consulting Engineers regarding water supply to the proposed development: "The bulk water system to the Goose Valley, Wittedrift and Matjiesfontein reservoirs is at capacity and must be upgraded according to the Bitou master plan before additional developments within the reservoir supply areas can be accommodated".

GLS Consulting Engineers (on behalf of the Bitou Municipality), provided the following temporary solution as part of their master planning:

- Installation of a temporary 1600mm bulk main off the existing 160mm distribution main in the N2 road reserve, will free up 860kl/day4 water supply.
- This capacity rectification will accommodate the development demand for Farm 444/38 (this application), Farm 304/32 and RE/6503.

According to Vita Consulting Engineers, implementation of this temporary solution is to be undertaken by the developer of Erf Portion 19 and 27 of Farm 444 (construction on this development commenced June 2024).

The 160mm diameter pipeline of approximately 460m in length, is to be installed as a temporary measure till the Municipality has its bulk water supply network capacity funding for further upgrades. It will be installed above ground, following the existing water servitude that runs from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (Figure 7).

The existing servitude already contains a 200mm and 250mm diameter underground pipelines (of which one is defunct).

The temporary pipeline is to be installed in short 2.4m sections that will be welded together on site. The implementation of the temporary solutions does not entail earthworks, or the removal of vegetation, although trimming of vegetation to clear the route is anticipated.

Bitou Municipality confirmed Bulk Services for Portion 38 of Farm 444 (Appendix E16).

12. In addition to the above, explain the need and desirability of the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013) or the DEA's Integrated Environmental Management Guideline on Need and Desirability. This may be attached to this BAR as Appendix K.

'Need', as defined by DEA&DP, refers to the timing of the proposal and the 'Desirability' refers to the 'placing' of the proposed development.

Need:

The proposed development is in line with all the provincial, district and local development policies. The timing is correct for this development as it will:

- Create employment opportunities during the construction and operational phases;
- Contribute to the economic growth of Plettenberg Bay.
- Increase the holistic financial sustainability of Bitou Municipality.
- Support the management objectives of the Keurbooms Estuarine Management Plan.

Please also refer to Section E) 4.1., 4.2. and 4.3. for additional information regarding the need for the proposed development.

Desirability:

The proposal is regarded as desirable because the proposed development:

- Is unlikely to impact negatively on existing land use rights of neighbouring property owners.
- It will not prevent any surrounding owner to exercise their legal land use rights.
- Will create employment opportunities during the construction and operational phase.
- It will optimise vacant land in an urban setting.
- It will support the management objectives of the Keurbooms-Bitou Estuarine Management Plan (K-BEMP).
- The development can be linked to Municipal services with limited upgrades to services.

Please also refer to Section E) 4.1., 4.2. and 4.3. for additional information regarding the need for the proposed development.

Questions to be engaged with when considering need & desirability:

1. How will this development impact the ecological integrity of the area?

The development will avoid all critical biodiversity areas. The proposed development site is not located in a high-risk area such as areas affected by flood lines and steep slopes. The preferred alternative for the proposed development avoids all highly sensitive habitat areas.

Ecological fire no longer forms part of the processes necessary to maintain a natural fynbos habitat. The lack of fire and the establishment of alien invasive vegetation along with historical grazing have caused a loss of historically occurring fynbos in this area. The fynbos currently present on the proposed development site is in poor condition and it appears that from species composition and structure to be either secondary or degraded.

The proposed development will support and adhere to the management objectives of the Keurbooms-Bitou Estuarine Management Plan as well as the Integrated Coastal Management Act.

The proposed development will prevent any pollution runoff into the adjacent estuarine habitat.

2. How will this development enhance ecosystems and/or result in the loss or protection of biological diversity? What measures were explored to avoid negative impacts and enhance positive impacts?

The proposed development will be limited to disturbed vegetation. Avoidance mitigation will be applied to the eastern portion or the property (highly sensitive estuarine habitat). The estuarine functional zone will be preserved/maintained in a natural state.

- The preferred development layout avoids the removal of sensitive indigenous vegetation such as Goukamma Dune Thicket and Mesic Thicket in the eastern portion of the property.
- The preferred development layout avoids highly sensitive biodiversity areas such as the estuarine habitat delineated by the aquatic specialist.
- A 33m aquatic buffer will be adhered to around the estuarine habitat as delineated by the aquatic specialist.
- Stormwater attenuation will take place on site to reduce the risk of influencing the surrounding estuarine habitat.
- The proposed development will prevent any pollution runoff into the adjacent estuarine habitat from unlawfully dump/infill material. Existing perimeter fence between the proposed development footprint and sensitive estuarine habitat in the easter portion of Portion 38/444 to remain in place.
- In addition to avoiding protected trees identified in a survey, further micro-siting is recommended for the proposed homes closest to the protected trees prior to vegetation clearing for construction of these properties.

3. How will this development pollute and/or degrade the biophysical environment? What measures were explored to avoid or minimise these impacts?

The proposed development will not pollute and/or degrade the biophysical environment. The following measures were explored to avoid or minimise pollution/degradation impacts:

- All No-Go areas/biodiversity sensitive areas will be avoided during construction.
- Construction vehicles will be limited to the predetermined access route of the proposed development site.
- A 33m aquatic buffer around delineated estuarine habitat will be adhered to.

- The proposed development will prevent any pollution runoff into the adjacent estuarine habitat from unlawfully dump/infill material.
- Stormwater attenuation will take place on site to reduce the risk of influencing the surrounding estuarine habitat.
- All general construction waste/rubble which will be removed to the local municipal waste site for building rubble or alternatively the material can be re-used in the construction phase where fill material is required.
- Construction phase will be monitored by an environmental control officer (ECO).

4. What waste will be generated by this development? Measures to avoid waste?

General construction waste during the development phase of the proposed project. Waste produced during construction will be collected and removed by appointed contractors to a registered waste management facility (records must be kept and provided to the environmental control officer for auditing purposes). Alternatively, the material can be re-used in the construction phase where fill material is required.

General household/domestic waste will be generated during the operational phase (approximately 20kg of solid waste per household per week) of the proposed development, with the homeowner association administrating the collection at each residential unit. Recycled waste to be collected by a registered Bitou Municipality service provider.

5. How will this development use and/or impact on non-renewable resources?

The proposed development will make use of municipal services regarding water and electricity.

Non-treated water must be utilised for construction so as to conserve potable water.

6. How will the ecological impacts resulting from this development, have an impact on people's environmental right in terms of the following:

Negative impact:

- Temporary noise during construction refer to EMPr for mitigation measures.
- Temporary construction traffic associated with the development phase.
- Development of a new structure(s) within the landscape.

Positive impacts:

- Optimise vacant land within the urban edge.
- Employment opportunities during construction and operational phases.
- Preserving/maintaining the riparian area of the Keurbooms Estuary.

Socio-economic impacts:

- Change in character and sense-of-place from an open property to a lifestyle village with residential units.
- Employment opportunities during the construction and operational phases.
- Increase the holistic financial sustainability of Bitou Municipality.

Positive and negative ecological impacts:

- Result in limited loss of vegetation.
- Sensitive estuarine habitat will be avoided.
- Continuous management of alien invasive vegetation on Portion 38 of Farm Ganse Vallei 444.

7. What is the socio-economic context of the grea?

Please refer to Section G(8) in this Draft Basic Assessment Report.

SECTION F: PUBLIC PARTICIPATION

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

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

Linear activities include upgrade of the existing water line, a section of new sewage line and a section of new temporary water link line up to the Goose Valley reservoir.

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

Please refer to Appendix F for copies of advert, site notices, notifications & stakeholder register. The report will be updated with comments received once the comment period on the DBAR ends.

- Neighbouring property owners were identified using CapeFarmMapper.
- Select neighbouring property owners were compiled into a list sent to the Bitou Municipality for confirmation of contact details in terms of the POPIA.
- Key Authorities were identified according to whether or not they have a mandated interest in the area/site.
- Local Councillor was verified with the Bitou Municipality.
- Site Notices were placed on site calling for I&APs to register and review the Pre-App DBAR.
- Written notifications were sent to all potential I&APs via email/post informing of the availability of the Pre-App DBAR and the opportunity to register as an I&AP.
- Written notifications were sent to all registered I&APs via email/post informing of the availability of the DBAR.
- Advert appeared in the *Knysna-Plett Herald* on 22 February 2024 for I&APs to register and submit comment on the Pre-App DBAR.

Comments received in response to the Pre-App DBAR or in request to be registered have been considered and added to the Stakeholder Register and all submissions have been incorporated and reflected in this Draft Basic Assessment Report.

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

The following State Departments and Organs of State were consulted with:

- Bitou Municipality
- Department of Transport and Public Works Provincial
- Provincial Roads
- SANRAL
- DEA&DP Coastal Management
- Department of Fisheries, Forestry and the Environment (DFFE)
- Department of Agriculture
- CapeNature

- Garden Route District Municipality
- Breede-Olifants Catchment Management Agency (BOCMA)
- Department of Health
- SACAA
- Heritage Western Cape
- 4. If any of the State Departments and Organs of State were not consulted, indicate which and why.

Department of Defence – The development will pose no threat to military or defence forces of South Africa. The site is not situated near any military facilities. The EAP is of the opinion that the theme is not applicable to this application. Since there is no provision in the Protocols for 'not applicable' the lowest possible rating level of Low remains. **There are no reasonable grounds to conduct any specialists' studies to affirm this and further consultation with Department of Defence is not necessary.**

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

To be updated for the Final Basic Assessment Report.

Comment

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

The application is silent on the existing public access/pathway to the estuary which traverses the subject property. During the pre-application I suggested that this aspect be addressed, as it has quite a significant bearing on the application in my view. The alignment of the road reserve/servitude adjacent to the subject property to the estuary is not practical, thus the need for the pathway to traverse the property as it currently does. The pathway has been in existence for at least the last 20 years as far as I can establish from aerial imagery, but has likely been in use for significantly longer. The applicant should clarify how the pathway will be dealt with, and possible approval conditions be inserted to this effect – we want to avoid a situation where the property/pathway will be fenced off as part of the property's "Private Nature Reserve", thus preventing public access to the estuary

(as this is the only public access in the area). Ideally, the

access should be formalised by either registering a public right of way servitude, or by subdividing the applicable

portion off and transferring it to the Municipality as Public

Open Space.

A significant portion of the property falls underneath the high water mark/ estuary, and thus constitutes coastal public property in terms of ICMA. This aspect is not addressed in the application. I would recommend that a determination of the high water mark be carried out, and that the portion below it be rezoned to "public open space" (and not "private nature reserve" as proposed) and be subdivided off and transferred to the RSA or Municipality.

Response

The existing public access from Rietvlei Road will remain open and no changes to the current pathways are proposed. The proposed development will not deny the public access to the coastal environment. Bitou Municipal recommends that a servitude/right of way be registered for the public access crossing the property to the estuary.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced up to the entrance of the proposed development within the constraints of the existing road. Hard surfacing the gravel road will improve accessibility for the public to the existing public parking area at the end of Rietvlei Road from where the public can access the estuary on foot.

It must be noted that the ICMA determines that private land falling below the high-water-mark (of the estuary/sea) reverts to the State. Technically the lower lying portion of the property into the estuary is therefore the responsibility of the State (including public access and/or infrastructure associated with it).

Considerations regarding the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"):

- Considering that no development will take place below highest level that high-water reaches in the estuary, there is no reasonable motivation for surveying the HWM for the purposes of this assessment as no development is proposed in this area.
- The Keurbooms Estuary is of high conservation value and in terms of the management

objectives, the Keurbooms-Bitou Estuarine Management Plan (K-BEMP) stipulates that formal protections mechanisms to obtain conservation status for land parcels within or spanning the estuarine functional zone (EFZ) must be investigated. The following guidelines are provided in the K-BEMP and are relevant to the proposed land-use and infrastructure:

- Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (wetlands, supratidal saltmarshes indigenous vegetation) occur. The implementation of the coastal management lines (CML), coastal protection zones (CPZ), flood lines and the inclusion of CBA's within all planning schemes will allow for compliance with this guideline. The proposed development layout will allow for the maintenance/preservation of the riparian zone located in the eastern portion of Portion 38 of Farm Ganse Vallei 444
- Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary process and cycles. The proposed development will not discharge any effluent water in the estuarine area and will therefore not alter the water quality.
- The likely impact of the proposed activity on the coastal environment, including the cumulative effect of its impact together with those of existing activities.
 - o The proposed development will be limited to already disturbed areas on Portion 38 of Farm Ganse Vallei 444, therefore applying avoidance mitigation to the riparian zone. An environmental management programme will be adhered to for the proposed development which will aim to preserve/maintain the natural coastal environment.
- The likely impact of coastal environmental processes on the proposed activity.
 - The proposed development will not be affected by coastal processes such as wave, current and wind action, erosion, accretion, sea-level rise, storm surges and flooding due to its elevated position as well as the remaining natural vegetation that acts as a buffer to potential future coastal processes that may include flooding/storm surges and coastal

erosion. The eastern portion of the proposed development site will be maintained in its natural state which will provide a sizeable buffer between the development activities and the Keurbooms Estuary.

It is evident from the considerations regarding the NEM:ICMA mentioned above, that the proposed development will not prejudice the achievement of any coastal management objectives/processes and is not in contrary to the interests of the surrounding community. The proposed development will not cause irreversible or long-lasting adverse affects to any aspect of the coastal environment, coastal erosion management requirements or coastal processes. The proposed development will not deny the public access to the coastal environment.

Please also see comment received from the Department of Environmental Affairs and Development Planning Sub-directorate: Coastal Management pertaining the NEM: ICMA below:

"Farm 38/444 is partially within the Coastal Protection Zone ("CPZ") as defined in Section 16 of the NEM: ICMA and the purpose of the CPI is to avoid increasing the effect or severity of natural hazards in the coastal zone and to protect people and properties from risks arising from dynamic coastal processes, including the risk of sea level risks. Due to the subject property's location within the CPZ, Section 63 of the NEM: ICMA must be considered where an authorisation is required in terms of Chapter 5 of the NEMA. Furthermore, Section 62 of the NEM: ICMA obliges all organs of state that regulates the planning of land to apply that legislation in a manner that gives effect to the purpose of the CPZ. As such, Section 63 of the NEM: ICMA must be considered by local authorities for land use decision making. The SD: CM notes that the proposed additions will not adversely affect the aims of the CPZ. The applicant has adequately considered the purpose of the CPZ as the portion where the proposed development will occur is deemed to be appropriate, as that the applicant has limited the proposed development to already disturbed, elevated areas while preserving or maintaining the remaining coastal habitat and coastal processes towards the estuary."

Designating an appropriate zoning (for the lower lying portion of the property into the estuary) is the responsibility of the Local Authority ito the Land Use Planning process. The slope down to the estuary cannot become 'public open space' and will remain 'private open space' for security and for use by the future residents as part of its buffer against coastal processes.

The portion of the property located below the high water mark should in my opinion not be counted towards the "communal open space" requirement of the applicable residential zone, as it is effectively public open space as

Please see extract from Specialist Planning Report below:

"The Section 8 Scheme Regulations stipulate that there should be at least 80m² communal open space per

explained above. Similarly, the residential density should be calculated excluding the area under the high water mark.

dwelling unit. Since the proposed development will be a sectional title development (no subdivision), all the outdoor spaces are considered communal open space, and given that a large portion (±5.41 ha) of the property will be zoned 'Open Space Zone III' for a private nature reserve, there is ample communal open space for the residents. The residents will have access to the 'private nature reserve' (±5.41 ha), which will also be managed and owned by the respective Body Corporate. The required communal open space for (12) units is only 960m². The proposed development will make provision for more than 7 ha of communal open space."

If the proposed Open Space area of 5.41ha is excluded from the total communal open space, it will still calculate to more than 1.5ha of communal open space for the proposed development which is compliant with the Section 8 Scheme Regulations.

The ICMA stipulates that land below the HWM automatically becomes State Land (without compensation to the land owner). Suitable zoning must (according to ICMA) be determined by the Local Authority as part of the Land Use Planning Application. As a minimum Private Open Space III will apply to the slope down to the Highly Sensitive estuarine portion of the property.

It is requested that the proposed Open Space III be formally declared as Protected Environment in terms Section 28 of the National Environmental Management: Protected Areas Act (NEM:PAA, Act 57 of Page 2 of 3 REF: 18/38/444 2003) to be able to give legal recognition of the sensitivity of the site. As such, Open Space Zone IV in the Bitou Zoning Scheme (2023) would be the appropriate zoning to apply for.

The environmental application stipulates that the remaining natural area is a No-Go area (irrespective of the final zoning) and it must be managed as a conservation area for the parts that will become Private Open Space III. The land seaward of the high-water mark is technically State Land and the Local Municipality must determine the most appropriate zoning accordingly.

Apart from the already existing walkways/paths, pedestrian routes, the private open space area must be managed by the applicant and in the future, the Managing Agent or Body Corporate / Homeowners Association of the proposed Keurbooms Lifestyle Village.

The long-term responsibilities of the applicant / HOA will be as follows (in the Private Open Space areas):

- Invasive alien clearing.
- Maintenance of all walkways/paths. This
 includes ensuring that no new paths are
 created apart from what is already present.
 Ensuring that the necessary educational
 signage is put up and remains in place.

The land use description for Open Space Zone III is as follows: "nature conservation area" means the use and management of land with the objective of preserving the natural biophysical characteristic of that land, including fauna and flora.

It is evident from the proposal that the objective of the proposed open space area will be in line with the land use description of Open Space Zone III.

The National Environmental Management: Integrated Coastal Management Act (NEM:ICMA, Act 24 of 2008) and Section 13 specifies that all people in South African have a

The existing public access from Rietvlei Road will remain open and no changes to the current pathways are proposed. The proposed development will not deny "right of reasonable access to the coastal public property" and Section 18(9) specifies that: "Each municipality approving the rezoning, subdivision or development of a land unit within or abutting on coastal public property must ensure that adequate provision is made in the conditions of approval to secure public access to that coastal public property". A Coastal Access Audit has been undertaken for the Garden Route District (WCPCASP, DEA&DP, 2019).

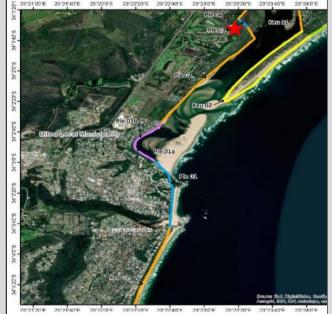


Figure 1 – Figure extracted from DEA&DP (2019) WCPCASP – Western Cape Provincial Coastal Access Audit undertaken for the Garden Route Municipal District. The red star indicates the position of Portion 38 of Farm 444 in relation to the audit. Vehicle access to the CPP is shown at this point. The figure shows that the section along the western banks of the Keurbooms Estuary has limited access to the Coastal Public Property. Historical public access to the estuary edge, i.e., coastal public property, has been gained via the property since 1960 as can be seen by the historical aerial imagery contained in the Terrestrial Biodiversity Impact Assessment (Figure 11) which clearly shows the small parking area at the bottom of Rietvlei Road East. This has been identified in the Coastal Access Audit.

It is requested that the public access that currently exists across the property be formalised in terms of a servitude in favour of the public or the designation of coastal access land. The access should continue to be walkable and may need to be maintained. Maintenance of the existing boardwalk should be specified, assessed and appropriately included in the Environmental Management Plan. Appropriate signage should be displayed at this access point indicating it as a public access point and that persons should remain on the created pathway.

Animal movement is not to be hindered by proposed fencing and access should be ensured especially at areas of stormwater dissipation.

the public access to the coastal environment. The existing private pedestrian trails on Portion 38 of Farm Ganse Vallei 444 will be maintained. Should the lower lying portion of the property down at the estuary be deemed State Land, it will be the responsibility of the State to maintain public access and associated infrastructure within this area.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced up to the entrance of the proposed development within the constraints of the existing road. Hard surfacing the gravel road will improve accessibility for the public to the coastal environment.

The pending town planning application will be amended to also include an application for subdivision to allow for the registration of a public right of way servitude. Once the town planning application has been approved, the area must be surveyed, and new servitude diagrams must be submitted to the Surveyor Generals office for approval. At that point, the HWM can be surveyed should it be deemed necessary to subdivide the lower lying area below the HWM for (administrative) transfer to the State.

- Public access servitude applicable to the portion of land that will remain Private Open Space.
- Maintenance of structures/infrastructure (inclusive of the existing boardwalk / signage etc) on State Land is not the responsibility of the Applicant.

No additional fragmentation of ecosystem patterns/processes will result from the proposed development. An existing perimeter fence is already in place around the property. Animal movement corridors are already fragmented to some extent due

to the fencing of surrounding developments (Goose Valley Golf Estate and private residential developments in Rietvlei Road).

No new infrastructure (including fencing) is proposed in the eastern portion (Open Space area) thus allowing animal movement to continue as normal the case on Portion 38 of Farm 444.

All stormwater discharge points are to be appropriately designed to ensure storm water is appropriately slowed and dissipated when to ensure no erosion or increased sediment occurs within the estuary functional zone.

Please see extract from the Civil Engineering Report below:

"The pre-development site drains from the highest central portion towards the northern-, western- and southern-boundaries. The high permeability of the insitu dune sands ensures that all stormwater run-off permeates into the subsoil layers and a formalised bulk stormwater connection for the development is not required. The residential dwellings, roads- and civil infrastructure has been positioned to fall above the prescribed 5m contour.

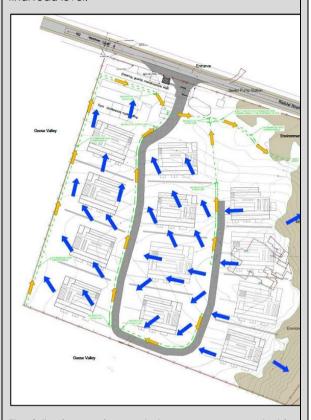
The standard stormwater design principle, as set out in section 1 will be implemented in the planning and design of the internal stormwater system. The following minimum design specifications will be implemented:

- Minimum pipe specification: Class 75 D Concrete spigot & socket pipes
- Minimum pipe diameter: 375mm Nominal diameter
- Minimum design flow: 1.0m/s inside a half-full pipe
- Maximum spacing between manholes/inlets:

An open swale stormwater network will be designed to have sufficient capacity to adequately manage and convey up to a 1:5 year rainfall event. The open swales network will follow the road network and will have inlet structures and pipe culverts at road crossings. For rainfall events with a return period larger than 1:5 year, the internal roadways will act as overland flow routes which will convey stormwater run-off towards the Keurbooms River. The cohesion of the dune sands is very poor and will therefore be very susceptible to erosion. The following erosion preventative measures will be incorporated in the detail stormwater design:

- Concentration of stormwater will be minimised to prevent high volume/flow rates
- Hard surface run-off (driveways) will be routed into swales via the internal roadways
- Sheetflow into open swales will be promoted to maximise contact time with permeable dune sands
- All channels with an internal velocity higher than 1m/s will be formalised (armorflex)
- All unlined channels will be landscaped with appropriate vegetation
- Energy dissipation structures will be installed at high energy discharge points

Due to the likely occurrence of a seasonal perched ground water table, provision will be made for a subsoil drainage network beneath the roads. The subsoil drainage network will consist of a 110mm diameter perforated pipe network installed 800mm below the final road level."



The following erosion control measures were noted in the Aquatic Compliance Statement report and included in the Environmental Management Plan for the proposed development:

- Ensure that construction activities do not cause any preferential flow paths and concentrated surface runoff during rainfall events.
- Clearly demarcate the construction area and ensure that heavy machinery does not compact soil or disturb vegetation outside of these demarcated areas.
- Reduce transport of sediment through use of structures such as silt fences and biodegradable coir logs placed along contours.
- Ensure that vegetation clearing is conducted in parallel with the construction progress to minimise erosion and runoff.
- Revegetate exposed areas once construction has been completed.
- Ensure that stormwater and runoff generated by hardened surfaces is discharged in retention areas (i.e. swales or retention ponds), to avoid concentrated runoff and associated erosion.

All landscaping is to be limited to endemic and indigenous plant species and alien invasive plant species are to be appropriately cleared, removed, and managed.

The following mitigation measures are included in the Environmental Management Plan:

- Clear the proposed development site, inclusive of private open space, of all NEMBA listed invasive alien vegetation species prior to any site clearing/development to ensure that indigenous vegetation can recover and rehabilitate more easily.
- Only indigenous vegetation permitted in the place of the loss of remainder on-site natural vegetation/habitat.

A signed letter by Bitou municipality confirming that the municipal system has sufficient capacity to accommodate sewerage from the proposed development must be provided to this office before the commencement of construction works.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6MI per day and is currently at an average daily discharge volume of 5.8MI (confirmed by Bitou Municipality). According to Bitou Municipality the remaining 0.2MI is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate most new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed, on 15 August 2024 that they can accommodate this proposed low residential development on Pt 38/444 within the available spare capacity of the Ganse Vallei Wastewater Treatment Works without compromising the allocation for low cost housing projects.

A signed Confirmation of Bulk Services Letter from Bitou Municipality is attached as Appendix E16 to the Draft Basic Assessment Report.

The estuary ecosystem occurring on-site that is identified in the ABCS must be protected as follows:

- Increased runoff due to vegetation clearance and/or soil compaction must be managed, and steps must be taken to ensure that stormwater during and post-construction does not lead to erosion and excessive levels of silt entering the estuary
- No stormwater must be discharged from the development directly into the estuary.
- The stormwater generated on site should be managed according to the Sustainable Drainage System (SuDS). In this respect, the stormwater management plan for the development must be reviewed and approved by a qualified freshwater ecologist before development to ensure that the stormwater management facilities are constructed, operated, and maintained in an environmentally sustainable manner.
- Before the construction commences, the buffer zone recommended in the ABCS between the Keurbooms estuary and development footprint must be delineated and introduced to staff as a No-Go area.
- Care must be taken to ensure that no pollution material enters the buffer zone and the estuary during and post-construction.

The following erosion control measures were noted in the Aquatic Compliance Statement report and included in the Environmental Management Plan for the proposed development:

- Ensure that construction activities do not cause any preferential flow paths and concentrated surface runoff during rainfall events.
- Clearly demarcate the construction area and ensure that heavy machinery does not compact soil or disturb vegetation outside of these demarcated areas.
- Reduce transport of sediment through use of structures such as silt fences and biodegradable coir logs placed along contours
- Ensure that vegetation clearing is conducted in parallel with the construction progress to minimise erosion and runoff.
- Revegetate exposed areas once construction has been completed.
- Ensure that stormwater and runoff generated by hardened surfaces is discharged in retention areas (i.e. swales or retention ponds), to avoid concentrated runoff and associated erosion.

The following mitigation measure is included in the Environmental Management Programme for the proposed development:

- Stormwater must not be discharged directly into the estuary.
- Remnant thicket (inclusive of the 33m buffer area along the estuary habitat closest to the houses) must be demarcated prior to any site clearing/development commencing to ensure that no encroachment happens into this sensitive area.
- Install silt fences / haybales to prevent silt being transported along with stormwater runoff.

A stormwater management plan is included in the Civil Engineering Report as well as the Environmental Management Programme. The stormwater management plan has been supplemented by recommendations made by the Aquatic Specialist in the Aquatic Compliance Statement.

The property is within a climate change corridor which is an element of ecological infrastructure, and these areas should remain in a functional structure and composition for biodiversity. These areas play an important role in landscape connectivity, as well as supporting the functioning of PAs or CBAs. These corridors represent the best option for promoting resilience to climate change and the persistence of biodiversity as they provide pathways for the movement of plants and animals in response to environmental change. They also support the natural movement of species between populations to ensure population viability (Pool-Stanvliet et.al. 2017).

The proposed development should not have a negative impact on the climate corridor as climate change impacts such as storm events, fires and floods must be considered.

The proposed development site is partially located in the Coastal Protection Zone where development will be limited to already disturbed, higher lying area of the property while preserving/maintaining the remaining coastal habitat that extends into the estuary and continues to conserve the elevated slope that separates the site from the estuary (eastern portion of property).

The proposed development will not be affected by coastal processes such as wave, current and wind action, erosion, accretion, sea-level rise, storm surges and flooding due to its elevated position as well as the remaining natural vegetation that acts as a buffer to potential future coastal processes that may include flooding/storm surges and coastal erosion. The eastern portion of the proposed development site will be maintained in its natural state which will provide a sizeable buffer between the development activities and the Keurbooms Estuary.

Portion 38 of Farm 444 is surrounded by a golf course to the south and west, the Rietvlei Road to the north and the Keurbooms Estuary to the east. The proposed development site is therefore considered to have sufficient fire breaks in the form of a golf course, road as well as the Keurbooms Estuary.

The secondary fynbos identified on site is not subject to a burning regime while the rest of the property consist of thicket and estuarine salt marsh habitats. These habitats are not considered fire prone ecosystems. All biomass accumulated from alien vegetation clearing is to be removed to reduce the fuel load as included in the Environmental Management Programme of the proposed development.

The property has a listed protected tree species which will be avoided. CapeNature reminds the applicant that in terms of section 15(1) of the National Forests Act, no person may cut,

Although care has been taken to avoid the surveyed protected trees and clumps, micro-siting of units/structures and infrastructure, is a recommendation

disturb, damage, or destroy any protected tree or possess, collect, remove, transport, export, purchase, sell, donate or in any other manner acquire or dispose of any protected tree except under a license granted by the Minister.

of this environmental assessment process to ensure that units/roads/structures and/or infrastructure do not result in the damage or removal of protected trees found across the study site. From experience it is noted that time lapse from when the protected tree survey is undertaken, to inform the environmental/planning applications, till implementation, could be a number of years during which time germination of more protected tree species may occur and/or surveyed trees would have grown larger. It is therefore a recommendation that the actual footprints of each unit be checked prior to final construction. In the event that trees may require pruning or trimming to accommodate a unit, the Holder of the EA at the time will be responsible for obtaining the necessary license prior to impacting on the tree(s).

The requirement for a Forestry permit has been included in the Environmental Management Programme for the proposed development, should it be necessary to trim or remove/transplant any protected species on site.

The property has an existing dwelling, and the development is proposed within EN and LC vegetation. The CBA is mapped to the east and must be demarcated as a No-Go area.

The following mitigation measure have been included in the Environmental Management Programme for the proposed development:

 Remnant thicket (inclusive of the 33m buffer area along the estuary habitat) must be demarcated prior to any site clearing/development commencing to ensure that no encroachment happens into this sensitive area.

A No-Go areas map indicating areas to be demarcated and avoided is also included in the Environmental Management Programme for the proposed development.

CapeNature does not support development on steep slopes with a gradient that is greater than 1:4. As the soil erodibility is high, we remind the applicant that the geology could become unstable during vegetation removal and heavy rainfall events may also exacerbate the soil condition.

No development is proposed on slopes with a gradient that is greater than 1:4. The following recommendations are included in the Environmental Management Programme for the proposed development:

- Vegetation clearing should be done in parallel with the construction progress. This will minimize erosion and runoff.
- Stormwater runoff that is generated by hardened surfaces should be discharged in retention areas such as swales and retention ponds. This will reduce concentrated runoff and erosion.

Fynbos is a fire-maintained ecosystems and fire plays an important role in determining species composition and community type. Thus, the low species richness is an indication the property has not been managed in terms of fire. The exclusion of fire from certain habitats will be considered unacceptable as this may ultimately cause the loss of fynbos species (Mucina and Rutherford 2006).

Although mapped as Garden Route Shale Fynbos (EN) the remaining fynbos on the elevated portion of the site where the development is proposed is moribund, invaded by several alien invasive species, and has relatively low species richness resulting in the Botanist classifying it as secondary/transformed fynbos. Based on the species analysis the botanist confirms that the remaining fynbos has poor species richness and composition which is not normal for intact healthy fynbos. This suggests that the fynbos is old secondary fynbos, whilst being chronically disturbed for an

extended period of time through grazing and nutrification (manure).

Please see extract from the Plant Species Compliance Statement regarding the fynbos habitat identified on site:

"Habitat that is unlikely to be able to recover fully after a relatively long period: > 15 years required to restore ~ less than 50% of the original species composition and functionality of the receptor functionality, or species that have a low likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a low likelihood of returning to a site once the disturbance or impact has been removed."

The site ecological importance assessment concluded that the fynbos habitat identified on site has a **Low** Biodiversity Importance.

For this reason the development footprint is restricted to the top level of the site (where fynbos was indicated) and said fynbos will be removed when development takes place.

The specialist concluded that he did not find any plant species of conservation concern but there is a potential for these species to occur. The specialist did not include any mitigation measures if these species were found on site. CapeNature would recommend the undertaking of walk-throughs (during the correct season) before construction commences to determine whether any SCC are present or not.

The following mitigation measures are included in the Environmental Management Programme following comment received from CapeNature:

- Development footprint to be surveyed (during the appropriate season as confirmed with a botanist) before construction activities commence to determine the presence of any Species of Conservation Concern.
- Should any Flora SCC be identified within the development footprint prior to construction, the appropriate permits will be obtained for the removal and transplanting of such species.

CapeNature supports the removal of invasive alien vegetation, and we recommend aliens outside of the proposed area, also be removed during the alien clearing phase. Removal of invasive alien plant species should be compliant with the National Environmental Management: Biodiversity Act (Act No.10 of 2004).

The following measures are included in the Environmental Management Programme of the proposed development:

- Compile and implement an alien management plan, which highlights control priorities and areas and provides a programme for long-term control.
- Landscaping must be done with indigenous vegetation (preferably endemic species) and ornamental plants may only be planted in plant boxes and pots with no invasive alien vegetation permitted on the estate.
- Clear the proposed development site of all NEMBA listed invasive alien vegetation species prior to any site clearing/development to ensure that indigenous vegetation can recover and rehabilitate more easily.
- HOA to maintain invasive alien species on the property inclusive of the private open space portion.

Long -term maintenance of the remainder of the property below the HWM is the responsibility of the State.

The Fynbos Forum Guidelines state that the impacts of housing developments must be minimised, buildings should be

Portion 38 of Farm 444 is surrounded by a golf course to the south and west, the Rietvlei Road to the north and

clustered within fire-free zones and protected with firebreaks. Furthermore, flammable building materials should be avoided. Furthermore, in terms of section 12 (1) and 2 (a) of National Veld and Forest Act an adequate firebreak must be prepared and maintained around the property to reasonably prevent the spread of unwanted fires in the area.

the Keurbooms Estuary to the east. The proposed development site is therefore considered to have sufficient fire breaks in the form of a golf course, road as well as the Keurbooms Estuary.

The secondary fynbos identified on site is not subject to a burning regime while the rest of the property consists of thicket and estuarine salt marsh habitats. These habitats are not considered a flammable fuel source. All biomass accumulated from alien vegetation clearing is to be removed to reduce the fuel load as included in the Environmental Management Programme of the proposed development.

It is acknowledged that the applicant intends to maintain existing walkways. Be advised that no further formal or informal walkways/pathways to the coast through the estuarine function zone (below the 5m contour), may be created on the subject property, as this active area performs an important ecological function. The activities on the subject property may in no way impede on the general public's ability to access coastal public property.

The existing public access from Rietvlei Road will remain open and no changes to the current pathways are proposed. The proposed development will not deny the public access to the coastal environment. The existing pedestrian trails across the private open space of portion 38 of Farm Ganse Vallei 444 will only be maintained and will not be made any longer or wider. No additional pathways are proposed in the Private Open Space area.

Areas deemed to be State Land due to the HWM is the responsibility of the State ito maintenance requirements.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced up to the entrance of the proposed development within the constraints of the existing road. Hard surfacing the gravel road will improve accessibility for the public to the coastal environment.

Notwithstanding the above, the applicant must be advised that the location of the property could still render the property at risk to coastal processes. This has been observed by the increase in frequency and magnitude of storm and flood events along the coast and estuaries as a result of climate change. The storm events that occurred in September 2023 is evidence of such events. It is therefore advised that caution be applied in the design and placement of the proposed structures.

Development will be limited to already disturbed, much higher lying area of the property while preserving/maintaining the remaining coastal habitat that extends into the estuary and continues to conserve the elevated slope that separates the site from the estuary (eastern portion of property).

The proposed development is unlikely to be affected by coastal processes such as wave, current and wind action, erosion, accretion, sea-level rise, storm surges and flooding due to its elevated position as well as the remaining natural vegetation that acts as a buffer to potential future coastal processes that may include flooding/storm surges and coastal erosion. The eastern portion of the proposed development site will be maintained in its natural state which will provide a sizeable buffer between the development activities and the Keurbooms Estuary.

This Directorate notes that a Water Use License application is not applicable, as the proposed development does not fall within the regulated area of a watercourse. However, you are advised to still consult with the Breede-Olifants Catchment Management Agency (BOCMA) and include their comments/inputs on the proposal in the BAR.

Please see comment received from Breede-Olifants Catchment Management Agency (BOCMA) on the Pre-Application Draft BAR below:

"It is noted that the development will be connected to the municipal sewer and potable water systems. Therefore, the requirement for a water use authorization related to water service provision, as outlined in sections 21 and 22 of the National Water

Act, 1998 (Act 36 of 1998) (NWA) will not be triggered by this development.

As per the Aquatic Biodiversity Compliance Statement (hereinafter ABCS) by Dr. J.M. Dabrowski dated 21 August 2023, this office confirms that the development does not trigger the requirements for a water use authorization in terms of section 21 (c) & (i) of NWA due to that none of the construction and operational activities will occur within the regulated area of a watercourse. The definition of a watercourse and the regulated area of a watercourse is provided in Clause 2 of the Government Notice 4167 published in Government Gazette 49833 dated 08 December 2023 (General Authorisation in terms of Section 39 NWA for water uses as defined in Section 21(c) or Section 21(i)."

Comment from the Breede Olifants Catchment Management Agency attached as Appendix E3 to the Draft Basic Assessment Report.

It is further noted that there are two protected trees species on the proposed site, as such you are advised to also consult and obtain written comment from the Department of Agriculture, Forestry & Fisheries, should the proposal involve any disturbance or removal of any of the protected tree species on the site.

Although care has been taken to avoid the majority of the surveyed protected trees and clumps, micro-siting units/structures and infrastructure, recommendation of this environmental assessment process to ensure that units/roads/structures and/or infrastructure do not result in the damage or removal of protected trees found across the study site. From experience it is noted that time lapse from when the protected tree survey is undertaken, to inform the environmental/planning applications, till implementation, could be a number of years during which time germination of more protected tree species may occur and/or surveyed trees would have grown larger. It is therefore a recommendation that the actual footprints of each unit be checked prior to final construction. In the event that trees may require pruning or trimming to accommodate a unit, the Holder of the EA at the time will be responsible for obtaining the necessary license prior to impacting on the tree(s).

The requirement for a Forestry permit has been included in the Environmental Management Programme for the proposed development, should it be necessary to trim or remove/transplant any protected species on site.

Comments from the Department of Fisheries, Forestry and the Environment are included in this Comments & Responses Report as well as attached as Appendix E5 to the Draft Basic Assessment report. The proposed units have been specifically positioned within the transformed, flat portion of the site which avoids higher sensitive areas identified by the independent biodiversity / botanical / faunal/ aquatic specialist studies, as well as on-site input from Department of Forestry (joint site inspection with Mrs Melanie Koen, inspection dated 22 July 2024).

Portion 38 of Farm Ganse Vallei 444 is located in a Freshwater Ecosystem Priority Area (FEPA), although the development

The following erosion control measures were noted in the Aquatic Compliance Statement report and

footprint falls outside the 33m buffer zone of the estuary. It is however still critical that the management of and discharge of stormwater from the development site be taken into consideration. The proposed mitigation measures stormwater specifications and method statements that will be required as a minimum is noted in the pre application draft BAR. However, this Directorate requires that a detailed stormwater management plan forms part of the Environmental Management Programme (EMPr), which must be submitted with the Basic Assessment Report.

included in the Environmental Management Plan for the proposed development:

- Ensure that construction activities do not cause any preferential flow paths and concentrated surface runoff during rainfall events.
- Clearly demarcate the construction area and ensure that heavy machinery does not compact soil or disturb vegetation outside of these demarcated areas.
- Reduce transport of sediment through use of structures such as silt fences and biodegradable coir logs placed along contours.
- Ensure that vegetation clearing is conducted in parallel with the construction progress to minimise erosion and runoff.
- Revegetate exposed areas once construction has been completed.
- Ensure that stormwater and runoff generated by hardened surfaces is discharged in retention areas (i.e. swales or retention ponds), to avoid concentrated runoff and associated erosion.

The following mitigation measure is included in the Environmental Management Programme for the proposed development:

- Stormwater must not be discharged directly into the estuary.
- Remnant thicket (inclusive of the 33m buffer area along the estuary habitat) must be demarcated prior to any site clearing/development commencing to ensure that no encroachment happens into this sensitive area.
- Install silt fences / haybales to prevent silt being transported along with stormwater runoff.

A stormwater management plan is included in the Civil Engineering Report as well as the Environmental Management Programme. The stormwater management plan has been supplemented by recommendations made by the Aquatic Specialist in the Aquatic Compliance Statement.

Forestry request that the Coastal Forest on the property should be GPS'd and incorporated within the proposed development design as no-go areas. It was confirmed during the joint site inspection with Mrs Melanie Koen (DFFE) undertaken on 22 July 2024 that the "Coastal Forest" noted in the comment from DFFE on the Pre-App BAR, refers the Mesic Thicket located on the steep slopes located between the proposed development units and the eastern open space area. The Mesic Thicket has been spatially delineated by Dr David Hoare and is excluded from the proposed development footprint and will be retained in its entirety. This vegetation will be demarcated prior to any vegetation removal/site construction activities.

Forestry object to current layout and request that the number of units be reduced in order to retain coastal forest.

The Terrestrial Biodiversity Impact Assessment stipulated the following:

- Estuarine habitats on site (eastern portion of the property) are sensitive and should be avoided.
 - o The proposed development will apply avoidance mitigation to the eastern portion of the property and all infrastructure is proposed on the western portion that is already disturbed/degraded.
- Mesic Thicket habitat on the sea-facing slope is sensitive. The Mesic Thicket forms an essential buffer between estuarine and terrestrial ecosystems.
 - No development is proposed in the identified Mesic Thicket habitat.
- The fynbos that is present on site, is in poor condition. The poor condition of the fynbos could be as a result of long-term degradation or due to being secondary, however, there is no evidence of historical cultivation.
 - o The preferred site alternative was identified considering the overall site sensitivity of Portion 38 of Farm Ganse Vallei 444. The preferred area on the property is already disturbed by historical grazing activities. The prolonged exclusion of burning contributed to the disappearance of Garden Route Shale Fynbos vegetation. The vegetation is no longer representative of the endangered fynbos species and rather of secondary grassy fynbos.

The habitats on Portion 38 of Farm Ganse Vallei that has the highest sensitivity and ecological value are excluded from the proposed development footprint.

It was confirmed during the joint site inspection with Mrs Melanie Koen (DFFE) on undertaken on 22 July 2024 that the "Coastal Forest" noted in the comment from DFFE on the Pre-App BAR, refers the Mesic Thicket located on the steep slopes located between the proposed development units and the eastern open space area. The Mesic Thicket is excluded from the proposed development footprint and will be retained in its entirety.

Furthermore micro-siting is required of units in proximity to the thicket and surveyed protected trees to ensure no impact. The number of units have been reduced from the initial 17 down to 12.

Forestry request a site visit in order to further clarify the impact on the Coastal Forest as reports were not clear on this. It was confirmed during the joint site inspection with Mrs Melanie Koen (DFFE) on undertaken on 22 July 2024 that the "Coastal Forest" noted in the comment from DFFE on the Pre-App BAR, refers the Mesic Thicket located on the steep slopes located between the proposed development units and the eastern open space area.

	The Mesic Thicket is excluded from the proposed development footprint and will be retained in its entirety.
All upgrading to the bulk water supply lines must be completed before commencement of the development.	Construction programmes and schedules are complex and it is a recommendation of this BAR that the restrictive condition be for associated link infrastructure to be completed prior to occupation of any units because that is when such services must be readily available. To place the restriction on total development/commencement will result in an unreasonable time lapse without achieving a reasonable outcome (which is to prevent utilization of services prior to it being implemented).
All sewage is to be connected to the Bitou Municipality sewer system into Waste Water Treatment Plant.	The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6MI per day and is currently at an average daily discharge volume of 5.8MI (confirmed by Bitou Municipality). According to Bitou Municipality the remaining 0.2MI is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate most new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed, on 15 August 2024 that they can accommodate this proposed low residential development on Pt 38/444 within the available spare capacity of the Ganse Vallei Wastewater Treatment Works without compromising the allocation for low cost housing projects. A signed Confirmation of Bulk Services Letter from Bitou
	Municipality is attached as Appendix E16 to the Draft Basic Assessment Report.
All necessary upgrades to the bulk sewer lines must be completed before commencement of the development.	Construction programmes and schedules are complex and it is a recommendation of this BAR that the restrictive condition be for associated link infrastructure to be completed prior to occupation of any units because that is when such services must be readily available. To place the restriction on total development/commencement will result in an unreasonable time lapse without achieving a reasonable outcome (which is to prevent utilization of services prior to it being implemented).
Installed sewer pump station must have standby non electronical pumps available in case of power outages, failures or mechanical malfunction of the existing pump.	The current design has made allowance for a duty/standby pump set with a back-up generator for the electrical pumps. The appointed engineer will discuss with Bitou Municipality and remove the generator in lieu of a diesel pump set should it be deemed necessary prior to construction.
Sewer pumpstation must have an emergency-overflow storage sump (8hours).	The current design has made allowance for 6 hours. The appointed engineer will discuss with Bitou Municipality and increase the storage capacity to include 8 hours should it be deemed necessary prior to construction.

Solid waste stored on – site in a designated area approved by Bitou Municipality.	The current proposed refuse storage area (and refuse vehicle turning circle) was discussed with Bitou Municipality and WCG.
Refuse collection area enclosed with no rainwater or stormwater run off, water point for proper cleaning and gully connected to sewer on lowest point of concrete floor.	Refuse collection is supplied with a foul sewer drainage point and water connection.
All refuse is to be incorporated into the Bitou Municipal solid waste stream.	A signed Confirmation of Bulk Services Letter from Bitou Municipality is attached as Appendix E16 to the Draft Basic Assessment Report.
A buffer of 5 m must be implemented around the two stone features. They must be fenced during the earth moving activities, to protect them from accidental impact.	This Mitigation Measure is included in the Environmental Management Programme for the proposed development.
An archaeologist must be on site to monitor earth moving activities, particularly those areas around the stone features. If any human remains or significant archaeological materials are exposed during development activities, then the find should be protected from further disturbance and work in the immediate area should be halted and Heritage Western Cape must be notified immediately. These heritage resources are protected by Section 36(3)(a) and Section 35(4) of the NHRA (Act 25 of 1999) respectively and may not be damaged or disturbed in any way without a permit from the heritage authorities. Any work in mitigation, if deemed appropriate, should be commissioned and completed before construction continues in the affected area and will be at the expense of the developer. The above recommendations should be included in the Environmental Management Program (EMPr) for the proposed residential development.	This Mitigation Measure is included in the Environmental Management Programme for the proposed development.
Archaeological monitoring of bulk earthmoving activities must take place.	This Mitigation Measure is included in the Environmental Management Programme for the proposed development.
The Archaeologist must report any occurrences of fossils and a palaeontologist must record the exposed sections before the trenches are closed up.	This Mitigation Measure is included in the Environmental Management Programme for the proposed development.
The HWC Chance Fossil Finds Protocol to be implemented and included in the Environmental Management Programme Report	HWC Chance Fossil Finds Protocol included in the Environmental Management Programme for the proposed development.
Will the KLV take any steps to control the current problem of illegal squatters on the estuary's edge? On more than one occasion, we have had to extinguish "food" fires which threatened to spread to the bush between the estuary and the properties to the West.	The Keurbooms Lifestyle Village intends to maintain existing pathways on Portion 38 of Farm Ganse Vallei 444 (within Private Open Space). The portion of the property below the HWM is deemed to be State Land and the responsibility of maintenance and ensuring the safety of people utilizing this area therefore falls to the State.
We note that there is a recommendation to hard surface the gravel section of Rietvlei/Meadow Land. "It is recommended that the eastern approach of Rietvlei Road be surfaced up to the access gate". This essential step should be undertaken prior to commencement of construction, as the dust caused	Hard surfacing of Rietvlei Road prior to commencement of construction activities will be included as a recommended condition in the Basic Assessment report should the Department of Environmental Affairs and Development Planning choose to include it in the Environmental Authorisation.

by construction vehicles will become a health risk to the elderly residents of Quartet.

Updated Response:

It is proposed for **the gravel parts** of **Rietvlei Road** to be **hard surfaced** within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced should the Municipality require such as part of the services agreement details.

Completing a road upgrade (or hard surfacing) prior to construction of any development, results in the same (upgraded) road being damaged by construction vehicles when the development is constructed. The additional cost of having to then redo the road upgrade is not reasonable given the low density of this proposed development. However, to address the potential issue of dust pollution from vehicles utilising Rietvlei Road during construction, it is mandatory to apply dust suppression methods to ensure that dust pollution is sufficient controlled. Dust suppression can be done through using a water tanker to wet the gravel road regularly, or alternatively applying an organic dust suppression product that temporarily binds the soil and prevent dust pollution.

The Rietvlei intersection is already dangerous. Particularly during construction, we propose that the developers should appeal to SANRAL to impose a 60km/h speed limit along that section of the N2 to assist construction vehicles to access and exit the N2. We believe that a permanent limit of 60km/h should be imposed along that stretch until after the two Keurbooms exits. During consultations with SANRAL, we would request that the general speed limit along the N2 be debated.

The recommendation to impose a speed limit on the N2 national road will be shared with the Applicant and appointed engineer to discuss during consultation with representatives of SANRAL. This recommendation will also be shared with SANRAL as part of the Comments & Response report appended to the Basic Assessment report.

We fully support the proposal "The roads authorities should consider upgrading the intersection or changing the intersection control to alleviate the existing LOS E along Rietvlei Road West. Both a roundabout or a signalized intersection will reduce delays."

The proposal to upgrade/amend the intersection is included in the Traffic Impact Assessment that was shared with SANRAL during the public participation process of the Pre-Application Draft Basic Assessment report, however for the low density development of 12 residential units, no dedicated upgrade (to the N2 intersection) is required. Upgrades to the N2 intersection will however remain part of SANRALs responsibility.

Public transport embayment's. We note that these are considered adequate. In fact, the Southbound embayment is a safety risk.

The notes and recommendations presented in your email will be shared with SANRAL as part of this Comments & Response Report.

- When vehicles are stopped there, often heavy vehicles using it as a temporary lay-over, the visibility of the Southbound traffic is impaired for vehicles entering or crossing the N2 flow.
- Southbound vehicles assume the embayment to be a deceleration zone for an exit into Rietvlei which promptly narrows again.
- Taxis invariably od not use the Southbound embayment. They generally turn into Rietvlei East and access the N2 again.
- The Southbound embayment should be moved to the South side of Rietvlei, where it will bot impede visibility.
- The N2 should be widened to properly accommodate access into and exit from Rietvlei in

All recommendations stipulated in the Traffic Impact Assessment as well as in documentation included in the Basic Assessment reports are to be shared with the roads authority for consideration as part of the public participation process, however the low density development itself (for 12 homes) do not justify an upgrade to the N2 intersection.

both directions. The current design is dangerous: increased traffic from KLV = increased risk.

The load from within Quartet and Meadows Estates already results in occasional back-ups which requires the services of the Bitou "honeysucker". We would need assurance that there will be no load increase or resultant increased risk of blockage which might affect Quartet/Meadows Estates and result in additional costs.

Load: The development will increase the load on the municipal system, but due to the pumpstation storage, the peak flows will not necessarily coincide with the pumpstation discharge cycles. If the current system experiences "occasional back-ups" then the problem is most likely blockages and not peak flow (which would result in daily spillage).

Blockages: The sewage from the development should not cause any blockages due to the fact that the sewage from the pumpstation will pass through a screen/filter before it is pumped via the rising main into the municipal system.

Furthermore upgrades to the sewer infrastructure forms part of this development application.

Note:

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

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

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

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

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

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

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

SECTION G: DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

1.1.	Was a specialist study conducted?	YES	NO
1.2.	Provide the name and or company who conducted the specialist stud	y.	
	•		
1.3.	Indicate above which aquifer your proposed development will be local influenced your proposed development.	ated and explain	n how this has
1.4.	Indicate the depth of groundwater and explain how the depth of groundwater and	ndwater and ty	pe of aquifer (if present)

2. Surface water

2.1.	Was a specialist study conducted?	YES	NO
2.2.	Provide the name and/or company who conducted the specialist study.		
Dr J.M. Do	abrowski (Confluent Environmental (Pty) Ltd.)		
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the proposed development.	perty(ies) has inf	luenced your

Portion 38 of Farm Ganse Vallei 444 is situated within sub-quaternary catchment (SQC) 9188. According to the National Freshwater Ecosystem Priority Atlas (NFEPA), SQC 9188 has been classified as a Freshwater Ecosystem Priority Area (FEPA). However, the footprint of the development is not located within any aquatic features.

The Keurbooms Estuary is located directly to the east of the proposed development property (Figure 14). The section of the estuary situated adjacent to the proposed development site is supra-tidal salt marsh dominated by *Juncus kraussi*.

Vegetation present between the edge of the Keurbooms Estuary and the eastern most row of proposed residential units consist of dense thicket vegetation (designated Goukamma Dune Thicket), which forms a buffer between the proposed development and the estuary. This vegetation may not be removed.

Based on the characteristics of the area identified during desktop studies and site inspections, an appropriate buffer of 33m will be adhered to from the edge of the estuary (Figure 14). The current site development plan makes provision for approximately 45m between the edge of the estuary and the closest proposed residential unit which is deemed sufficient for the purpose of protecting the estuarine habitat.

Any development that occurs within the proposed 33m buffer zone will be considered as **Very High** sensitivity and is therefore not supported. Development that occurs outside the 33m buffer zone is considered as **Low** sensitivity.

The proposed development footprint falls entirely outside the 33m buffer zone.

Due to the location of the proposed development site in the FEPA, the following consideration should be taken into account to ensure that stormwater is managed according to the Sustainable Drainage System (SuDS) principles:

• Stormwater must not be discharged directly into the estuary.

- Rainwater harvest tanks must be installed at the proposed residential units as well as communal buildings to reduce water entering the stormwater system.
- Make use of swales and retention ponds to attenuate stormwater runoff on site. This will increase infiltration and reduce the speed and volume of stormwater runoff discharged from the proposed development site.
- Make use of permeable paving to promote infiltration into the soil.
- Make use of retention ponds and artificial wetlands to capture stormwater runoff.

The buffer zone is located on steep slopes which will be vulnerable to erosion during site clearance. The following recommendations are made as erosion control measures:

- Ensure that construction activities do not cause any preferential flow paths and concentrated surface runoff.
- Demarcate the construction area. This will ensure that construction vehicles do not compact soil or disturb any vegetation within the buffer zone.
- To reduce the transport of sediment, make use of silt fences and biodegradable coir logs which can be placed along contours.
- Vegetation clearing should be done in parallel with the construction progress. This will minimize erosion and runoff.
- Revegetate exposed areas once construction has been completed.
- Stormwater runoff that is generated by hardened surfaces should be discharged in retention areas such as swales and retention ponds. This will reduce concentrated runoff and erosion.

The National Water Act (NWA, 1998) stipulates that 'Watercourse' means:

- A river or spring;
- A natural channel in which water flows regularly or intermittently;
- A wetland, lake or dam, into which or from which, water flows; and
- Any collection of water which the Minister may, by notice in the Gazette, declare to be a watercourse, and a reference to a watercourse includes, where relevant, its bed and banks.

The Keurbooms Estuary is not defined as a watercourse and therefore the proposed development will not be within the regulated area of a watercourse. Consequently, **no water use authorisation is required.**



Figure 14: Delineated estuary with 33m buffer zone.

3. Coastal Environment

3.1.	Was a specialist study conducted?	YES	NO
3.2.	Provide the name and/or company who conducted the specialist study	-	
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were this influenced your proposed development.	taken into acco	ount and explain how

Considerations regarding the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"):

- Whether coastal public property, the coastal protection zone or coastal access land will be affected, and if so, the extent to which the proposed development or activity is consistent with the purpose for establishing and protecting those areas.
 - The proposed development is not located in coastal public property and will have no affect on surrounding coastal public properties.
 - o Portion 38 of Farm Ganse Vallei 444 is not designated as coastal access land.
 - The proposed development site is partially located in the Coastal Protection Zone. However, development will be limited to already disturbed, elevated areas while preserving/maintaining the remaining coastal habitat and coastal processes towards the estuary (eastern portion of property) (Figure 12).
- Socio-Economic impact if the activity is authorised / not authorised.
 - o If the proposed development is authorised, it will have the following impacts relating to socio-economics:
 - Create temporary and permanent employment opportunities during construction and operational phase.
 - Preserve and maintain the riparian zone in the eastern portion of the proposed development site.
 - Optimise vacant land in an urban setting, therefore increasing the holistic financial sustainability of Bitou Municipality.

- Meet the management objectives of the Keurbooms-Bitou Estuarine Management Plan.
- o If the proposed development is not authorised, it will have the following impacts relating to socio-economics:
 - Property remains vacant and will therefore not increase the holistic financial sustainability of Bitou Municipality.
 - No employment opportunities will be created for the local community of Bitou Municipality.
- The likely impact of the proposed activity on the coastal environment, including the cumulative effect of its impact together with those of existing activities.
 - o The proposed development will be limited to already disturbed areas on Portion 38 of Farm Ganse Vallei 444, therefore applying avoidance mitigation to the riparian zone. An environmental management plan will be adhered to for the proposed development which will aim to preserve/maintain the natural coastal environment.
- The likely impact of coastal environmental processes on the proposed activity.
 - The proposed development will not be affected by coastal processes such as wave, current and wind action, erosion, accretion, sea-level rise, storm surges and flooding. The eastern portion of the proposed development site will be maintained in its natural state which will provide a sizeable buffer between the development activities and the Keurbooms Estuary.

It is evident from the considerations regarding the **NEM:ICMA** mentioned above, that the proposed development will not prejudice the achievement of any coastal management objectives and is not in contrary to the interests of the surrounding community. The proposed development will not cause irreversible or long-lasting adverse affects to any aspect of the coastal environment. The proposed development will not deny the public access to the coastal environment.

3.4. Explain how estuary management plans (if applicable) has influenced the proposed development.

The estuarine management plans, coastal management programmes and coastal management objectives applicable in the area:

- The Keurbooms Estuary is of high conservation value and in terms of the management objectives, the Keurbooms-Bitou Estuarine Management Plan (K-BEMP) stipulates that formal protections mechanisms to obtain conservation status for land parcels within or spanning the estuarine functional zone (EFZ) must be investigated. The following guidelines are provided in the K-BEMP and are relevant to the proposed land-use and infrastructure:
 - Planning should allow for the maintenance of a riparian zone along the length of the estuary where sensitive habitats (wetlands, supratidal saltmarshes and indigenous vegetation) occur.
 - The implementation of the coastal management lines (CML), coastal protection zones (CPZ), flood lines and the inclusion of CBA's within all planning schemes will allow for compliance with this guideline. The proposed development layout will allow for the maintenance/preservation of the riparian zone that forms part of the private open space, located in the eastern portion of Portion 38 of Farm Ganse Vallei 444. Areas below the HWM is technically deemed State Land for which the State is responsible ito maintenance.
 - Development and land use in the catchment and estuarine area should not lower water quality or interfere with normal hydrodynamic or sedimentary process and cycles.

- The proposed development will not discharge any effluent water in the estuarine area and will therefore not alter the water quality.
- Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.
 - The proposed development is not located in coastal public property and will have no affect on surrounding coastal public properties.
 - Portion 38 of Farm Ganse Vallei 444 is not designated as coastal access land.
 - The proposed development site is partially located in the Coastal Protection Zone. However, development will be limited to already disturbed areas while preserving/maintaining the remaining coastal habitat (eastern portion of property) within its Private Open Space (Figure 12).
 - The proposed development will adhere to a 33m buffer zone around the delineated estuary (Confluent Consulting, 2023).

4. Biodiversity

4.1.	Were specialist studies conducted?	YES	OH
4.2.	Provide the name and/or company who conducted the specialist studie	es.	
Dr David H	Hoare (David Hoare Consulting (Pty) Ltd).		
4.3.	Explain which systematic conservation planning and other biodiversity in NFEPA, NSBA etc. have been used and how has this influenced your prop		

The following sources of information was used to undertake biodiversity assessments (extract from Terrestrial Biodiversity Impact Assessment, Botanical Compliance Statement and Faunal Compliance Statement undertaken by Dr David Hoare and Dr Wynand Vlok) (Appendix G2, G3 and G4):

Terrestrial Biodiversity Impact Assessment:

- Regional Vegetation:
 - Broad vegetation types occurring on site were obtained from Mucina and Rutherford (2006), with updates according to the SANBI BGIS website (http://bgis.sanbi.org), as follows:
 - Mucina, L. and Rutherford, M.C. (editors) 2006. Vegetation map of South Africa, Lesotho and Swaziland: an illustrated guide. Strelitzia 19, South African National Biodiversity Institute, Pretoria.
 - South African National Biodiversity Institute 2018 Final Vegetation Map of South Africa, Lesotho and Swaziland [Vector] 2018. Available from the Biodiversity GIS website, downloaded on 23 September 2021.
- Threatened Ecosystems:
 - o The conservation status of the vegetation types were obtained from Mucina and Rutherford (2006) and the National List of Ecosystems that are Threatened and in need of protection (GN1002 of 2011), published under the National Environmental Management: Biodiversity Act (Act No. 10, 2004).
 - o The plant species checklist of species that could potentially occur on site was compiled from a plant species checklist extracted from the NewPosa database of the South African National biodiversity Institute (SANBI) for the quarter degree grids 3422AA.

o The IUCN Red List Category for plant species, as well as supplementary information on habitats and distribution, was obtained from the SANBI Threatened Species Programme (Red List of South African Plants, http://redlist.sanbi.org).

• Regional plans:

- o Information from the National Protected Areas Expansion Strategy (NPAES) was consulted for possible inclusion of the site into a protected area in future (available on http://bgis.sanbi.org).).
- o The 2017 Western Cape Biodiversity Spatial Plan (WCBSP) Maps were consulted for inclusion of any parts of the site into any Critical Biodiversity Areas or Ecological Support Areas (CapeNature. 2017 WCBSP Mossel Bay [Vector] 2017. Available from the Biodiversity GIS website (biodiversityadvisor.sanbi.org)).

Botanical Compliance Statement:

- Vegetation and Plant Species:
 - Plant species that could potentially occur on in the general area was extracted from the NewPosa database of the South African National biodiversity Institute (SANBI) for the quarter degree grid/s in which the site is located.
 - o The IUCN Red List Category for plant species, as well as supplementary information on habitats and distribution, was obtained from the SANBI Threatened Species Programme (Red List of South African Plants, http://redlist.sanbi.org).
 - Lists were compiled specifically for any species at risk of extinction (Red List species) previously recorded in the area. Historical occurrences of threatened plant species were obtained from the South African National Biodiversity Institute (http://posa.sanbi.org) for the quarter degree square/s within which the study area is situated. Habitat information for each species was obtained from various published sources. The probability of finding any of these species was then assessed by comparing the habitat requirements with those habitats that were found, during the field survey of the site, to occur there.
 - o Regulations published for the National Forests Act (Act 84 of 1998) (NFA) as amended, provide a list of protected tree species for South Africa. The species on this list were assessed in order to determine which protected tree species have a geographical distribution that coincides with the study area and habitat requirements that may be met by available habitat in the study area. The distribution of species on this list were obtained from published sources (e.g. van Wyk & van Wyk 1997) and from the SANBI Biodiversity Information System website (http://sibis.sanbi.org/) for quarter degree grids in which species have been previously recorded. Species that have been recorded anywhere in proximity to the site (within 100 km), or where it is considered possible that they could occur there, were listed and were considered as being at risk of occurring there.

Although mapped as Garden Route Shale Fynbos (EN) the remaining fynbos on the elevated portion of the site where the development is proposed is moribund, invaded by several alien invasive species, and has relatively low species richness. Based on the species analysis the botanist confirms that the remaining fynbos has poor species richness and composition which is not normal for intact healthy fynbos. This suggests that the fynbos is old secondary fynbos (lack of fire maintenance), whilst being chronically disturbed for an extended period of time through grazing and nutrification (manure).

According to the botanist, the national vegetation map is not mapped at a fine scale and the onsite patterns do not necessarily match the vegetation type description.

Although there are several plant species listed in the Screening Tool report that have a medium probability of occurring on site (based on distribution and habitat requirements) the botanical specialist did not find these species. Thus the habitats have been given a Site Ecological Importance score of Medium.

Faunal Compliance Statement:

- Fauna:
 - Lists of animal species that have a geographical range that includes the study area were obtained from literature sources (Bates et al., 2014 for reptiles, du Preez & Carruthers 2009 for frogs, Mills & Hes 1997 and Friedmann and Daly, 2004 for mammals). This was supplemented with information from the Animal Demography Unit website (adu.uct.ac.za) and literature searches for specific animals, where necessary.
- Appendix 2 (of Faunal Compliance Statement) is a summary (for the QDS3422AA) of amphibians, mammals and retiles that may occur on the study site.

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

The eastern portion of Portion 38 of Farm Ganse Vallei Farm 444 is located in a designated Critical Biodiversity Area, specifically a estuary area (Figure 11). A very small portion of the property contains designated Ecological Support Areas, specifically ESA2 (restore from other land use). No development is proposed in the critical biodiversity areas.

Critical Biodiversity Area 1

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

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

Critical Biodiversity Area 2

<u>Definition:</u> Areas in a degraded or secondary condition. Required to meet biodiversity targets for species, ecosystems or ecological processes and infrastructure.

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

Ecological Support Area 2

<u>Definition:</u> Not essential for meeting biodiversity targets. Important in supporting functioning of PAs or CBAs. Often vital for ecosystem services.

<u>Objective:</u> Restore/minimise impact on ecological infrastructure functioning, especially soil and water-related services.

Proposal: The proposed development does not include any infrastructure in the eastern portion of the development property that is located in a designated Critical Biodiversity Area. All development will be focussed on the western portion of the property that is already disturbed due to historical grazing, the exclusion of burning regimes to maintain fynbos habitat as well as the spread of alien vegetation species.

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

According to the SANBI Red List of Ecosystems map, the proposed development site consists of Garden Route Shale Fynbos (Endangered) in the western portion of the property as well as Goukamma Dune Thicket (Least Concern) in the western and eastern portion of the property.



Figure 15: SANBI Red List of Ecosystems map in relation to the proposed development site (CapeFarmMapper, 2023).

Terrestrial Biodiversity Impact Assessment (David Hoare Consulting): The Terrestrial Biodiversity Impact Assessment stipulated the following:

- Estuarine habitats on site (eastern portion of the property) are sensitive and must be avoided.
 - The proposed development applies total avoidance of the eastern portion of the property and all infrastructure is proposed on the western portion that is already disturbed/degraded.
- Mesic Thicket habitat on the sea-facing slope is sensitive. The Mesic Thicket forms an essential buffer between estuarine and terrestrial ecosystems.
 - o No development is proposed in the identified Mesic Thicket habitat.
- The fynbos that is present on site, is in poor condition. The poor condition of the fynbos could be as a result of long-term degradation and it is deemed secondary.
 - The preferred site alternative was identified considering the overall site sensitivity of Portion 38 of Farm Ganse Vallei 444. The preferred area on the property is already disturbed by historical grazing activities. The prolonged exclusion of burning contributed to the disappearance of Garden Route Shale Fynbos vegetation. The vegetation is **no longer representative of the endangered fynbos species** and rather of secondary grassy fynbos.
- The habitats on Portion 38 of Farm Ganse Vallei that have the highest sensitivity and ecological value are excluded from the proposed development footprint (Figure 17).

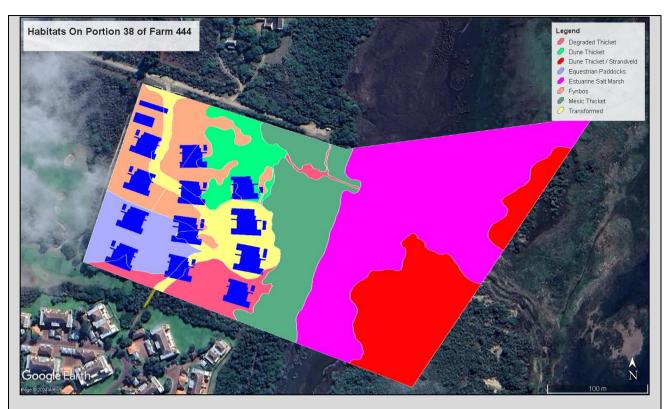


Figure 16: Habitats identified on Portion 38 of Farm 444 (David Hoare Consulting, 2024).

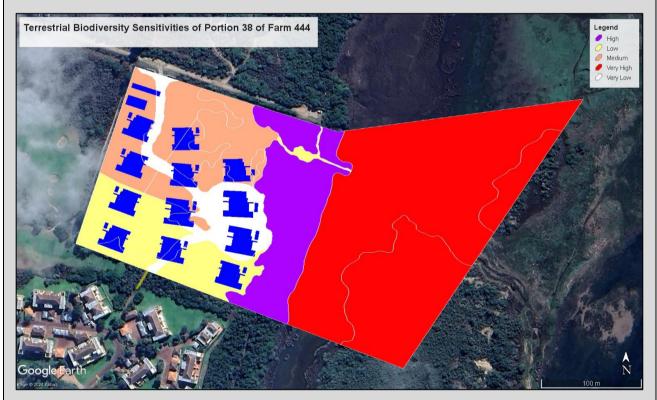


Figure 17: Terrestrial Biodiversity Sensitivities for Portion 38 of Farm 444 (David Hoare Consulting, 2024).

Botanical Compliance Statement (David Hoare Consulting): The Botanical Compliance Statement Stipulated the following:

• No plant species of concern were identified on site.

- The estuarine habitat (eastern portion of the property) is a known habitat for Zostera capensis (Least Concern). This species is ecologically important and listed as a sensitive species. The estuarine habitat has a Site Ecological Importance of Very High:
 - No development is proposed in the identified estuarine habitat (eastern portion of the property).
- Two protected tree species were identified on site namely *Pittosporum viridflorum* and *Sideroxylon inerme*. The exact location of the protected trees were marked with GPS coordinates.
 - The site development plan was amended to avoid all the identified protected tree species (Figure 19).

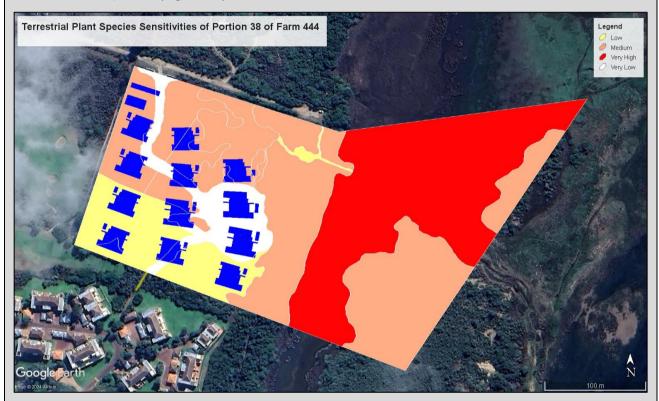


Figure 18: Terrestrial Plant Species sensitivities identified for Portion 38 of Farm 444 (David Hoare Consulting, 2024).

It is noted that time lapse from when the protected tree survey is undertaken, to inform the environmental/planning applications, till implementation, could be a number of years during which time germination of more protected tree species may occur and/or surveyed trees would have grown larger/died off. It is therefore a recommendation that the actual footprints of each unit be checked prior to final construction. The current layout will not however result in the removal of protected trees. Should trimming or relocation of younger trees be required the Applicant must apply for the necessary Forestry Permit in terms of the Act.



Figure 19: Protected tree survey. CW = Cheesewood. MW = Milkwood (David Hoare Consulting).

Terrestrial and Botanical Compliance Statement (Benjamin Walton Cape Vegetation Surveys) (for proposed **link water and sewerage pipeline infrastructure in the N2 and Rietvlei Road road reserves**):

- Rietvlei Road road reserve:
 - The eastern extent of the study area of the Rietvlei Road road reserve has a band of disturbed natural vegetation (Goukamma Dune Thicket elements of Least Concern) which is considered of Medium Terrestrial Biodiversity Sensitivity and Medium Plant Species Sensitivity. The eastern extent is composed of tall shrubs and small trees, herbs, bulbs and annual grasses. However, the development impact in disturbed Dune Thicket of Medium Terrestrial Biodiversity Sensitivity, is a minor impact for plant community functioning and ecosystem services, and positive impact for infrastructural development. The impact is site specific in extent to the study area and surrounding adjacent environment. The duration of the impact is temporary should passive secondary succession be facilitated within the vegetated sections of the Rietvlei Road Reserve. Following disturbance, the spread of Invasive Alien Species (IAS) must be monitored and controlled.
 - The western extent of the study area of the Rietvlei Road road reserve is transformed due to brushcutting / mowing which is considered of Low Terrestrial Biodiversity Sensitivity and Low Plant Species Sensitivity.
 - A single Cheesewood tree was identified and marked with GPS coordinates. The identified Cheesewood tree is located towards the east of the proposed entrance of Keurbooms Lifestyle Village and not within the disturbance footprint of the proposed pipeline routes. It is recommended that this Cheesewood tree be demarcated during construction to create awareness for staff.
 - A single bulb specie (Brunsvigia orientalis) was identified and marked with GPS coordinates to the west of the current entrance to Portion 38/444 which can be rescued and relocated to within the open space areas of the Portion 38/444. It is also

- recommended that the proposed pipeline routes in the road reserves be inspected by the appointed Environmental Control Officer prior to any construction to identify any emerging bulb species for rescue.
- o The Site Ecological Importance of the Disturbed Thicket is found to be Medium. Development activities of medium impact is acceptable followed by appropriate restoration activities once the link services are installed.

• N2 road reserve:

- o The habitat where water and sewerage pipeline infrastructure is proposed in the N2 road reserve is transformed and composed of annual exotic and indigenous grasses and weedy plants subject to frequent mowing.
- o The vegetation along the N2 road reserve is of Very Low Terrestrial Biodiversity Sensitivity and Very Low Plant Species Sensitivity.



Figure 20: Two broad habitats identified within the road reserves being Transformed Habitat (yellow area) and Disturbed Dune Thicket (green area).

No plant Species of Conservation Concern were identified within the road reserves.

The following mitigation measures are recommended:

- The applicant must conduct activities carefully and reuse or relocate as much bulk plant material as is practical prior to construction (specifically *Brunsvigia orientalis* is rescuable).
- Topsoil must be appropriately stored outside of the development footprint to aid in rehabilitation use. As there is a potential for dispersal and supply of indigenous plant propagules at the property it is recommended that natural succession occur following the activity as passive rehabilitation, within previously vegetated sections of Rietvlei Road Reserve.
- Excavation and earthworks proposed to be conducted must remain within the development footprint and be demarcated from the remaining areas.
- During construction exposed surfaces and slopes may be covered with mulch, hessian cloth and / or "chip filled hessian sausage rolls" to prevent loss of soil by natural wind and water erosion.

The general vegetation of the study area is considered of Very Low Terrestrial Biodiversity Sensitivity & Low Terrestrial Biodiversity Sensitivity with a Low to Medium Relative Plant Species Sensitivity.

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

The proposed development is not located in a protected area.

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

Faunal Compliance Statement (David Hoare Consulting): The Faunal Compliance Statement stipulated the following:

- The proposed development site is not considered to be a suitable or critical habitat for any of the animal species identified in the Screening Tool Report.
- Areas outside the development footprint that have a Very High Site Ecological Importance will not be affected by the proposed development.
- The eastern portion of the proposed development site containing thicket have a moderate to high probability of the Knysna Warbler (Vulnerable) to occur, however, no development is proposed in the eastern portion of the property.
- The Crowned Eagle (Near Threatened) is unlikely to occur on the proposed development site even though the Mesic Thicket in the eastern portion of the property may constitute part of their general foraging range.
- Small antelope species could potentially find a suitable habitat in the Mesic Thicket in the eastern portion of the property. However, due to landscape connectivity issues, the small antelope species are unlikely to be present.

It is verified that the Animal Species Theme has a Medium sensitivity for the proposed development site.

5. Geographical Aspects

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

No geographical aspects will be affected.

6. Heritage Resources

6.1.	Was a specialist study conducted?	YES	NO
6.2.	Provide the name and/or company who conducted the specialist study	•	
Stefan de	Kock (Perception Planning)		
6.3.	6.3. Explain how areas that contain sensitive heritage resources have influenced the proposed development.		

During 2009, a NID application in relation to the proposed development of a boutique hotel on Portion 38 of Farm Ganse Vallei 444 was submitted to HWC by Perception Planning on behalf of the previous landowner. In response to the NID submission, HWC required that an Archaeological Impact Assessment (AIA) & Desktop Palaeontology Impact Study (PIA) be undertaken. No development took place after the 2009 NID application.

A new Notice of Intent to develop has been submitted to Heritage Western Cape on 19 October 2022. HWC, in their response to the 2022 NID, confirmed that an Integrated Heritage Impact Assessment is required due to the presence of two potential burial sites.

The two potential burial sites were investigated during the 2022 Archaeological Impact Assessment which led to the following observations:

- No evidence of any pre-colonial or colonial period archaeology on the property.
- Slight possibility of archaeological material under the dune which covers the southern portion of the property.
- The two stone features consist of quartzite cobbles which are small in size and overgrown with indigenous brush (4m apart).
- Similar quartzite cobbles are distributed throughout the area in the undergrowth next to Rietvlei Road and the pathways leading to the estuary.
- The quartzite cobbles are part of an old beach terrace.
- It cannot be confirmed whether the stone features represent burial sites.

The Committee approved the HIA compiled by Perception Planning dated March 2023 with the following conditions (Appendix E1):

- A 5m buffer must be adhered to around the two stone features which must also be fenced during earth moving activities.
- An archaeologist must be on site to monitor earth moving activities. If any human remains
 or significant archaeological materials are exposed during development activities, the find
 should be protected from further disturbance and work in the immediate area should be
 halted and Heritage Western Cape must be notified immediately.

An additional Notice of Intent to Develop has been submitted to HWC for the proposed sewerage and water pipeline link infrastructure in the N2 and Rietvlei Road road reserves as well as for the proposed upgrades of Rietvlei Road as these constitute 'linear activities' albeit existing and already transformed areas.

7. Historical and Cultural Aspects

Explain whether there are any culturally or historically significant elements as defined in Section 2 of the NHRA that will be affected and how has this influenced the proposed development.

No historical and cultural aspects will be affected.

8. Socio/Economic Aspects

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

Surrounding properties area characterised by a variety of rural residential, tourist and commercial associated uses while areas located east of the N2 National Road are characterised by group housing developments (private residential estate developments) which are managed by homeowners associations.

Private residential properties in the area are associated with the high-end income bracket. Properties are of reasonable size, mostly with large homes. Redevelopment in the area see older houses being renovated and/or modified often.

The area is fully serviced and Municipality services are well maintained with a high level of service delivery. Road infrastructure is of good condition and maintenance done when required.

Due to the proximity of the various coastal suburbs that make up this Plettenberg Bay-Keurbooms area, the area offers both permanent as well as semi-permanent accommodation through short-term rental, as well as ownership.

Residents in the area are mostly well-educated, highly qualified and either employed or retired. There is a school in the surrounding area (Plettenberg Bay Primary), and access to the beach and estuary makes it a popular area for walking/hiking and cycling.

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

Development of a lifestyle village, in this particular area is unlikely to deter from the character/value of the greater area.

The proposed development will contribute to the socio-economic value of Bitou Municipality in the following ways:

- Create temporary employment opportunities during pre-construction and construction phase.
- Create employment opportunities during operational phase.
- Create temporary employment opportunities for contractors, small businesses and suppliers during construction and operational phases.
- Increase in the attraction of Bitou Municipality.
- Improve the holistic financial sustainability of the local municipality due to additional rates and taxes being generated.
- 8.3. Explain what social initiatives will be implemented by applicant to address the needs of the community and to uplift the area.

The development is proposed as a private development. The 'community' in which the site is located is not characterised as impoverished and it is unlikely that community upliftment (projects) is required.

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

Pre-construction and Construction Phase:

- Minimal noise impact construction activities will be limited to normal working hours (07:00 18:00) during weekdays and 07:00 13:00 on Saturdays with no activities to take place on Sundays and public holidays (unless prior arrangement is made with the ECO under exceptional circumstances).
- No impact regarding odours.
- Minimal dust pollution construction vehicle movement will be limited to the designated access routes and dust control measures will be put in place.
- Potential dust pollution on the gravel portion of Rietvlei Road during construction may cause temporary inconvenience to residents and/or sensitive receptors i.e. elderly residents residing in the immediate area.

Operational Phase:

- No noise impact.
- No impact regarding odours.
- Low impact regarding visual character and sense of place.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

1.1. Property and site alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts.

Provide a description of the preferred property and site site alternative.

The western portion of Portion 38 of Farm Ganse Vallei 444, Plettenberg Bay, Bitou Municipality.

Provide a description of any other property and site alternatives investigated.

No alternative properties or site alternatives were investigated for the proposed development.

Provide a motivation for the preferred property and site alternative including the outcome of the site selectin matrix.

The preferred site alternative was identified considering the overall site sensitivity of Portion 38 of Farm Ganse Vallei 444.

The preferred area on the property is already disturbed as a result of historical transformation, landscaping, development and agricultural activities.

The prolonged exclusion of burning (of fynbos) contributed to the transformation of Garden Route Shale Fynbos vegetation. The vegetation is no longer deemed to be representative of the endangered fynbos species and rather of secondary/degraded grassy fynbos.

The preferred site alternative avoids the delineated estuary habitat in the eastern portion of the property, therefore preserving/maintaining the highly sensitive riparian area of the Keurbooms Estuary.

Provide a full description of the process followed to reach the preferred alternative within the site.

An aquatic specialist was appointed by the applicant to assist with the delineation of the estuary habitat on the eastern side of the property. This estuary delineation was captured in a spatial layer that was used to inform the location of the proposed development with a setback of 33m.

Botanical/Biodiversity specialists were appointed to map the habitat sensitivity of the remaining fynbos, thicket vegetation. An overlay was compiled of the various sensitivity areas identified by the specialists which was used to inform the preferred site development layout.

Protected tree survey informed the placement of residential units in order to avoid all GPS marked trees.

Other specialist studies were undertaken including heritage (including palaeontology and archaeology), to determine the site location that would have the lowest impact on the cultural and biophysical environment.

The information gathered was used by the Architect and Urban Planner to compile a site development plan presented herewith as the preferred alternative.

The overall density (number of units) has subsequently been reduced and the placement of units (especially towards the location of protected tree species) are such that these trees will be avoided.

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

Site selection is determined by ownership and therefore no other property was available for consideration by the applicant.

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

DRAFT BASIC ASSESSMENT REPORT: APRIL 2024

Positive Impacts:

- Development will be focused on the already disturbed portion of Portion 38 of Farm Ganse Vallei 444 with less dense/sensitive vegetation compared to the remainder of the property in the lower lying, more sensitive thicket and estuarine habitat.
- Development will make use of existing municipal water, sewage, and electrical services.
- Development will manage alien invasive vegetation species.
- Development will maintain identified protected indigenous trees on the property.
- Development will create employment opportunities during construction and operational phases.
- Additional income to the local municipality through municipal rates and taxes.
- Improved maintenance/management of the riparian area of Keurbooms Estuary within the Private Open Space portion of the site.

Negative Impacts:

- Fragmentation of intact habitat with the positioning of residential units in an otherwise natural (albeit transformed) environment.
- Additional pressure on non-renewable (municipal) resources such as water and electricity.
- Additional traffic in Rietvlei Road, especially during the peak holiday periods.
- Additional waste generation that must be accommodated through the Municipal waste disposal systems.
- Additional effluent that must be accommodated through the Municipal sewage processing systems.
- Temporary noise impact during pre-construction and construction phases.

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

Provide a description of the preferred activity alternative.

Preferred Alternative

The applicant proposes to develop a low density residential estate, with private amenities, on Portion 38 of Farm Ganse Vallei 444 (8.58ha), Plettenberg Bay (Bitou Municipality, Western Cape Province). The development allows for private, in-house care and support should ill/elderly residents require such services.

The property is situated east of the N2 national road and is bordered by the Goose Valley Golf Estate (west/south), Keurbooms Estuary (east) and the Meadows Residential Estate (north-west), as well as private residential development directly north of the site.

A large single residential dwelling with landscaped gardens surrounding the structure overlooking the estuary exist on the property. There are also existing stables and paddocks in the south-western corner of the property that is significantly more transformed. The property was historically used for keeping horses and grazing activities (Figure 1).

Portion 38 of Farm Ganse Vallei 444 is currently zoned Agriculture Zone I and it is the intention of the applicant to subdivide the property into two (2) portions and rezone these portion to:

- Residential Zone II portion (3.17ha equating to 36% of the site) and
- Open Space Zone portion (5.41ha equating to 64% of the site) (Figure 2).

The proposed development within the **Residential Zone II portion** will entail the following infrastructure:

- Twelve (12) x sectional title group housing units (single storey), each with a double garage and two (2) additional parking bays. Each unit will cover ~655m² and will therefore calculate to 1.39 units per hectare over the entire site.
- Entrance gate (from Rietvlei Road).
- Guard house.
- Maintenance and staff rooms.
- Communal areas (clubhouse, conference room, gym, pool, doctor/nurse office and admin office).
- Six (6) x visitor parking bays at the communal buildings / facilities.
- Internal access roads (5.5m wide).
- External services (water line and sewer line within road reserves as part of Municipal infrastructure).

Importantly no formal development is proposed in the Open Space Zone portion (~5.41ha) although existing pedestrian trails within the private open space will be maintained. Land below the HWM is deemed to revert to the State ito the Integrated Coastal Management Act (ICMA) in which case the State is responsible for maintenance of the land below the HWM.

Vehicular access to the proposed development will be directly from Rietvlei Road (Minor Road 7214) within a 9.45m wide right of way servitude (Portion 4 of Farm 444) along the northern boundary of Portion 38 of Farm Ganse Vallei 444. The Rietvlei Road connects directly with the N2 National Road and is an existing tar road. At the bottom of Rietvlei Road there is an existing public parking area from where the general public can access the estuary.

The proposed development will be a sectional title development (no subdivision), and therefore all the outdoor spaces are considered communal open space that must be maintained by the development (Applicant/Managing Agent/Body Corporate) in perpetuity. Given that a large portion (~5.41 ha) of the property will be zoned private 'Open Space Zone' with other internal recreational open space areas limited within the proposed Residential Zone II portion on the top flat portion of the site.

The proposed units have been specifically positioned within the transformed, flat portion of the site which avoids higher sensitive areas identified by the independent biodiversity / botanical / faunal/ aquatic specialist studies, as well as on-site input from Department of Forestry (joint site inspection with Mrs Melanie Koen, inspection dated 22 July 2024).

All existing buildings/structures which do not form part of the newly proposed development (paddocks, entrance gate, dwelling) will be demolished.

<u>Sewage Network:</u> The proposed development will be accommodated within the existing Goose Valley Main pumping station drainage area. The existing Goose Valley Main pumping station with an accompanying 200mm diameter rising main have sufficient capacity to accommodate the proposed development on Portion 38 of Farm Ganse Vallei 444.

Based on the outcome of the GLS (municipal) services evaluation for this application, the following additional infrastructure will be required to connect the proposed development to the existing municipal sewer system:

- Private pump station on Portion 38 of Farm Ganse Vallei (Item 4 in Figure 4). The location of the proposed pump station is indicated on the Site Development Plan (Appendix B1).
- Rising main (75mm diameter, approximately 470m long) in the Rietvlei Road road reserve (Item 5 in Figure 4).
- Outfall sewer (160mm diameter, approximately 120m long) in the Rietvlei Road road reserve and N2 road reserve (Item 6 in Figure 4).

• Outfall sewer (250mm diameter, approximately 445m long) in the N2 road reserve (Item 7 in Figure 4) where it will connect to the existing Goose Valley main pump station.

The Ganse Vallei Wastewater Treatment Works (WWTW) has an effluent discharge capacity of 6Ml per day and is currently at an average daily discharge volume of 5.8Ml. According to Bitou Municipality the remaining 0.2Ml is reserved for approved low-income housing developments. Upgrades to the Ganse Vallei WWTW is therefore required to accommodate new developments. However, due to the small scale of the proposed development, Bitou Municipality confirmed on 15 August 2024 that it can accommodate the proposed development on Pt 38/444 within the Ganse Vallei Wastewater Treatment Works without compromising the spare capacity allocations for low-cost housing.

The proposed internal sewage network (160mm diameter uPVC gravity pipe network with round precast concrete ring manholes) will drain towards the new proposed private sewer pumpstation on the northern boundary of Portion 38/444.

<u>Water Network:</u> The proposed development will be accommodated in the Goose Valley reservoir zone. Water reticulation will be connected to an existing 75mm diameter pipe located north-west of the property in Rietvlei Road road reserve.

According to the GLS (municipal) services investigation, the 75mm diameter pipe in Rietvlei Road road reserve needs to be upgraded to a 110mm diameter pipe (extending approximately 220m long) in the Rietvlei Road reserve in order to comply with the fire flow criteria (Item 1 in Figure 6).

The internal water reticulation system will be a metered network consisting of a combined domestic and fire water reticulation network (75mm diameter uPVC Class 12 potable water main). Provision will be made inside erf boundaries of every property for individual water meters (located 1m inside each erf boundary).

Extract from Civil Engineering Report compiled by Vita Consulting Engineers regarding water supply to the proposed development: "The bulk water system to the Goose Valley, Wittedrift and Matjiesfontein reservoirs is at capacity and must be upgraded according to the Bitou master plan before additional developments within the reservoir supply areas can be accommodated".

GLS Consulting Engineers (on behalf of the Bitou Municipality), provided the following temporary solution as part of their master planning:

- Installation of a temporary 160@mm bulk main off the existing 160mm distribution main in the N2 road reserve, will free up 860kl/day⁵ water supply.
- This capacity rectification will accommodate the development demand for Farm 444/38 (this application), Farm 304/32 and RE/6503.

According to Vita Consulting Engineers, implementation of this temporary solution is to be undertaken by the developer of Erf Portion 19 and 27 of Farm 444 (construction on this development commenced June 2024).

The 160mm diameter pipeline of approximately 460m in length, is to be installed as a temporary measure till the Municipality has its bulk water supply network capacity funding for further upgrades. It will be installed above ground, following the existing water servitude that runs from the Goose Valley Reservoir to the existing distribution main in the N2 road reserve (Figure 7).

The existing servitude already contains a 200mm and 250mm diameter underground pipelines (of which one is defunct).

The temporary pipeline is to be installed in short 2.4m sections that will be welded together on site. The implementation of the temporary solutions does not entail earthworks, or the removal of vegetation, although trimming of vegetation to clear the route is anticipated.

Roads and Parking Areas:

The internal road network will be a 5.5m wide brick paved road with formal kerbs/edgings, roadside channels and a stormwater drainage network. Internal roads will not be subdivided and will form part of the communal areas maintained by the Body Corporate of the proposed development.

It is proposed for the gravel parts of Rietvlei Road to be hard surfaced within the constraints of the existing road. Asphalt portions of Rietvlei Road to be resurfaced (Figure 8).

Stormwater:

The pre-development site drains from the central portion (highest point on the property) towards the north-western and southern boundaries. No formal bulk municipal stormwater infrastructure is available in vicinity of the property. Due to the high permeability of the insitu dune sands, stormwater runoff permeates into the subsoil layers and therefore a formalised bulk stormwater connection is not required for the proposed development.

An open swale stormwater network will however be designed which will have sufficient capacity to manage and convey up to a 1:5 year rainfall event. The open swale stormwater network will follow the road network and will have inlet structures and pipe culverts at road crossings. If a rainfall event with a return period larger than 1:5 year occurs, the internal roadways will act as overland flow routes which will convey stormwater run-off towards the lower lying eastern portion of the property.

Provision will be made for a subsoil drainage network beneath the internal roads. The subsoil drainage network will consist of a 110mm diameter perforated pipe network installed 800mm below the final road level.

Due to the poor cohesion of the dune sands, the following erosion preventative measures will be included in the stormwater design:

- Minimize the concentration of stormwater to prevent high flow rates.
- Route run-off from hard surfaces into swales.
- Promote sheet flow into open swales.
- Formalise (armorflex) channels with an internal velocity more than 1m/s.
- Landscape unlined channels with appropriate vegetation.
- Install energy dissipation structures at high energy discharge points.

Solid Waste:

The collection of domestic waste from individual housing units will be administrated by the homeowners association / body corporate of the proposed development. Solid waste will be transferred to a communal refuse storage located at the entrance of the proposed development from where it will be removed as per the Municipal waste collection schedule. Adequate turning space for a standard refuse truck has been incorporated in the proposed entrance design.

Provide a description of any other activity alternatives investigated.

The **No-Go alternative** (status quo) with no development of a lifestyle resort. Under this alternative, the current land use would continue with the primary rights of agriculture.

Provide a motivation for the preferred activity alternative.

Alternative 1 (Preferred):

Alternative 1 is the preferred activity due to the following aspects:

- The development will manage alien invasive vegetation species in the development footprint as well as in the sensitive estuarine habitat within the private open space portion of the property.
- The development avoids and will maintain identified protected tree species on the property.
- The development will create temporary employment opportunities during the construction and operational phases.
- The development will generate additional income to the local municipality through municipal rates and taxes.
- The development will not obstruct continued public access to the Keurbooms Estuary.
- The development does not encroach beyond the property boundaries.
- Access can be obtained via existing road infrastructure.
- Development is restricted to areas that are already transformed.
- Development footprint and number of units have been reduced to avoid identified sensitive environmental features.
- Reduced number of units equals less traffic and less pressure on municipal services.
- Avoidance of the identified (possible) archaeological site near the entrance of the property.

Provide a detailed motivation if no activity alternatives exist.

The proposal is regarded as desirable because the proposed development:

- Is unlikely to impact negatively on existing land use rights of the neighbouring property owners.
- It will not prevent any surrounding owner to exercise their legal land use rights.
- It will create temporary employment opportunities during the construction and operational phases.
- It will optimise vacant land in an urban setting.
- It will contribute to the holistic financial sustainability of Bitou Municipality.
- It will support the management objectives of the Keurbooms-Bitou Estuarine Management Plan (K-BEMP).

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

Impact	No-Go Alternative	Alternative 1 (Preferred)
Positive	No vegetation will be disturbed. Habitat will remain intact. No fragmentation of ecosystem patterns/processes although a perimeter fence is already in place around the property.	Invasive alien vegetation will be managed better through designated management and levees that will be allocated for environmental management inclusive of invasive alien management in particular. Highly sensitive thicket and estuarine habitats will be avoided.
		Identified protected tree species will be avoided.
		Temporary employment opportunities will be created.

		Create an additional attraction and accommodation in an area that is popular amongst tourists. Additional rates and taxes will be generated for the Municipality. Support the management objectives of the K-BEMP.
Negative	Invasive alien vegetation will be less maintained since the area is not utilised by the residents/homeowners or visitors that generally obliges the owners/managers to keep invasive alien vegetation under control. No additional employment opportunities will be created. Property will remain vacant, and concern has been raised about land invasion. No addition attraction for Bitou Municipality. No additional rates and taxes will be generated towards Municipal income.	Permanent loss of ~3.17ha of transformed vegetation. Fragmentation of intact habitat and ecosystem. Additional traffic especially during peak holiday periods in Rietvlei Road. Additional pressure on non-renewable resources of the local municipality.
	Design or layout alternatives to avoid negative imp maximise positive impacts	pacts, mitigate unavoidable negative impacts and

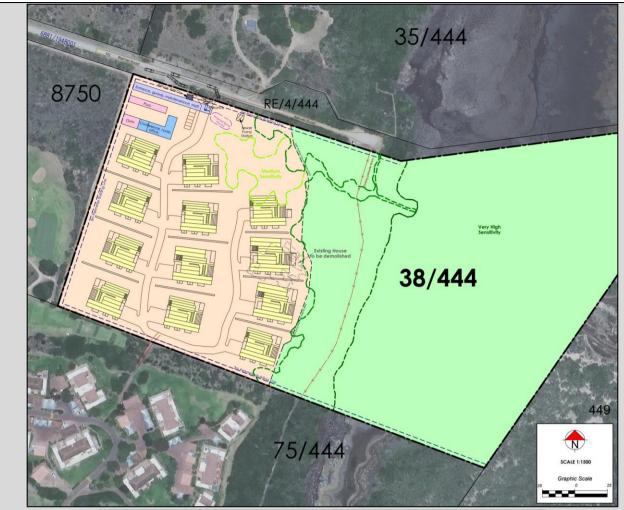
Alternative 1 (Preferred):

The proposed development within the **Residential Zone II portion** will entail the following infrastructure:

- Twelve (12) x sectional title group housing units (single storey), each with a double garage and two (2) additional parking bays. Each unit will cover ~655m² and will therefore calculate to 1.39 units per hectare over the entire site.
- Entrance gate (from Rietvlei Road).

Provide a description of the preferred design or layout alternative.

- Guard house.
- Maintenance and staff rooms.
- Communal areas (clubhouse, conference room, gym, pool, doctor/nurse office and admin office).
- Six (6) x visitor parking bays at the communal buildings / facilities.
- Internal access roads (5.5m wide).
- External services (water line and sewer line within road reserves as part of Municipal infrastructure).



LEGE	ND:			
ZON	ING	QTY	' HA	%
	Residential Zone II (Group housing)	1	3.17	36.9
	Open Space Zone III (Nature reserve)	1	5.41	63.1

Figure 21: Proposed site development plan (Marike Vreken Urban & Environmental Planners, 2023).

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

Alternative 2 (not preferred and not deemed feasible in terms of the impact hierarchy approach):

Alternative 2 (Figure 22) entails the same development components, but with 17 x single housing units. The increase in housing units results in a slightly different layout which will encroach into identified sensitive areas on the site and impact on the protected trees as per the survey.

This alternative layout does not take into account the presence of the potential graves identified in the archaeological impact assessment as well as the location of protected tree species on the property. This alternative was initially proposed prior to input obtained from respective specialist, but is no longer considered desirable/feasible.



Figure 22: Original site development plan.

Provide a motivation for the preferred design or layout alternative.

The preferred design layout alternative was specifically designed to avoid the delineated thicket and estuary habitat in the eastern portion of the property. Development will be limited to the already disturbed portions of the property that are least sensitive.

The preferred design layout accommodates the 33m estuary habitat buffer to be adhered to and therefore contributing to the objectives of the K-BEMP.

The preferred design layout avoids all identified protected tree species, thicket and protected trees.

The preferred layout avoids the archaeological identified area.

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

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

Impact	Alternative 1 (Preferred)	Alternative 2 (Not Preferred)
Positive	Avoid protected indigenous tree species.	Will result in the loss of protected tree species with placing of additional units that

	Allows for a 33m buffer on the delineated estuary habitat.	extends well into he 'medium' sensitive area.
	Contributes to the management objectives of the K-BEMP.	
	In line with the management objectives of the Western Cape Biodiversity Spatial Development Framework for CBA areas.	
	Allows for a 5m buffer around potential identified graves.	
Negative	Permanent loss of vegetation, albeit reduced when compared to	Increased loss of natural vegetation due to larger footprint.
	Alternative 2.	Does not take the location of identified protected tree species into account.
		Permanent loss of vegetation.
		Does not take the location of potential graves into account.
		Development will take place within sensitive thicket and estuarine habitats identified by specialist studies.
1.4.	Technology alternatives (e.g., to reduce resource of negative impacts, mitigate unavoidable negative	demand and increase resource use efficiency) to avoid
Provide a desc	ription of the preferred technology alternative:	траст ана тахитье розпус ітрастя.
Provide a desc	ription of any other technology alternatives investig	ated.
Provide a motiv	vation for the preferred technology alternative.	
Provide a motiv	vation for the preferred technology alternative.	
	vation for the preferred technology alternative. iled motivation if no alternatives exist.	
Provide a deta		ives will have on the environment.
Provide a deta	iled motivation if no alternatives exist.	ives will have on the environment.
Provide a deta	iled motivation if no alternatives exist. and negative impacts that the technology alternat Operational alternatives to avoid negative impacts	ives will have on the environment. s, mitigate unavoidable negative impacts and maximise
Provide a deta List the positive	iled motivation if no alternatives exist. and negative impacts that the technology alternat	
Provide a deta List the positive 1.5. Provide a desc	iled motivation if no alternatives exist. and negative impacts that the technology alternat Operational alternatives to avoid negative impacts positive impacts.	s, mitigate unavoidable negative impacts and maximise
Provide a deta List the positive 1.5. Provide a desc Please also I	iled motivation if no alternatives exist. and negative impacts that the technology alternat Operational alternatives to avoid negative impacts positive impacts. ription of the preferred operational alternative.	s, mitigate unavoidable negative impacts and maximise tives'.
Provide a deta List the positive 1.5. Provide a desc Please also I Provide a desc	iled motivation if no alternatives exist. and negative impacts that the technology alternat Operational alternatives to avoid negative impacts positive impacts. ription of the preferred operational alternative. refer to Section 1.2 and 1.3 under 'Alternative'	tives'.
Provide a deta List the positive 1.5. Provide a desc Please also I Provide a desc The propose	and negative impacts that the technology alternate Operational alternatives to avoid negative impacts positive impacts. ription of the preferred operational alternative. refer to Section 1.2 and 1.3 under 'Alternative investigation of any other operational alternatives investigation.	tives'.
Provide a deta List the positive 1.5. Provide a desc Please also I Provide a desc The propose Provide a motive	and negative impacts that the technology alternate Operational alternatives to avoid negative impacts positive impacts. ription of the preferred operational alternative. refer to Section 1.2 and 1.3 under 'Alternative inpacts of any other operational alternatives investigated development does not trigger any operational operat	tives'.

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

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

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

The No-Go alternative is not preferred due to the following reasons:

- Under a development estate, there will be levies charged to future residents which makes it financially more feasible to ensure maintenance of the private open space (inclusive of invasive alien vegetation management within this area).
- Considering that the site does contain areas where development can be considered without
 compromising ecological integrity, patterns or processes, optimising vacant land within the
 urban edge is better compared to leaving such land open and putting pressure on areas
 outside urban edges for township development to meet growing demand in the Garden
 Route.
- Development rights will contribute to the economic sustainability of the Municipality through rates and taxes that is much higher than the current rates for open space.
- The development footprint is not deemed unacceptable considering that the majority of the site will still remain natural with ecological functioning, whilst economic benefits will arise from the preferred alternative.
- 1.7. Provide and explanation as to whether any other alternatives to avoid negative impacts, mitigate unavoidable negative impacts and maximise positive impacts, or detailed motivation if no reasonable or feasible alternatives exist.

Should any reasonable and feasible alternatives be proposed as part of the stakeholder engagement process, such will be considered and responded to as part of the ongoing environmental process.

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

The proposed development is deemed preferable and suitable for the proposed property for the following reasons:

- Site location is suitable within the urban context in terms of proximity to town centres, amenities and public beaches.
- Accessibility is existing with well-maintained access roads (access can be gained from existing Rietvlei Road).
- Partial development of the site is aligned with the planning principles of optimising vacant land within an urban environment.
- The development of a lifestyle village in this location is deemed compatible with the surrounding land use character which consist of single residential, apartments, resorts and other holiday accommodations.
- Highly sensitive biodiversity areas/corridors within the private open space, will be avoided and actively maintained.
- The development footprint is small and allows for sufficient Open Space area.

2. "No-Go" areas

Explain what "no-go" area(s) have been identified during identification of the alternatives and provide the co-ordinates of the "no-go" area(s).

The delineated estuary habitat and 33m buffer zone located in the eastern portion of the proposed development site is considered as No-Go areas and should be avoided during the pre-construction and construction phases (Figure 23).

No-Go areas for environmentally sensitivity that have been identified, must be established/demarcated before commencement of construction. All personnel involved in the development must be briefed about the exact location of the "No-Go" areas. These areas must be avoided during the construction phase. For the operational phase residents will be able to access this area via existing pedestrian routes through the thicket but no further disturbance may be allowed.

The protected trees identified will be accommodated in the development layout plan and will not be removed (Figure 19). However, if any additional protected tree saplings are identified in the planning and investigation period, it will be handled accordingly by either adjusting the site layout plan or obtaining the relevant permits for replanting.



Figure 23: Delineated estuary habitat with 33m buffer zone considered as No-Go areas.

IMPORTANT NOTE: The area indicated as No-Go is not intended to be set-aside as an area where there may be no access whatsoever. This area will be accessible to future residents for recreational use (along existing pathways/trails), alien clearing teams and/or fire management teams, but during the construction phase this area is deemed to be a no-go area (with the exception of alien clearing teams or the teams doing maintenance on the existing fence/pedestrian tracks on the property.

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

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

Criteria for Assessment

These criteria are drawn from the EIA Regulations, published by the Department of Environmental Affairs and Tourism (April 1998) in terms of the Environmental Conservation Act No. 73 of 1989.

These criteria include:

• Nature of the impact

This is the 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

Describe whether the impact will be: local extending only as far as the development site area; or limited to the site and its immediate surroundings; or will have an impact on the region, or will have an impact on a national scale or across international borders.

• Duration of the impact

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

Probability of occurrence

The specialist / EAP 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 / EAP 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 / EAP 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.

Accumulative impact

Consideration must be given to the extent of any accumulative 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 / EAP 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, you are 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 a major influence on the proposed development and/or environment and will result in the "no-go" option 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.

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

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

Terrestrial Biodiversity Impact Assessment									
Alternative:	No Go Option Alternative 1 (Preferred)								
	Construction and Operational Phases								
Potential impact and risk:	Direct Loss of Habitat (Degra	dation / Loss of Natural Habitat)							
Nature of impact:	Negative - Indirect	Negative - Direct							
	Extent Without and With Mitigation: Site (The impact will only affect the site).	Extent Without and With Mitigation: Site (District) (The impact will affect the site, local area or district).							
Extent and duration of impact:	Duration Without and With Mitigation: Long-term (The impact and its effects will continue or last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter (10-50 years).	Duration Without and With Mitigation: Permanent (The only class of impact that will be non-transitory. Mitigation either by man or natural process will not occur in such a way or such a time span that the impact can be considered transient (Indefinite)).							
Consequence of impact or risk:	Poor management of habitat may result in long-term degradation of vegetation on site.	Construction activities will result in clearing of natural habitat, to be replaced by the infrastructure. This will result in permanent local loss of vegetation.							
Probability of occurrence:	Possible Without and With Mitigation (The impact may occur (between 25% to 50% chance of occurrence)).	Definite Without and With Mitigation (Impact will certainly occur (greater than a 75% chance of occurrence)).							
Degree to which the impact may cause irreplaceable loss of resources:	Marginal loss of resources Without and With Mitigation.	Marginal loss of resources Without and With Mitigation.							

Degree to which the impact can be reversed:	Partly reversible Without and With Mitigation (The impact is partly reversible but more intense mitigation measures are required).	Irreversible Without and With Mitigation (The impact is irreversible and no mitigation measures exists).
Indirect impacts:		
Cumulative impact prior to mitigation:	None Identified.	None Identified.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative (The anticipated impact will have negligible negative effects and will require little to no mitigation).	Site Scale: High Negative (The anticipated impact will have significant effects and will require significant mitigation measures to achieve an acceptable level of impact). District Scale: Medium Negative (The anticipated impact will have moderate negative effects and will require moderate mitigation measures).
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		
Degree to which the impact can be mitigated:		
Proposed mitigation:	No mitigation is envisaged therefore the post- mitigation score is identical.	 Compile and implement an alien management plan, which highlights control priorities and areas and provides a programme for long-term control. Use indigenous and site-appropriate plant species in any rehabilitation and landscaping. No additional clearing of vegetation should take place without a proper assessment of the environmental impacts, unless for maintenance purposes, in which case all reasonable steps should be taken to limit damage to natural areas.

		Obtain permits for any protected trees that may need to be pruned or removed.					
Residual impacts:							
Cumulative impact post mitigation:							
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative (The anticipated impact will have negligible negative effects and will require little to no mitigation).	Site Scale: High Negative (The anticipated impact will have significant effects and will require significant mitigation measures to achieve an acceptable level of impact). District Scale: Medium Negative (The anticipated impact will have moderate negative effects and will require moderate mitigation measures).					
Construction and Operational Phases							
Potential impact and risk:	Invasion by alien invasive plant species (Invasion by alien invasive plant species, leading to degradation of indigenous habitat)						
Nature of impact:	Negative - Indirect	Negative - Indirect					
Extent and duration of impact:	Extent Without and With Mitigation: Site (The impact will only affect the site). Duration Without and With Mitigation: Long-term (The impact and its effects will continue or last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter (10-50 years).	Extent Without and With Mitigation: Site (The impact will only affect the site). Duration Without Mitigation: Long-term (The impact and its effects will continue or last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter (10-50 years). Duration With Mitigation: Medium-term (The impact and its effects will continue or last for some time after the					

		construction phase but will be mitigated by direct human action or by natural processes thereafter (2 – 10 years)).
Consequence of impact or risk:	Disturbance and clearing of natural habitat leads to conditions that are ideal for alien invasive species to colonise. Once present, the modify the environment in ways that limit recovery of indigenous habitat.	Disturbance and clearing of natural habitat leads to conditions that are ideal for alien invasive species to colonise. Once present, the modify the environment in ways that limit recovery of indigenous habitat.
Probability of occurrence:	Probable Without and With Mitigation (The impact will likely occur (between a 50% to 75% chance of occurrence)).	Without Mitigation: Probable (The impact will likely occur (between a 50% to 75% chance of occurrence)). With Mitigation: (Possible (The impact may occur (between 25% to 50% chance of occurrence)).
Degree to which the impact may cause irreplaceable loss of resources:	Without Mitigation: Significant loss of resources With Mitigation: Marginal loss of resources.	Without Mitigation: Significant loss of resources With Mitigation: None
Partly reversible Without and With Mitigation (The impact can be reversed: Partly reversible Without and With Mitigation (The impact is partly reversible but more intense mitigation measures are required).		Partly reversible Without and With Mitigation (The impact is partly reversible but more intense mitigation measures are required).
Indirect impacts:		
Cumulative impact prior to mitigation:		
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium Negative (The anticipated impact will have moderate negative effects and will require moderate mitigation measures).	Medium Negative (The anticipated impact will have moderate negative effects and will require moderate mitigation measures).
Degree to which the impact can be avoided:		
Degree to which the impact can be managed:		

Degree to which the impact can be mitigated:		
Proposed mitigation:	Under the No-Go option, it is assumed that no alien control as mitigation could be applied.	 Compile and implement an alien management plan, which highlights control priorities and areas and provides a programme for long-term control. Use indigenous and site-appropriate plant species in any rehabilitation and landscaping. Protect natural areas outside of the development footprint from disturbance.
Residual impacts:		
Cumulative impact post mitigation:		
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative (The anticipated impact will have negligible negative effects and will require little to no mitigation).	Low Negative (The anticipated impact will have negligible negative effects and will require little to no mitigation).

SECTION I: FINDINGS, IMPACT MANAGEMENT AND MITIGATION MEASURES

1. Provide a summary of the findings and impact management measures identified by all Specialist and an indication of how these findings and recommendations have influenced the proposed development.

Aquatic Biodiversity Impact Assessment (Confluent Consulting): The Aquatic Biodiversity Impact Assessment stipulated the following:

- An estuary habitat was delineated in the eastern portion of the proposed development property.
 - Mitigation: The proposed development layout was amended to avoid the entire delineated estuary habitat in the eastern portion of the property. Development infrastructure will be focussed in the higher lying western portion of the property.
- An estuary buffer of 33m is recommended.
 - Mitigation: The 33m estuary buffer will be adhered to as this will protect the Keurbooms Estuary from residential development and will provide a level of connectivity between the terrestrial and wetland areas.

Neither construction or operational phase activities are expected to have any negative impacts on the estuarine health. The sensitivity of the proposed development site can be regarded as **Low** for aquatic biodiversity.

Due to the location of the proposed development site in the FEPA, the following consideration should be taken into account to ensure that stormwater is managed according to the Sustainable Drainage System (SuDS) principles:

- Stormwater must not be discharged directly into the estuary.
- Rainwater harvest tanks must be installed at the proposed residential units as well as communal buildings to reduce water entering the stormwater system.
- Make use of swales and retention ponds to attenuate stormwater runoff on site. This will increase infiltration and reduce the speed and volume of stormwater runoff discharged from the proposed development site.
- Make use of permeable paving to promote infiltration into the soil.
- Make use of retention ponds and artificial wetlands to capture stormwater runoff.

The buffer zone is located on steep slopes which will be vulnerable to erosion during site clearance. The following recommendations are made as erosion control measures:

- Ensure that construction activities do not cause any preferential flow paths and concentrated surface runoff.
- Demarcate the construction area. This will ensure that construction vehicles do not compact soil or disturb any vegetation within the buffer zone.
- To reduce the transport of sediment, make use of silt fences and biodegradable coir logs which can be placed along contours.
- Vegetation clearing should be done in parallel with the construction progress. This will minimize erosion and runoff.
- Revegetate exposed areas once construction has been completed.
- Stormwater runoff that is generated by hardened surfaces should be discharged in retention areas such as swales and retention ponds. This will reduce concentrated runoff and erosion.

The Keurbooms Estuary is not defined as a watercourse and therefore the proposed development will not be within the regulated area of a watercourse. Consequently, **no water use authorisation is required.**

Terrestrial Biodiversity Impact Assessment (David Hoare Consulting): The Terrestrial Biodiversity Impact Assessment stipulated the following:

- Estuarine habitats on site (eastern portion of the property) are sensitive and should be avoided.
 - o The proposed development will apply avoidance mitigation to the eastern portion of the property and all infrastructure is proposed on the western portion that is already disturbed/degraded.
- Mesic Thicket habitat on the sea-facing slope is sensitive. The Mesic Thicket forms an essential buffer between estuarine and terrestrial ecosystems.
 - o No development is proposed in the identified Mesic Thicket habitat.
 - o Thicket and protected trees in proximity to the development footprint to be demarcated and avoided prior to vegetation clearing/construction.
- The fynbos that is present on site, is in poor condition. The poor condition of the fynbos could be as a result of long-term degradation or due to being secondary, however, there is no evidence of historical cultivation.
 - o The preferred site alternative was identified considering the overall site sensitivity of Portion 38 of Farm Ganse Vallei 444. The preferred area on the property is already disturbed by historical grazing activities. The prolonged exclusion of burning contributed to the disappearance of Garden Route Shale Fynbos vegetation. The vegetation is no longer representative of the endangered fynbos species and rather of secondary grassy fynbos.

The habitats on Portion 38 of Farm Ganse Vallei 444 that have the highest sensitivity and ecological value are excluded from the proposed development footprint.

Mitigation measures identified in the Terrestrial Biodiversity Impact Assessment:

- Compile and implement an alien management plan, which highlights control priorities and areas and provides a programme for long-term control for the private open space areas.
- Use indigenous and site-appropriate plant species in any rehabilitation and landscaping.
- No additional clearing of vegetation should take place without a proper assessment of the environmental impacts, unless for maintenance purposes, in which case all reasonable steps should be taken to limit damage to natural areas.
- Protect natural areas outside of the development footprint from disturbance.
- Obtain permits for any protected trees that may need to be pruned or removed.
- Land Use Planning application to stipulate the most appropriate zoning for the portion of land below the HWM which is deemed to revert to the State ito the ICMA, along with any requirements for surveying of the HWM and possible subdivision.

Botanical Compliance Statement (David Hoare Consulting): The Botanical Compliance Statement Stipulated the following:

- No plant species of concern were identified on site.
- The estuarine habitat (eastern portion of the property) is a known habitat for *Zostera* capensis (Least Concern). This species is ecologically important and listed as a sensitive species. The estuarine habitat has a Site Ecological Importance of Very High.
 - No development is proposed in the identified estuarine habitat (eastern portion of the property).
- Two protected tree species were identified on site namely *Pittosporum viridflorum* and *Sideroxylon inerme*. The exact location of the protected trees were marked with GPS coordinates.

- The site development plan was amended to avoid all the identified protected tree species (Figure 19).
- o Micro-siting of the units closest to the surveyed protected trees must be undertaken prior to construction by the ECO.

It is noted that time lapse from when the protected tree survey is undertaken, to inform the environmental/planning applications, till implementation, could be a number of years during which time germination of more protected tree species may occur and/or surveyed trees would have grown larger/died off. It is therefore a recommendation that the actual footprints of each unit be checked prior to final construction. The current layout will not however result in the removal of protected trees. Should trimming or relocation of younger trees be required the Applicant must apply for the necessary Forestry Permit in terms of the Act.

Terrestrial and Botanical Compliance Statement (Benjamin Walton Cape Vegetation Surveys) (for proposed water and sewerage pipeline infrastructure in the N2 and Rietvlei Road road reserves):

Rietvlei Road road reserve:

- o The eastern extent of the study area of the Rietvlei Road road reserve has a band of disturbed natural vegetation (Goukamma Dune Thicket elements of Least Concern) which is considered of Medium Terrestrial Biodiversity Sensitivity and Medium Plant Species Sensitivity. The eastern extent is composed of tall shrubs and small trees, herbs, bulbs and annual grasses. However, the development impact in disturbed Dune Thicket of Medium Terrestrial Biodiversity Sensitivity, is a minor impact for plant community functioning and ecosystem services, and positive impact for infrastructural development. The impact is site specific in extent to the study area and surrounding adjacent environment. The duration of the impact is temporary should passive secondary succession be facilitated within the vegetated sections of the Rietvlei Road Reserve. Following disturbance, the spread of Invasive Alien Species (IAS) must be monitored and controlled.
- The western extent of the study area of the Rietvlei Road road reserve is transformed due to brushcutting / mowing which is considered of Low Terrestrial Biodiversity Sensitivity and Low Plant Species Sensitivity.
- A single Cheesewood tree was identified and marked with GPS coordinates. The identified Cheesewood tree is located towards the east of the proposed entrance of Keurbooms Lifestyle Village and not within the disturbance footprint of the proposed pipeline routes. It is recommended that this Cheesewood tree be demarcated during construction to create awareness for staff.
- A single bulb specie (Brunsvigia orientalis) was identified and marked with GPS coordinates to the west of the current entrance to Portion 38/444 which can be rescued and relocated to within the open space areas of the Portion 38/444. It is also recommended that the proposed pipeline routes in the road reserves be inspected by the appointed Environmental Control Officer prior to any construction to identify any emerging bulb species for rescue.

• N2 road reserve:

- The habitat where water and sewerage pipeline infrastructure is proposed in the N2 road reserve is transformed and composed of annual exotic and indigenous grasses and weedy plants subject to frequent moving.
- The vegetation along the N2 road reserve is of Very Low Terrestrial Biodiversity Sensitivity and Very Low Plant Species Sensitivity.

The Site Ecological Importance of the Disturbed Thicket is found to be Medium. Development activities of medium impact is acceptable due to its temporary nature (excavation that will be

closed up once the infrastructure is installed) and the necessary restoration done post installation.

The Site Ecological Importance of the transformed road verges and brushcut thicket are found to be Very Low. Development activities of medium to high impact acceptable and restoration activities may not be required.

No plant Species of Conservation Concern were identified within the road reserves.

The following mitigation measures are recommended:

- The applicant must conduct activities carefully and reuse or relocate as much bulk plant material as is practical prior to construction (specifically *Brunsvigia orientalis* is rescuable).
- Topsoil should be appropriately stored outside of the development footprint to aid in rehabilitation use. As there is a potential for dispersal and supply of indigenous plant propagules at the property it is recommended that natural succession occur following the activity as passive rehabilitation, within previously vegetated sections of Rietvlei Road Reserve.
- Excavation and earthworks proposed to be conducted must remain within the development footprint and be demarcated from the remaining areas.
- During construction exposed surfaces and slopes may be covered with mulch, hessian cloth and / or "chip filled hessian sausage rolls" to prevent loss of soil by natural wind and water erosion.

The general vegetation of the study area is considered of Very Low Terrestrial Biodiversity Sensitivity & Low Terrestrial Biodiversity Sensitivity with a Low to Medium Relative Plant Species Sensitivity.

Faunal Compliance Statement (David Hoare Consulting): The Faunal Compliance Statement stipulated the following:

- The proposed development site is not considered to a suitable or critical habitat for any of the animal species identified in the Screening Tool Report.
- Areas outside the development footprint that have a Very High Site Ecological Importance will not be affected by the proposed development.
- The eastern portion of the proposed development site containing thicket have a moderate to high probability of the Knysna Warbler (Vulnerable) to occur, however, no development is proposed in the eastern portion of the property.
- The Crowned Eagle (Near Threatened) is unlikely to occur on the proposed development site even though the Mesic Thicket in the eastern portion of the property may constitute part of their general foraging range.
- Small antelope species could potentially find a suitable habitat in the Mesic Thicket in the eastern portion of the property. However, due to landscape connectivity issues, the small antelope species are unlikely to be present.

It is verified that the Animal Species Theme has a Medium sensitivity for the proposed development site.

2. List the impact management measures that were identified by all Specialist that will be included in the EMPr

All impact management measures that were identified by all specialists and described above (Section H, 4. And Section I, 1.) will be included in the EMPr.

3. List the specialist investigations and the impact management measures that will **not** be implemented and provide an explanation as to why these measures will not be implemented.

All impact management measures and specialist findings have been accommodated in the preferred alternative.

4. Explain how the proposed development will impact the surrounding communities.

Development of a lifestyle estate, in this particular area next to the Keurbooms Estuary is unlikely to deter from the character/value of the greater area.

The proposed development will contribute to the socio-economic value of Bitou Municipality in the following ways:

- Create temporary employment opportunities during pre-construction and construction phase.
- Create employment opportunities during operational phase.
- Create temporary employment opportunities for contractors, small businesses and suppliers during construction and operational phases.
- Increase in the attraction of Bitou Municipality.
- Improve the holistic financial sustainability of the local municipality due to additional rates and taxes being generated.

There will be mostly temporary impacts associated with the construction phase, namely noise and potentially dust pollution. The following key mitigation measures are submitted as part of the BAR (refer to the EMPr (Appendix H) for more details):

- Construction activities must be limited to Mondays Fridays (07:00 18:00) and Saturdays (08:00 13:00).
- Work may not take place on Sunday's or public holidays.
- Vegetation clearing must be done in phases to avoid large pieces of land being exposed to wind (which could result in unnecessary dust pollution).
- Make use of wetting agents should dust be a problem.
- Rehabilitation of work areas to take place as soon as possible to minimise dust pollution;
- An ECO must be appointed to oversee construction and must keep record of any complaints regarding noise/dust pollution.
- Construction material must be stored on-site, and construction vehicles must not obstruct traffic flows.
- Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.
 - Water will become a very scares resource as periods of drought will be longer.
 Therefore, the use of rainwater collection tanks is important at the communal buildings as well as residential erven to provide additional water supply for landscaping and irrigation.
 - Rainfall intervals will become less, but downpours may be more severe. Therefore, stormwater management on the site is important to prevent unnecessary erosion and/or flooding. The use of SUDS throughout the development, coupled with rainwater tanks at communal buildings, as well as road and parking deign will reduce the chances of erosion caused by stormwater runoff.
 - Longer, drying periods will impact on plant growth and keeping landscaped areas
 presentable requires irrigation/watering. Planting only indigenous, endemic plants in
 landscaped areas will reduce the need for irrigation and also ensure that landscaped
 areas are more resilient during periods of drought.
- 6. Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

There are no conflicting recommendations between specialists.

7. Explain how the findings and recommendations of the different specialist studies have been integrated to inform the most appropriate mitigation measures that should be implemented to manage the potential impacts of the proposed activity or development.

All findings and recommendations by the specialists have been incorporated into the proposal.

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

1. Avoid Impacts:

- Avoid protected indigenous tree species identified by specialist studies.

 Avoidance mitigation has been applied to the preferred alternative.
- Survey the recommended 33m buffer zone from the estuary habitat prior to construction commencement to ensure that no development encroaching into this sensitive area.
- Demarcate all protected trees prior to any vegetation clearing/development commencing to ensure that contractors do not cause harm/damage to such sensitive features in the landscape.

2. Minimise Impacts:

- Clear Portion 38 of Farm Ganse Vallei 444 of all NEMBA listed invasive alien vegetation species prior to any site clearing/development to ensure that indigenous vegetation can recover and rehabilitate more easily.
- Limit construction activities to specified days and times.
- Clear the site in a phase manner to reduce dust pollution.
- Only indigenous vegetation permitted in the place of the loss of remaining onsite natural vegetation/habitat.
- Appointing an ECO to oversee construction to further minimise the potential for unnecessary direct or indirect impacts during the construction as well as the operational phase of the development.
- Implement resource conservation measures as part of the design, construction and operational phases.
- Implement Environmental Maintenance and Management Plan under ECO supervision.

3. Rectify

• None necessary.

4. Reduce

• Ensure that an ECO inspects the property regularly during its lifespan to monitor for (A) invasive alien vegetation and (B) encroachment into the remaining natural areas i.e. development creep.

5. Off-Site

None necessary.

SECTION J: GENERAL

1. Environmental Impact Statement

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

- From a spatial planning perspective, the development proposal is deemed to be in line with the Western Cape SDF, Bitou Municipal SDF and IDP, particularly considering development of vacant land within the urban context.
- The development proposal is likely to contribute to positive socio-economic impacts through income generation as part of the residential erven sales, employment opportunities during the construction and operational phases.
- The preferred site layout design avoids all highly sensitive areas as well as protected tree species identified and assessed by specialists.
- The development proposal is in character with surrounding residential developments.
- Services are available through existing municipal supply.
- All specialist findings and mitigation measures have been considered and incorporated into the preferred alternative.

1.2. Provide a map that that superimposes the preferred activity and its associated structures and infrastructure on the environmental sensitivities of the preferred site indicating any areas that should be avoided, including buffers. (Attach map to this BAR as Appendix B2)

The preferred alternative is representative of an overlay of the environmentally sensitive features (only features of concern) with the development proposal avoiding it.

1.3. Provide a summary of the positive and negative impacts and risks that the proposed activity or development and alternatives will have on the environment and community.

Positive	Negative
Optimising of vacant land in an urban context.	Temporary noise, dust and safety impacts associated with the movement of heavy vehicles.
Temporary employment opportunities during construction (to semi-skilled and unskilled workers mostly).	Loss of vegetation.
Employment opportunities during the operational phase (to skilled and semi-skilled workers mostly).	Temporary risk of increase crime during construction.
Support for local economic development and tourism.	Temporary increase in construction vehicular traffic.
Income generation for the Municipality from additional development through rates and taxes.	Additional pressure on non-renewable services.
Income generation for the Applicant with sale of properties.	Continued maintenance cost (alien clearing, access control, clearing of dumped materials).

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

- 2.1. Provide Impact management outcomes (based on the assessment and where applicable, specialist assessments) for the proposed activity or development for inclusion in the EMPr
 - Pre-construction clearing must be done with input from the ECO to ensure that new germinated protected tree/plant species, or trees that have grown in size between the date of EA and implementation, are identified for potential Forestry Permit applications (trimming or relocation).
 - Ensure that the remnant thicket habitat within the designated private open space area is cleared of all invasive alien species and maintained as such.
 - Rezoning all of the remaining natural areas to an appropriate Zoning to prohibit unwanted development creep or encroachment into remaining natural thicket areas down to the estuary taking into account the HWM to inform which is State Land and which is Private Land.
 - Demarcate the remaining thicket (inclusive of the 33m buffer zone) prior to development commencing to ensure that no development goes beyond this line.
 - Implement and adhere to an approved Environmental Maintenance and Management Plan.
 - Apply for Forestry Permits if any trimming/roots/relocation may be required during construction or operational phases and must be obtained prior to the trimming/relocation of any protected trees.

- Communal facilities and houses must be fitted with rainwater tanks to be used for irrigation of landscaped areas.
- All landscaping must be indigenous vegetation in replacement of the loss of secondary vegetation/fynbos. Ornamental plant that are not indigenous/endemic must be planted in plant boxes or pots only.
- No invasive alien species may be used for landscaping/gardening purposes.
- Restrict working times and hours to minimise noise/dust pollution.
- Employ minimum 50% local labour.
- Source minimum 50% construction materials locally.
- Resource conservation measures must be implemented.
- ECO must be appointed for the duration of the construction phase.
- Access into the remaining thicket may only be through means of existing walkways.
- Implementation of all link services prior to occupation of the first unit/house.
- Dust suppression must be applied to the gravel portion of Rietvlei Road for the duration
 of construction should it not be hard surfaced prior to construction of the development
 on the site.
- 2.2. Provide a description of any aspects that were conditional to the findings of the assessment either by the EAP or specialist that must be included as conditions of the authorisation.

Please refer to Section J) 2.1, 2.3, 3, 4 and 5 below.

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

The proposed activity can be considered for environmental authorisation for the following reasons:

- The western portion of the site is not deemed sensitive overall, therefore limiting development to the western portion is not likely to result in an unacceptable environmental loss;
- The loss of secondary vegetation within the proposed property is deemed acceptable on condition that the prescribed pre-construction, construction and operational conditions are adhered to.

PRE-CONSTRUCTION:

- Development may not proceed until such time as all approvals are obtained.
- An ECO must be appointed prior to construction to oversee site preparation, vegetation removal and construction.
- DAFF permits must be obtained prior to relocation/trimming/cutting of any protected trees and/or on the property.
- Pre-construction clearing must be done with input from the ECO to ensure that new germinated protected tree/plant species, or trees that have grown in size between the date of EA and implementation, are identified.
- Remnant thicket (inclusive of the 33m buffer area along the estuary habitat) must be demarcated prior to any site clearing/development commencing to ensure that no encroachment happens into this sensitive area.
- All NEMA listed invasive alien vegetation must be removed from the remnant thicket area prior to construction commencing.
- ECO to demarcate all protected trees prior to any site clearing or development activities commencing.

CONSTRUCTION:

• ECO must be appointed for the duration of the construction phase and must inspect site activities on a regular basis to ensure compliance with the EA and EMP;

- Clearing of vegetation must be planned in phases to avoid large open areas that will be vacant for periods of time and that could result in unwanted dust pollution;
- The thicket area must remain demarcated for the duration of the construction phase.
- Implementation of all link services prior to occupation of the first unit/house.
- Dust suppression must be applied to the gravel portion of Rietvlei Road for the duration
 of construction should it not be hard surfaced prior to construction of the development
 on the site.
- EMP must be implemented and adhered to.

OPERATIONAL:

- Only existing pedestrian tracks in the open space may be used to access the remnant thicket area:
- Landscaping must be done with indigenous vegetation (preferably endemic species)
 and ornamental plants may only be planted in plant boxes and pots with no invasive
 alien vegetation permitted on the estate.
- Occupation of units may only be permitted on condition that the necessary external link services and upgrades have been completed.
- Alien clearing within the private open space area must be done regularly to ensure that the thicket remains free of invasive alien vegetation.
- 2.4. Provide a description of any assumptions, uncertainties and gaps in knowledge that relate to the assessment and mitigation measures proposed.

The EAP assumes that the necessary approvals such as planning approvals / building plan approvals and contracts i.e., service level agreements, will be finalised within the initial five (5) year commencement period to allow the Developer to commence with the listed activities within the validity period of the EA.

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

Five (5) year validity period for the EA from date of authorisation to commence with construction.

Five (5) year implementation period from commencement to completion of project.

3. Water

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

Residential units as well as all communal buildings must be fitted with rainwater tank collection systems for the operational phase to supplement municipal potable water for landscaping and irrigation.

Potable water may not be used during the construction phase (inclusive of any dust suppression that may be deemed necessary).

4. Waste

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

The contactor must provide recycle bins on the property during construction and must ensure that staff is aware of what products can be recycled/reused.

At-source separation of waste must be implemented during the operational phase.

5. Energy Efficiency

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

Only LED lights must be used within the development.

Heat and/or solar pumps and/or gas geysers (or similar) must be used throughout the development.

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

capacity or duly authorised thereto hereby declare/affirm that all the information submitted or to be submitted as part of this application form is true and correct, and that:

- Lam fully aware of my responsibilities in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA"), the Environmental Impact Assessment ("EIA") Regulations, and any relevant Specific Environmental Management Act and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware of my general duty of care in terms of Section 28 of the NEMA;
- I am aware that it is an offence in terms of Section 24F of the NEMA should I commence with a listed activity prior to obtaining an Environmental Authorisation;
- I appointed the Environmental Assessment Practitioner ("EAP") (if not exempted from this requirement) which:
- o meets all the requirements in terms of Regulation 13 of the NEMA EIA Regulations; or
- meets all the requirements other than the requirement to be independent in terms of Regulation 13 of the NEMA EIA Regulations, but a review EAP has been appointed who does meet all the requirements of Regulation 13 of the NEMA EIA Regulations;
- I will provide the EAP and any specialist, where applicable, and the Competent Authority with access to all information at my disposal that is relevant to the application;
- I will be responsible for the costs incurred in complying with the NEMA EIA Regulations and other environmental legislation including but not limited to –
 - costs incurred for the appointment of the EAP or any legitimately person contracted by the EAP;
 - costs in respect of any fee prescribed by the Minister or MEC in respect of the NEMA EIA Regulations;
 - Legitimate costs in respect of specialist(s) reviews; and
 - the provision of security to ensure compliance with applicable management and mitigation measures;
- I am responsible for complying with conditions that may be attached to any decision(s) issued by
 the Competent Authority, hereby indemnify, the government of the Republic, the Competent
 Authority and all its officers, agents and employees, from any liability arising out of the content of
 any report, any procedure or any action for which I or the EAP is responsible in terms of the NEMA
 EIA Regulations and any Specific Environmental Management Act.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

Signature of the Applicant:

23/10/2024

Intergreen (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

ILouise-Mari van Zyl.......... EAP Registration number2019/1444....... as the appointed EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was
 distributed or was made available to registered interested and affected parties and that
 participation will be facilitated in such a manner that all interested and affected parties were
 provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and

•	I am aware	that	a f	alse	declaration	is	an	offence	in	terms	of	Regulation	48	of	the	NEMA	EΙΑ
	Regulations;	/	7		1												

Signature of the EAP:

24 October 2024

Date:

Cape Environmental Assessment Practitioners (Pty) Ltd

Name of company (if applicable):

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

IFrancois Byleveld......... EAP Registration number2023/6770...... as the assisting candidate EAP hereby declare/affirm the correctness of the:

- Information provided in this BAR and any other documents/reports submitted in support of this BAR;
- The inclusion of comments and inputs from stakeholders and I&APs;
- The inclusion of inputs and recommendations from the specialist reports where relevant; and
- Any information provided by the EAP to interested and affected parties and any responses by the EAP to comments or inputs made by interested and affected parties, and that:
- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the activity or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another EAP that meets the general requirements set out in Regulation 13 of NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review EAP must be submitted);
- In terms of the remainder of the general requirements for an EAP, am fully aware of and meet all of the requirements and that failure to comply with any the requirements may result in disqualification;
- I have disclosed, to the Applicant, the specialist (if any), the Competent Authority and registered interested and affected parties, all material information that have or may have the potential to influence the decision of the Competent Authority or the objectivity of any report, plan or document prepared or to be prepared as part of this application;
- I have ensured that information containing all relevant facts in respect of the application was distributed or was made available to registered interested and affected parties and that participation will be facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments;
- I have ensured that the comments of all interested and affected parties were considered, recorded, responded to and submitted to the Competent Authority in respect of this application;
- I have ensured the inclusion of inputs and recommendations from the specialist reports in respect of the application, where relevant;
- I have kept a register of all interested and affected parties that participated in the public participation process; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations;

Fouleveld

Signature of the Assisting Candidate EAP:

Date:

Cape Environmental Assessment Practitioners (Pty) Ltd Name of company (if applicable):

- I, Benjamin Alan Walton, as the appointed Botanical and Biodiversity Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:
- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal, or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity.
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all the requirements.
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

(a)

Signature of the Specialist:

Date: 2024/10/18

Cape Vegetation Surveys

Name of company:

Note: Duplicate this section where there is more than one specialist.

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Dowl	23 October 2024
Signature of the EAP:	Date:
David Hoare Consulting (Pty) Ltd	
Name of company (if applicable):	

Note: Duplicate this section where there is more than one specialist.

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

23 October 2024
Date:

DRAFT BASIC ASSESSMENT REPORT: APRIL 2024

Note: Duplicate this section where there is more than one specialist.

I ...**Dr Lita Webley**..., as the appointed Archaeological Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

L. E. Webley	11 October 2024
Signature:	Date:
N/A	
Name of company (if applicable):	

Note: Duplicate this section where there is more than one specialist.

I ... **Dr J.M. Dabrowski**..., as the appointed Aquatic Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

The bound	20 October 2024
Signature:	Date:
Confluent Environmental	
Name of company (if applicable):	

Note: Duplicate this section where there is more than one specialist.

I ... **Stefan Ethan de Kock**..., as the appointed Heritage Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department
 and I&APs all material information that has or may have the potential to influence the
 decision of the Department or the objectivity of any Report, plan or document prepared
 or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

	11/10/2024
Signature:	Date:
Perception Planning	
Name of company (if applicable):	

Note: Duplicate this section where there is more than one specialist.

I ... **Dr Wynand Vlok**..., as the appointed Faunal Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - o other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - o am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department
 and I&APs all material information that has or may have the potential to influence the
 decision of the Department or the objectivity of any Report, plan or document prepared
 or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.

Dr W Vlok

Digitally signed by Dr W Vlok DN: cn=Dr W Vlok, o=BioAssets CC, ou, email=wynand.vlok@gmail.com, c=ZA Date: 2024.10.18 07:11:15 +02'00'

Signature:	Date:
BioAssets CC	
Name of company (if applicable):	