LORNAY
ENVIRONMENTAL CONSULTING

Final Basic Assessment Report

Residential Development and associated access
on Erf 1489 and Erf 1490, Vermont, Hermanus

4 June 2026

Consultant:
Michelle Naylor | Env. Consultant **|** M.Sc., Pr. Sci. Nat., EAPASA
Cell: 083 245 6556| **|** michelle@lornay.co.za **|** www.lornay.co.za
Unit 5/1F, Hemel & Aarde Wine Village, Hermanus, 7200
Lornay Environmental Consulting Pty Ltd| Reg 2015/445417

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024

Western Cape Government

Department of Environmental Affairs and Development Planning

BASIC ASSESSMENT REPORT

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

APRIL 2024

(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)

PROPOSED CONSOLIDATION, REZONING AND SUBDIVISION FOR THE ESTABLISHMENT OF RESIDENTIAL ERVEN AND ACCESS ROAD ON REMAINDER OF ERF 1489 & PORTION A OF ERF 1490 VERMONT, HERMANUS, OVERSTRAND MUNICIPALITY

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

MAPS

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

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

ACRONYMS

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

ATTACHMENTS

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

The following checklist of attachments must be completed.

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

	Appendix:	**Comment from WCG: DoH**	N/A
	Appendix:	**Comment from DEA&DP: Pollution Management**	N/A
	Appendix:	**Comment from DEA&DP: Waste Management**	N/A
	Appendix:	**Comment from DEA&DP: Biodiversity**	N/A
	Appendix:	**Comment from DEA&DP: Air Quality**	N/A
	Appendix:	**Comment from DEA&DP: Coastal Management**	N/A
	Appendix:	**Comment from the local authority**	Pending
	Appendix E2:	**Confirmation of all services (water, electricity, sewage, solid waste management)**	Attached
	Appendix:	**Comment from the District Municipality**	Attached
	Appendix :	**Copy of an exemption notice**	N/A
	Appendix	**Pre-approval for the reclamation of land**	N/A
	Appendix :	**Proof of agreement/TOR of the specialist studies conducted.**	N/A
	Appendix :	**Proof of land use rights**	N/A
	Appendix:	**Proof of public participation agreement for linear activities**	N/A
Appendix E:	**Public participation information: including a copy of the register of I&APs, the comments and responses Report, proof of notices, advertisements and any other public participation information as is required.**		✓
Appendix F:	**Heritage Western Cape Confirmation**		✓
Appendix G:	**Specialist Report(s)** **Appendix G1: Aquatic Biodiversity Screening Assessment** **Appendix G2: Aquatic Biodiversity Impact Assessment** **Appendix G3: GLS Report** **Appendix G4: Water Services Layout** **Appendix G5: Sewer Layout Plan**		✓

	Appendix G6: Plants Species and Terrestrial Biodiversity Compliance Statement	
Appendix H:	**EMPr**	✓
Appendix I:	**Appendix I1: Screening tool report** **Appendix I2: SSVR**	✓
Appendix J:	**GA**	✓
Appendix K:	**Maintenance Management Plan**	✓
Appendix K:	**Need and desirability for the proposed activity or development in terms of this Department's guideline on Need and Desirability (March 2013)/DEA Integrated Environmental Management Guideline**	
Appendix…..	**Any other attachments must be included as subsequent appendices**	

SECTION A
ADMINISTRATIVE DETAILS

Highlight the Departmental Region in which the intended application will fall	CAPE TOWN OFFICE: REGION 1		GEORGE OFFICE: REGION 3
	(City of Cape Town, West Coast District	(Cape Winelands District & Overberg District)	(Central Karoo District & Garden Route District)
Duplicate this section where there is more than one Proponent Name of Applicant/Proponent:	Westrand Inv 1015 (Pty) Ltd		
Name of contact person for Applicant/Proponent (if other):	Huw Jones		
Company/ Trading name/State Department/Organ of State:	-		
Company Registration Number:	1996/051425/23		
Postal address:	Private Bag X15 Postnet Suite 56		
	Hermanus	Postal code: 7200	
Telephone:	( )	Cell: +27(0) 66 304 5864	
E-mail:	walker.plumbers@hermanus.co.za		
Company of EAP:	Lornay Environmental Consulting		
EAP name:	Michelle Naylor		
Postal address:	Unit 5/1F, Hemel & Aarde Wine Village		
	Hermanus	Postal code: 7200	
Telephone:	083 245 6556	Cell: 083 245 6556	
E-mail:	michelle@lornay.co.za	Fax:	
Qualifications:	Master of Science (Rhodes University)		
EAP registration no:	EAPASA.2019/698., SACNASP., IAIASA		
Duplicate this section where there is more than one landowner Name of landowner:	**Erf 1489 VERMONT** Westrand Inv 1015 (PTY) LTD		
Name of contact person for landowner (if other):	Huw Jones		
Postal address:	64		
	HERMANUS	Postal code: 7200	
Telephone:	( )	Cell: +27(0) 066 304 5864	
E-mail:	walker.plumbers@hermanus.co.za		
Name of landowner	**Erf 1490 VERMONT** Edward Henry Gillespie		
Name of contact person for landowner (if other):	RICHARD KOTZé		
Postal address	P O Box 20		
	HERMANUS	Postal code: 7200	
Telephone:		Cell: +27 (0) 0845132147	
E-mail:	egillespie@overstrand.gov.za		
Name of Person in control of the land: Name of contact person for person in control of the land: Postal address:	As above		
		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:	Overstrand Municipality	
Contact person:	Penelope Aplon	
Postal address:	Magnolia Street	
	Hermanus	Postal code: 7200
Telephone	028 313 8000	Cell:
E-mail:	paplon@overstrand.gov.za	Fax: ( )

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

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

The site is located within the built-up urban edge of the suburb of Vermont, Hermanus, Overstrand Municipality.

The properties under this application include the Remainder of Erf 1489 (RE/1489), with Residential Zone1: Single Residential (SR1) zoning and Erf 1490. The applicant intends subdividing RE/1489, into 18 General Residential Zone 1: Town Housing (GR1) properties with associated Open Space and roads. The property is adjacent to existing residential developments and a holiday resort development (Paradise Park). The R43 National Road is located on the northern boundary.

Access to the properties is via a Right of Way road, that has been hardened and forms the extension of Kolgans Close. It is proposed that this access road be formalised by subdividing a 10m wide x ±150m long strip from the eastern boundary of Erf 1490.

This application therefore considers these two properties, Remainder of Erf 1489 (RE/1489), Vermont and Erf 1490, Vermont.

Figure 1. Aerial photo of the two properties. The "Greenfield" area within a green circle and the existing access road and pipelines shown as "Brownfield" in the brown oval, to be subdivided from Erf 1490 and upgraded.

The access road section is completely transformed. RE/1489, where the residential component is proposed, has experienced disturbance over time and does not reflect a natural state, but does not contain any formal development.

3.	~~**For Linear activities or developments**~~
3.1.	~~Provide the Farm(s)/Farm Portion(s)/Erf number(s) for all routes:~~

3.2.	~~Development footprint of the proposed development for all alternatives.~~		m²	
3.3.	~~Provide a description of the proposed development (e.g. for roads the length, width and width of the road reserve in the case of pipelines indicate the length and diameter) for all alternatives.~~			
3.4.	~~Indicate how access to the proposed routes will be obtained for all alternatives.~~			
3.5.	~~SG Digit codes~~			
3.6.	**~~Starting point co-ordinates for all alternatives~~**			
	~~Latitude (S)~~	°	‘	“
	~~Longitude (E)~~	°	‘	“
	~~Middle point co-ordinates for all alternatives~~			
	~~Latitude (S)~~	°	‘	“
	~~Longitude (E)~~	°	‘	“
	~~End point co-ordinates for all alternatives~~			
	~~Latitude (S)~~	°	‘	“
	~~Longitude (E)~~	°	‘	“
~~Note: For Linear activities or developments longer than 500m, a map indicating the co-ordinates for every 100m along the route must be attached to this BAR as Appendix A3.~~				
4.	**Other developments**			
4.1.	Property size(s) of all proposed site(s):		**Remainder of Erf 1489 -** 10 479 m² **Erf 1490 –** 14 876 m² **Portion Erf 1490 (access road) –** Approx. 1 519 m²	
4.2.	Developed footprint of the existing facility and associated infrastructure (if applicable): The RE/1489 is currently undeveloped and does not contain any existing facilities apart from an access road to the property which falls on Erf 1490. The right of way access road is shown as 2368/1990001 on the eastern boundary of Erf 1490. This is referred to as Portion A of Erf 1490 in the specialist studies and town planning report. There is an existing water pipeline on the northern boundary of Erf 1489 in the trunk road parallel to the R43. The existing sewer pipeline services Erf 2570 and Erf 1488 Vermont and is located on the southern boundary of this property and in the road reserve of Portion A. There is an existing electricity supply to Erf 2570 and Erf 1488.			

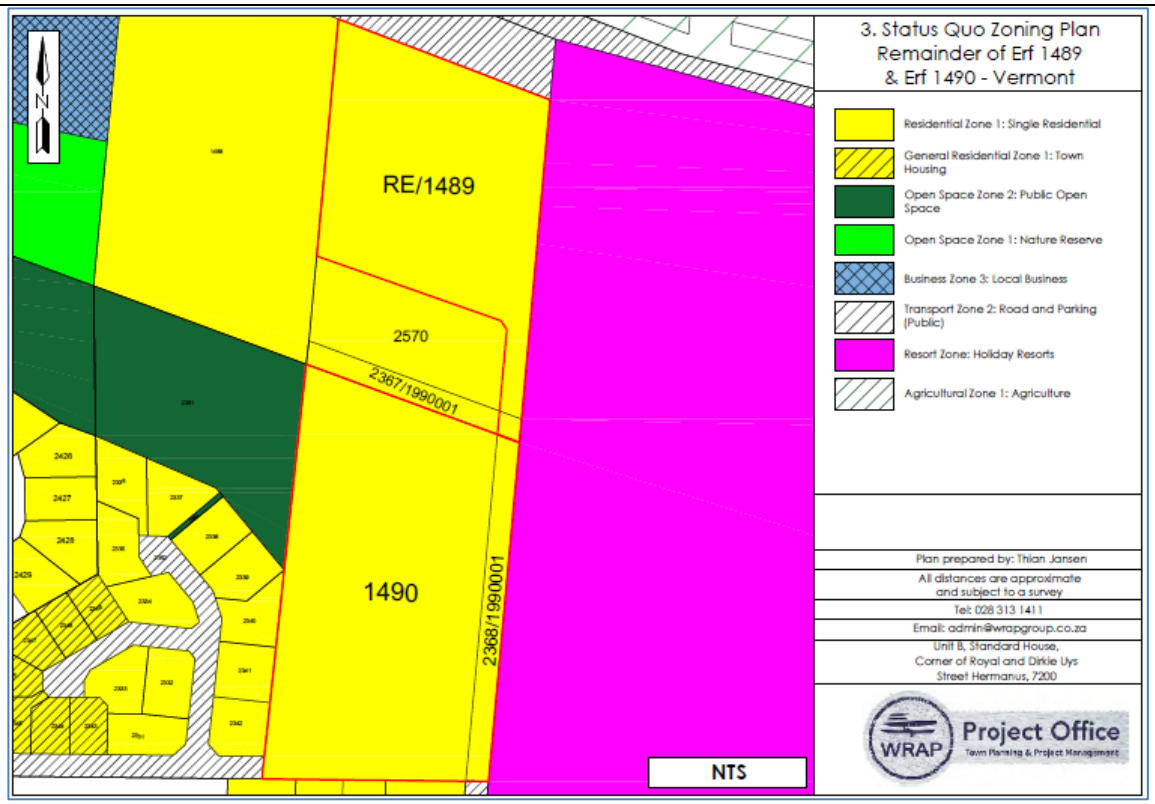

Figure 2: Status Quo Zoning Plan. The proposed residential area is RE/1489. The existing right of way access road and proposed subdivision from Erf 1489 is 2368/1990001 on the eastern boundary of Erf 1490. Referred to as Portion A in the Town Planning Report attached.

4.3.	Development footprint of the proposed development and associated infrastructure size(s) for all alternatives:	
	Erf 1490 (Portion A): This figure is approximate as it will be accurately surveyed after the subdivision of Erf 1490 into Portion A of ±1 519 m^2 The resulting 1 519m^2 will then be consolidated with the existing RE/1489 which is 10 479m^2 in extent. The resulting property will then be subdivided as shown below. This is the Preferred Alternative (Alternative 2).	**Erf 1486:** Subdivision of the consolidated property to create Residential erven – 18 Town housing GR1 units Open space and roads **Combined Total development Footprint:** ±11 998 m^2 ~ **12000 m^2**
4.4.	Provide a detailed description of the proposed development and its associated infrastructure (This must include details of e.g. buildings, structures, infrastructure, storage facilities, sewage/effluent treatment and holding facilities).	

The development of Remainder of Erf 1489 (RE/1489) Vermont is proposed. The subdivision of the existing right of way access road (Portion A) over Erf 1490 Vermont is also required, in order to provide access to the existing RE/1489.

Existing	
Remainder of Erf 1489	10 479 m²
Erf 1490	16 395 m²
Proposed Subdivision	
Remainder of Erf 1490	±14 876 m²
Portion A (a Portion of Erf 1490)	±1519 m²
Proposed Consolidation	
Remainder of Erf 1489 & Portion A	±11 998 m²
Remainder of Erf 1490	±14 876 m²

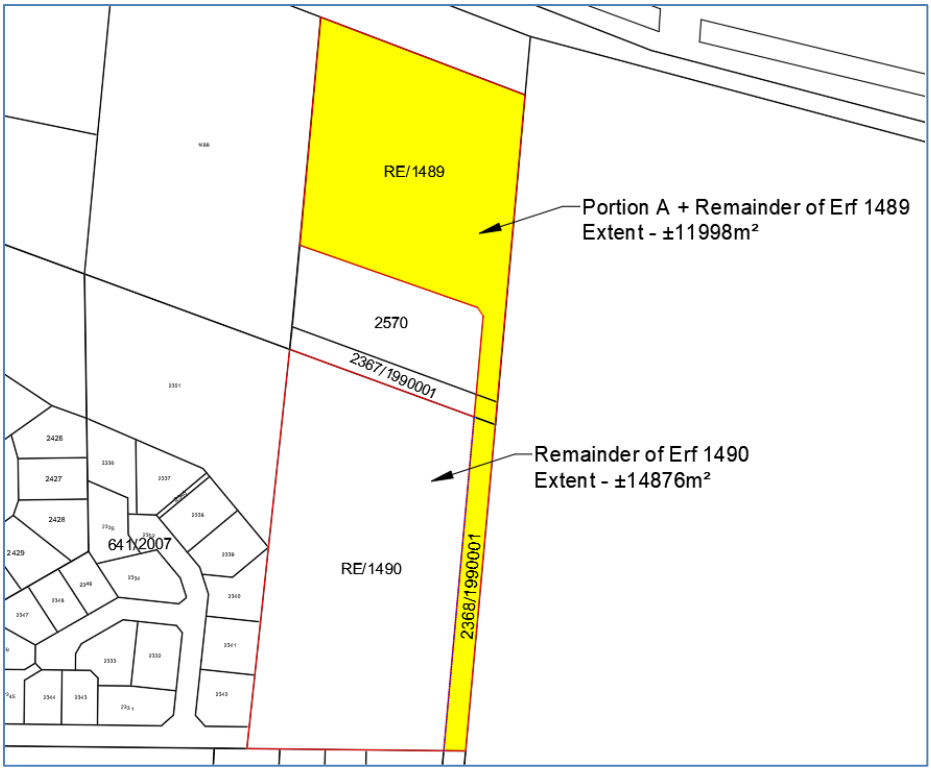

Figure 3. Proposed subdivision and consolidation plan indicated in yellow.

The proposed development will consist of:

- → 18 Residential properties
- → 1 Public open space
- → 1 Public Road

Land development approval required

- → Rezoning of the consolidated Portion A, ±1519m² and Remainder of Erf 1489, Vermont from Residential Zone 1: Single Residential to Subdivisional Area Zone (SA).
- → Subdivision of the consolidated Portion A (Erf 1490), ±1519m² and the Remainder of Erf 1489, Vermont into;
  - Eighteen (18) General Residential Zone 1: Town Housing (GR1) erven
  - One (1) Open Space Zone 2: Public Open Space (OS2) erf
  - One (1) Transport Zone 2: Road and Parking (TR2B).

No conservation worthy, environmentally sensitive, natural areas on RE/1489 were identified by the EAP or Delta Ecology during the Screening and Impact Assessment process. Additionally, a Plant species and Terrestrial Biodiversity Compliance Statement

was undertaken which confirmed that the site is in a degraded and transformed state with no plant species of conservation concern having been identified during the site investigation by the botanical specialist.

There are no alternative access routes to the development site and there are no site alternatives for the proposal.

Water Supply

There is existing potable water supply suitable for an upgrade within close proximity of the property at Kolgans Close. Water is sourced from the Preekstoel Water Treatment Plant. An upgraded connection point and internal reticulation infrastructure will be constructed to Overstrand Municipal standards.

Sewer Supply

There is an existing sewer network pipe on the boundary between Erf 2570 and Erf 1490. In order to accommodate the proposed development, capacity of the sewer infrastructure will need to be upgraded from the existing 110mm diameter pipe to a 160 mm diameter outfall to Overstrand Municipal standards as per recommendations in the GLS Consulting Engineers report.

Proposed and existing water and sewer infrastructure plans by GLS Infrastructure Planning are attached.

Electricity Supply

There is existing electrical supply from Eskom within close proximity to the property. Installation and connection will be to specifications of the Overstrand Municipality.

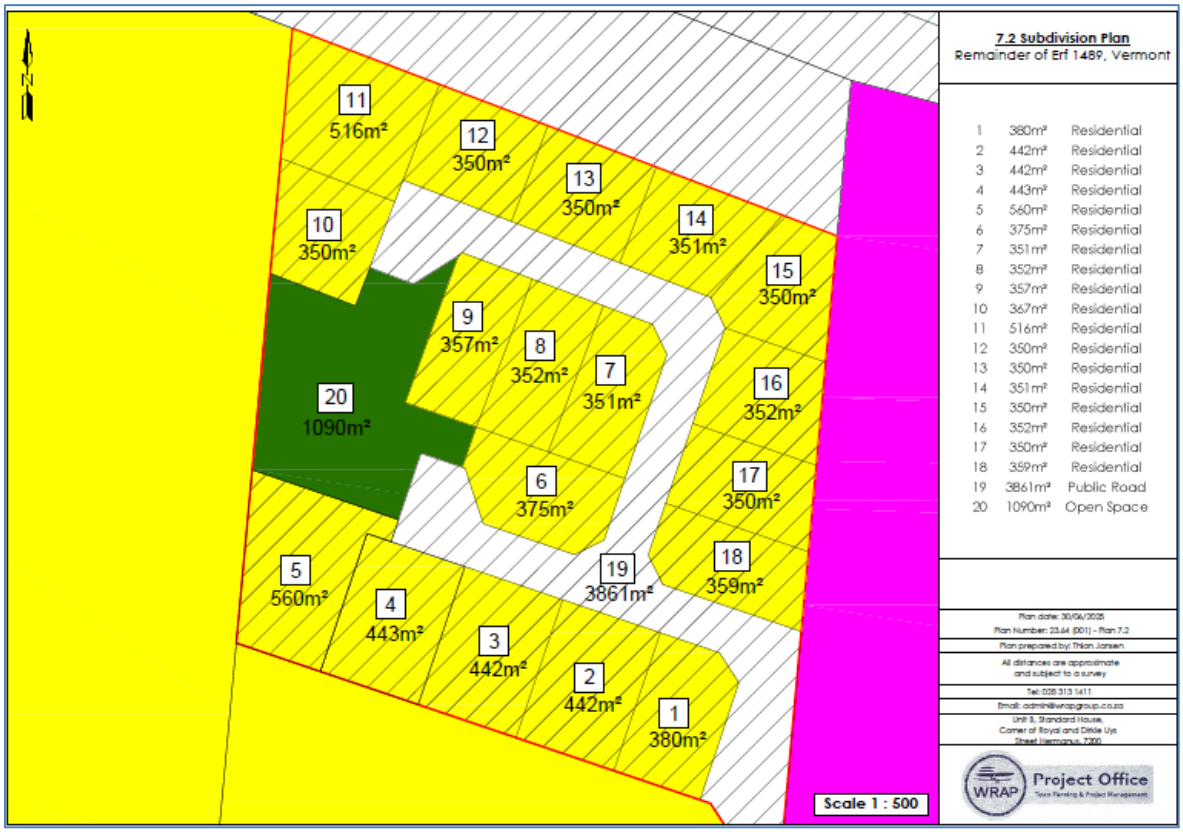

Figure 4a. Proposed development on Residential erven and Open space proposed on RE/1489 Vermont.

Stormwater Management

Stormwater will be managed within the residential area, as far possible, in order to limit surface water flow into the wetland and to mitigate impacts on the wetland across which the access road is located. This includes:

→ Limiting paved areas around buildings
→ Permeable paving systems.
→ Rainwater tanks on houses

Table 1. The subdivision of the property into distinct zones with varied development sizes.

ERVEN	ZONING	TYPE OF DEVELOPMENT	SIZE	Percentage coverage
Erf 1 - 18	General Residential Zone 1: Town Housing (GR1)	Residential Town House	350m^2 - 516m^2	58.74%
Erf 20	Open Space Zone 2: Public Open Space (OS2)	Open Space	1090m^2	9.08%
Erf 19	Transport Zone 2: Road and Parking (TR2)	Road and Parking	3861m^2	32,18%

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

Access will be taken via the existing road network (Kolgans Close) and "right of way" road to an existing driveway all of which will need to be upgraded. The road surface is currently hardened with crushed shells. An internal road network will be developed during the construction phase.

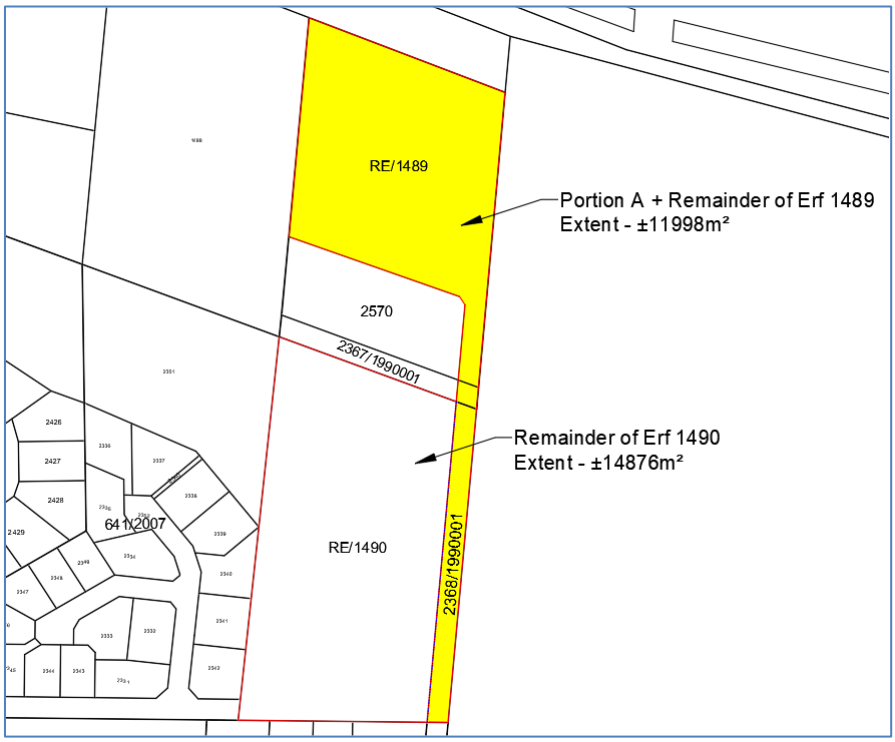

Figure 4b. Proposed access to Re/1489, via existing right of way servitude. (2368/1990001)

4.6.	SG Digit code(s) of the proposed site(s) for all alternatives: **ERF RE/1489:** C01300230000148900000 **Erf 1490:** C01300230000149000000

4.7.	Coordinates of the proposed site(s) for all alternatives:			
	Latitude (S)	34 °	24‘	28.02“
	Longitude (E)	19 °	9‘	60.01“

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

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

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

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

The National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) ("ICMA"). If yes, attach a copy of the comment from the relevant competent authority as Appendix E4 and the pre-approval for the reclamation of land as Appendix E19.	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. A Notice of Intent was submitted to HWC and it was confirmed that no further Heritage Impact Assessment is required for the proposed development. See HWC comment attached under Appendix F.	YES	NO ✓
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. A Freshwater Specialist was appointed	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.
N/A

4. Policies

Explain which policies were considered and how the proposed activity or development complies and responds to these policies.
Western Cape Spatial Development Framework, 2014 (WCSDF) ***"3.3.4.2 SPATIAL IMPLICATIONS*** *The lack of integration, compaction and densification in urban areas in the Western Cape has serious negative consequences for municipal finances, for household livelihoods, for the environment, and the economy.* *The PSDF provides principles to guide municipalities towards more efficient and sustainable spatial growth patterns.*

In order to secure a more sustainable future for the Province it is important that settlement planning and infrastructure investment achieves:

i. higher densities

ii. a shift from a suburban to urban development model

iii. more compact settlement footprints to minimise environmental impacts, reduce the costs and time impacts of travel and enhance Provincial and Municipal financial sustainability in relation to the provision and maintenance of infrastructure, facilities and services.

iv. address apartheid spatial legacies by targeting investment in areas of high population concentration and socio-economic exclusion.

By prioritising a more compact urban form through investment and development decisions, settlements in the Western Cape can become more inclusionary, widening the range of opportunities for all".

The proposed development on Erf 1489, Vermont, aligns with these principles through the densification of land use within the urban edge, thereby contributing to spatial compaction. By clustering 18 town house residential units onto an erf that was originally zoned as Single Residential (SR1), and would therefore have housed a single family, the layout reflects an efficient land use pattern that supports sustainable development while avoiding urban sprawl. The integration of infrastructure within an already accessible urban edge supports sustainable service delivery.

Overstrand Municipality Spatial Development Framework, 2020 (OSDF)

AO 4. The compact urban form and design of Overstrand's urban and rural settlements enables high levels of accessibility to key destinations such as employment, healthcare, education and recreation.

i Judicious densification and intensification in urban areas should be actively promoted.

ii Ensure effective integration between land-use and transportation planning and operations.

Overstrand Integrated Development Plan Review and Amendment, 2025/26 (IDP)

The Strategic Environmental Management Framework, which was approved in June 2014, continues to inform decisions that will address the need for development while protecting natural and cultural resources.

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.	
DEA&DP EIA Guideline and information document series	Applied to various components in the Basic Assessment process. The following guidelines are considered throughout this Basic Assessment process: • Guidelines for EIA Requirements • Guidelines for Public Participation • Guideline on Need and Desirability • Guideline for Involving Biodiversity • Specialists in EIA Processes • Guideline for Environmental Management Plans.
GN No. 326- Appendices 1 and 4 relating to the information requirements in the BAR and EMPr.	Provincial Department of Environmental Affairs and Development Planning

Western Cape Biodiversity Spatial Plan Handbook (2023)	This guideline informed the assessment of the biodiversity context of the properties. It was noted that there has been a change over time and that the property is no longer considered an Ecological Support Area (ESA), but that there is a mosaic of terrestrial Critical Biodiversity Areas (CBA) and Wetlands on and in close proximity to the site.

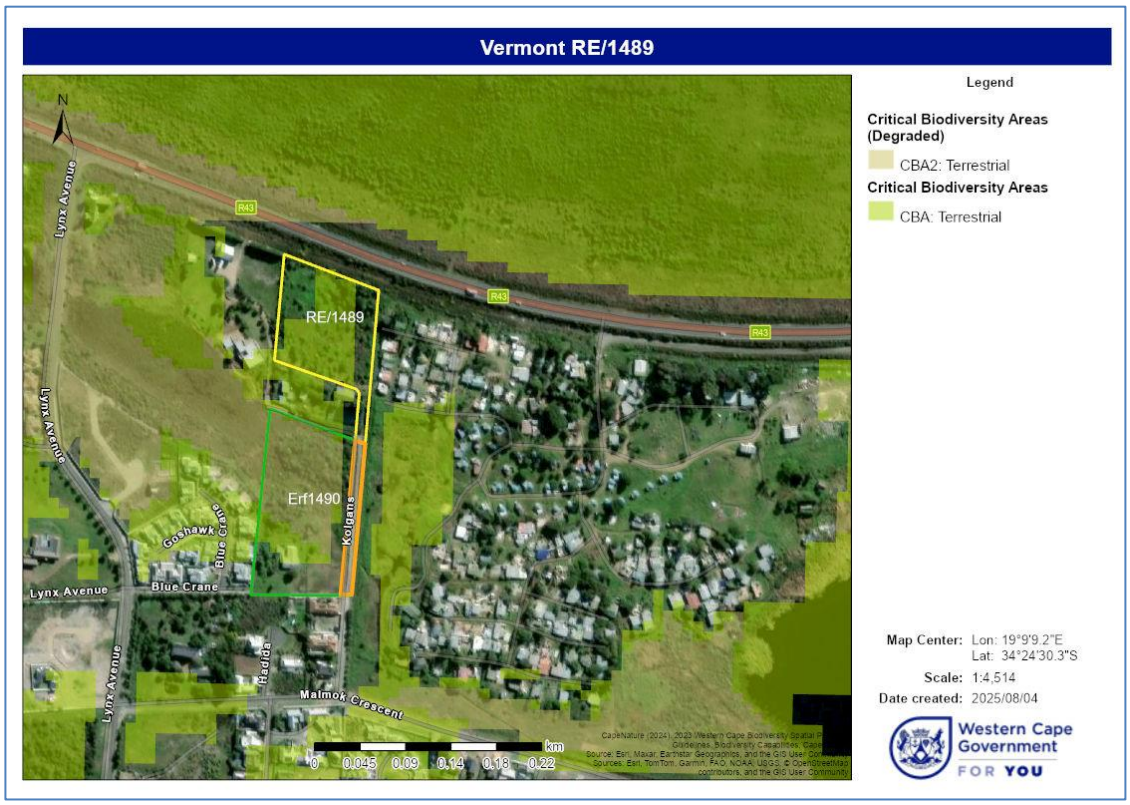

Figure 5: RE/1489 Vermont outlined in yellow, proposed for residential development. Critical Biodiversity Areas. The access road, Portion A (Orange) is to be subdivided from Erf 1490 Vermont (Extension of Kolgans Close). The Critical Biodiversity Area includes area with existing buildings. The degraded Critical Biodiversity Area on Erf 1490 is indicated as terrestrial has been assessed as a UVB wetland. The Aquatic Biodiversity Assessment has delineated a wetland in this area extending from Lynx Road towards the Vermont Salt Pan

6. Protocols

Explain how the proposed activity or development complies with the requirements of the protocols referred to in the NOI and/or application form
The proposed development complies with the requirements of various protocols, as outlined in the Site Sensitivity Verification Report (SSVR): **Aquatic Biodiversity Theme** – Very High Sensitivity – An Aquatic Biodiversity Impact Assessment was undertaken. This study delineated the wetland and confirmed that the residential area, RE/1489 Vermont is Terrestrial, however it is within 100m of a wetland. The existing access road along the eastern boundary of Erf 1490 crosses a Unchanneled Valley Bottom (UVB) wetland that extends through Vermont from west of Lynx road to the Vermont Salt Pan. The road section is existing, completely transformed and hardened with no possibility of rehabilitation. **Agricultural Theme** – Medium Sensitivity – the proposed development is in line with neighbouring developments and is included in the Overstrand Municipality urban area. It is not appropriate for agricultural development. No further assessment will be undertaken.

Archaeological and Cultural Heritage Theme – Low sensitivity – in line with the requirements of the National Heritage Resources Act, a Notice of Intent to Develop was submitted to Heritage Western Cape as part of the BAR process. Heritage Western Cape have confirmed that no further studies are required but the mitigation measures must be included in the EMPr should artifacts or human remains be found during construction.

Civil Aviation Theme – High sensitivity – the proposed development is in line with neighbouring development and therefore no additional impacts are expected in terms of this theme. No further assessment required.

Defence Theme – Low. No impacts envisaged. No further assessment required. The proposed development is in line with the existing residential development in the area.

Palaeontology Theme – Low – no further assessment required as stipulated by Heritage Western Cape. Mitigation measures to be included in the Construction EMPr in the event that materials are uncovered during groundbreaking and construction.

Animal Species Theme – High – The property is located within the built-up urban area of Vermont and flanked by the R43 to the north. The site has been disturbed over time and does not contain any Wetland habitat (RE/1489). The following species are flagged in the Screening tool:

Sensitivity	Feature(s)
High	Aves-Circus maurus
High	Aves-Circus ranivorus
High	Aves-Turnix hottentottus
High	Aves-Polemaetus bellicosus
Medium	Aves-Sarothrura affinis
Medium	Reptilia-Bitis armata
Medium	Invertebrate-Aneuryphymus montanus

A Faunal SSV and Compliance Statement was undertaken for a similar nearby site in Vermont (Erf 1486) which is located 200m west of the subject property (Terrestrial Animal Site Sensitivity Verification Report and Species Specialist Assessment Report by Prof Jan A Venter, August 2024). The following comments are highlighted by the specialist in the above-mentioned report and from this recent data from the assessment, it is concluded that no further Faunal assessment is required for erven RE/1489 and 1490:

- ***Aves Circus maurus*** – Black Harrier – Extract from Jan Venter Report on Erf 1486 Vermont: "*The species' typical breeding habitat is Fynbos, particularly Strandveld and Mountain Fynbos. In fragmented Renosterveld habitat it is only found in high-quality, larger sized patches (Curtis et al. 2004). Foraging habitat includes montane areas, lower altitude Karoo scrub, semi-desert, floodplains and croplands (Curtis et al. 2004). Small mammals and birds (especially quail) are their main diet preference (Curtis et al. 2004). Both GBIF and iNaturalist data sets indicates sufficient records of this species in the general region of the property (Erf 1486)".* Given the findings for Erf 1486, it is concluded, as with Erf 1486, that although there is a reasonable likelihood that the species would frequent the property for foraging purposes, the species range widely, and the minor loss of forage habitat would not have a significant influence on the species. The development site also does not significantly influence potential breeding sites or their prey species. The Black harrier, *Circus maurus*, will therefore not likely be significantly impacted by the proposed development and potential impact are therefore classified as 'low'. No further assessment required.

- ***Aves Circus ranivorus*** – African Marsh Harrier – Extract from Jan Venter Report on Erf 1486 Vermont: "*This species occurs along large water bodies and adjacent open vegetation (Simmons 2005). The species is classified as Endangered in South Africa (Taylor 2015b), with habitat loss and degradation being the most significant threat to the continued survival of this species. Both GBIF and iNaturalist data sets sufficient*

records of this species close to and in the general region of the property. There is therefore a reasonable likelihood that the species would frequent the property for foraging purposes. We did not observe the species during our field visit (Erf 1486). The species range widely, and the minor loss of forage habitat would therefore not have a significant influence on the species. The development site also does not significantly influence potential breeding sites or their prey species. The African marsh harrier Circus ranivorus, will therefore not likely be significantly impacted by the proposed". Given the findings here, no further assessment for Erf 1489 is proposed.

- ***Aves Turnix hottentottus*** – Fynbos Button Quail – Extract from Jan Venter Report on Erf 1486 Vermont: *"an endangered terrestrial turnicid which is endemic to the Fynbos biome (Lee et al. 2018). Inappropriate burning frequencies and rapid urban development and agricultural expansion in lowland areas are the main threats to this species (Peacock 2015). This species avoids older vegetation (age since fire) and dense grass (or other vegetation) cover (Lee et al. 2018). The species preference for sparse drier vegetation has also been recorded by Lee (2013). There are iNaturalist and GBIF records in the vicinity but not in similar habitat types comparable to the development site. We did not observe the species during our field visit. The dense wetland vegetation that are found in the development site constitutes unsuitable habitat for this species. The likelihood that this species would occur at the site is therefore considered low. The impact of the development on Hottentot Buttonquail Turnix hottentotus, by the proposed development will therefore likely be 'very low'.* Given these findings no further assessment will be applied to Erf 1489 for this species.

- ***Aves Polemaetus bellicosus*** – Martial Eagle – Extract from Erf 1486 Report "*The Martial Eagle is found throughout sub-Saharan Africa (Amar and Cloete 2018). The species is an African endemic which is thought to be declining and was recently uplisted to globally Vulnerable, although data on population trends are almost entirely lacking (Amar and Cloete 2018). In South Africa the species is listed as 'Endangered' (Taylor 2015d). Their prey consists of small mammals such as hares, mongoose, genet and ground squirrels (Boshoff et al. 1990). These birds will occupy most habitats provided there are adequate tall trees or pylons for nesting and perching (Machange et al. 2005). There are a few iNaturalsit and GBIF records for the species in the general area. We did not observe the species during our field visit. It is noted that the property does not provide good habitat for the Martial eagle's preferred prey species. The species range widely, and the minor loss of marginal forage habitat would therefore not have a significant influence on the species. The development site also does not influence potential breeding sites or their prey species. The Martial eagle Polemaetus bellicosus, will therefore not likely be significantly impacted by the proposed development and potential impact are therefore classified as* ***'low'".*** Given these findings for the adjacent site, no further assessment for this species will take place for Erf 1489 Vermont.

- ***Aves Sarothrura affinis*** – Striped flufftail – Extract from Erf 1486 Vermont Report: *The South African population of Striped Flufftail, Sarothrura affinis, is suspected to be undergoing a decline as a result of habitat loss (Peacock et al. 2015). More than 10 % of the regional population may have been lost because throughout its fragmented range, suitable grassland habitat is under severe threat from unsuitable burning regimes, heavy grazing, agriculture and afforestation (Peacock et al. 2015). In the Western Cape this species is often found in dense Psoralea-Osmitopsis Fynbos next to streams or near moist depressions (Graham and Ryan 1984, Kakebeeke 1993). There are a couple of records for this species on both the iNaturalist and GBIF databases with most of these are towards Kleinmond and Grabouw area about 20 km away. One GBIF record is closer to the property (within a 15 km radius) on the mountain slopes near the Klein River to the east. Striped flufftails did not respond to our playbacks at the development site (Erf 1486). High winds however could have hampered the effectiveness of call-ups during the site visit. We consider the habitat at this site to be marginally suitable for this species but also cannot rule out its occurrence with confidence. If they are present, it is likely that some of their habitat will be lost and the disturbance during construction phase will make them vacate the area temporarily. This would be possible because of the adjacent nature*

*reserve and wetland system. The potential impact on Stiped flufftail, Sarothrura affinis is classified as **'low'.** Given the findings above for nearby Erf 1486, no further assessment is recommended for the subject property.*

- ***Reptilia Bitis armata*** – puffadder – Extract from Erf 1486 report: *The Southern Adder Bitis armata is classified as 'Vulnerable' because of its severely fragmented distribution due to the reduction in the extent and quality of its habitat (Maritz and Turner 2023). This species has a small distribution in the southwest coastal margin of the Western Cape with three disjunct subpopulations, one from West Coast National Park to just north of Cape Town, the second near Hermanus and the third near De Hoop Nature reserve (Maritz and Turner 2023). The species occurs mainly in coastal lowland Fynbos on sandy and rocky substrates (Phelps 2010). It is known to shelter under rock slabs between dense shrubs on coastal plains (Phelps 2010). iNaturalist and GBIF records for this species is concentrated between Stanford and Struisbaai to the 20 km to the east of this property. We did not observe the species during our field visit. The dense wetland vegetation and associated strata that are found in the development site constitutes unsuitable habitat for this species. The likelihood that this species would occur at the site is therefore considered very low. The impact of the development on Southern Adder, Bitis armata, by the proposed development will therefore likely be 'very low'.* Given the findings for the adjacent Erf 1486 site, no further assessment will be undertaken for Erf 1489 Vermont.

- ***Invertebrate Aneuryphymus montanus*** – Yellow Winged Agile grasshopper – Extract from Erf 1486 Report: *This endemic grasshopper species occurs on Western and Eastern Cape mountains. It is listed as 'Vulnerable'. It has been recorded from near Clanwilliam eastwards towards East London, associated with different fynbos types occurring on south-facing, cool slopes (Brown 1960). Brown (1960) mentions the species being collected "amongst partly burnt stands of evergreen sclerophyll in rocky foothills". Sites where the species have been documented include Graafwater, close to Lambert's Bay, De Rust, Suurbraak, Bot River, Kogelberg and Joubertinia. The species seems to show preference for rocky, mountainous areas. Its estimated extent of occurrence is ca. 170 000 square kilometres. No specimens were seen during a field visit. The proposed development is classified as 'very low' impact on A. montanus, due to an absence of species data from this area, no suitable habitat, no direct evidence of occurrence, the limited size of the development relative to the surrounding vegetation and the species' regional occurrence, and the wide extent of occupancy of A. montanus. Given the information above, it is not likely that the above species would be encountered on the property."* Given these findings for the above site, no further assessment will be undertaken for the subject property.

Plant Species Theme – (High)– These properties fall within an area which is considered a threatened vegetation type, Hangklip Sand Fynbos. However, RE/1489 was previously the garden of neighbouring Erf 2570, which has an existing home and shed. The erf is surrounded by high walls and fences and is within an established residential area. It is therefore no longer in a natural condition. There are existing vegetable garden and remnants of lawned area as well as infestation with alien invasive trees evident on site. From sit investigations it is concluded that the Terrestrial Biodiversity should be amended to Low - See also comments in Aquatic Biodiversity Assessment. Further studies are therefore not required. However, a detailed site investigation was undertaken by a botanical specialist to verify the presence of plant species associated with the mapped vegetation type. The investigation determined that the study area is highly degraded and transformed, with a virtual absence of characteristic and dominant species associated with Hangklip Sand Fynbos. As a result, the study area does not resemble the listed ecosystem type in structure, composition, or ecological functioning, and therefore cannot be considered representative of this Critically Endangered vegetation type. Furthermore, no plant Species of Conservation Concern (SCC) were recorded within the proposed development footprint, and the likelihood of such species establishing on site is very low due to the highly degraded condition of the habitat.

Photo 1. RE/1489 in the foreground with R43, looking north (*Source*: Lornay 2025)

Photo 2. RE/1489 looking east (*Source*: Lornay, 2025)

Photo 3. RE/1489 from R43 looking east. (*Source*: Lornay, 2025).

Terrestrial Biodiversity Theme – Very High Sensitivity – According to the National Web-Based Environmental Screening Tool, the site is mapped as having Very High Sensitivity for the Terrestrial Biodiversity Theme. This classification is likely due to the underlying vegetation type mapped for the property, namely Hangklip Sand Fynbos, which is recognised as a Critically Endangered ecosystem type.

However, a detailed site investigation was undertaken by a botanical specialist to verify the presence of plant species associated with the mapped vegetation type. The investigation determined that the study area is highly degraded and transformed, with a virtual absence of characteristic and dominant species associated with Hangklip Sand Fynbos. As a result, the study area does not resemble the listed ecosystem type in structure, composition, or ecological functioning, and therefore cannot be considered representative of this Critically Endangered vegetation type.

Furthermore, no plant Species of Conservation Concern (SCC) were recorded within the proposed development footprint, and the likelihood of such species establishing on site is very low due to the highly degraded condition of the habitat.

In addition, no threatened ecosystems, Critical Biodiversity Areas (CBAs), or Ecological Support Areas (ESAs) occur within the proposed development footprint. Given that the study area does not conform to the characteristics of

Hangklip Sand Fynbos, it is not considered eligible to contribute meaningfully to national ecosystem protection levels or conservation targets.

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.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soils, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse	The existing access road and right of way servitude is over a delineated wetland. This 'right of way' road is hardened with shells and the area is highly compacted and disturbed. The formalisation of this road and upgrade to Overstrand Municipal specifications will require excavation and deposition and compaction of a variety of materials in excess of $10m^3$. Erf 1490 Vermont and more than half of RE/1489 fall within 100m of an area identified as an Artificial Wetland in the NFEPA and a Non-Perennial River. (CSIR, 2011) Note: The wetland scientist is of the opinion that there is **no** non perennial drainage line on RE/1489 Vermont and the property is entirely terrestrial The wetland has been delineated and is located at the access to RE/1489 residential site. The access road is located within the wetland and is extremely modified and no longer functioning. The existing access road, an extension of Kolgans Close, is on the eastern boundary of Erf 1490 Vermont, crosses this wetland.
27	The clearance of an area of 1 hectare or more, but less than 20 hectares of indigenous vegetation	Removal of vegetation to establish residential dwellings. SANBI BGIS maps the site as Hangklip Sand Fynbos (CR) RE/1489 Vermont has been part of a residential garden in the past and has been planted to a vegetable garden in some areas and has a number of AIS. Few plant species associated with the Hangklip Fynbos vegetation were identified by the specialist, but no plant species of conservation concern were identified The existing access road over Erf 1490 Vermont has been hardened and contains no vegetation.

		RE/1489 is larger than 1Ha.
Activity No(s):	Provide the relevant **Basic Assessment Activity(ies)** as set out in **Listing Notice 3**	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The clearance of an area of 300 square metres or more of indigenous vegetation 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.	SANBI BGIS maps the site originally as Hangklip Sand Fynbos (CR), from site investigation by EAP and Freshwater specialist, it is confirmed that the site is transformed and limited vegetation of this group persists. Important to note that the vegetation is not in a natural condition with a number of alien invasive species, including Kikuyu lawn (*Cenchrus clandestinus*) and various *Acacia* species
14	The development of (ii) Infrastructure or structures with a physical footprint of 10m² or more where such Development occurs (a) Within a watercourse (i) Western Cape (ff) Critical Biodiversity Area or Ecosystem Service Area as identified in Systematic Biodiversity Plans adopted by the competent authority or in bioregional plans	Part of the subject properties falls within a CBA.
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.		

The upgrade of the existing municipal line in Kolgans / Malmok street, to **replace** 110 mm with 160 mm diameter pipe - **will not** trigger any listed activities because:

→ No upgrade to the WWTW capacity is required.
→ Because the upgraded pipe will have a diameter 160mm and the peak flow of the development will be less than 9.2kL/d for 18 residential units.
→ The capacity of the upgraded 160mm diameter pipeline will be approx. 16 litre/sec

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.

Remainder of Erf 1489 Vermont (RE/1489) (hereafter referred to as the subject property) has an extent of 1,0479ha (Refer Figure 2 – Zoning Plan) and is currently zoned as Residential Zone 1: Single Residential (SR1). The subject property has been identified as a suitable densification and infill development area.

This proposed development will consist of the following:

- → 18 Residential Properties (General Residential Zone 1: Town Housing (GR1))
- → 1 Public Open Space; and
- → 1 Public Road.

The current access to the Remainder of Erf 1489 Vermont is via a registered right of way servitude over Erf 1490, Vermont. No alternative access road from the R43 is possible, as confirmed by Western Cape Department of Infrastructure; Roads's closure of all individual access points to the R43; and that the property, Erf 1486, has a right of way through Erf 1490 (Portion A). The proposal is to upgrade the existing road to create a public road, with the subdivided section becoming part of the public road network.

The proposal is to develop the property to increase the residential yield and provide a scarce and valuable residential product for an under-pressure housing market. The following is proposed:

Table 1: Percentage of each component

Legend Colour	Zoning	Size (m²)	Percentage
	Open Space Zone 2: Public Open Space	1146	9,08%
	General Residential Zone 1: Town Housing	7047	58,74%
	Transport Zone 2: Road and Parking (B)	3861	32,18%
	Total	11998	100,00%

The rezoning and subdivision of the subject property will introduce a smaller, more affordable type of residential opportunity into the housing market in Vermont. The proposed zoning and morphology are however aligned with development trends in other areas of the Overstrand Municipality and is not considered out of the ordinary.

LAND ASSEMBLY APPROVALS REQUIRED

- → Subdivision of Erf 1490 Vermont into Portion A, ±1519m², and the Remainder of Erf 1490 Vermont, ±14876m², in terms of Section 16(2)(d) of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020.
- → Consolidation of Portion A, ±1519m² and the Remainder of Erf 1489 Vermont, 10479m² in terms of Section 16(2)(e) of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020.

→ Rezoning the consolidated Portion A and the Remainder of Erf 1489 from Residential Zone 1: Single Residential to Subdivisional Area Zone.

→ Subdivision of the resulting property into Eighteen (18) General Residential Zone 1: Town Housing (GR1) erven, one (1) Open Space Zone 2: Public Open Space (OS2) erf and one (1) Transport Zone 2: Road and Parking (TR2B).

Existing	
Remainder of Erf 1489	10 479 m²
Erf 1490	16 395 m²
Proposed Subdivision	
Remainder of Erf 1490	±14 876 m²
Portion A (a Portion of Erf 1490)	±1519 m²
Proposed Consolidation	
Remainder of Erf 1489 & Portion A	±11 998 m²
Remainder of Erf 1490	±14 876 m²

Please note that the Residential development will take place on RE/1489, with the access road being located on an existing servitude access route over Erf 1490.

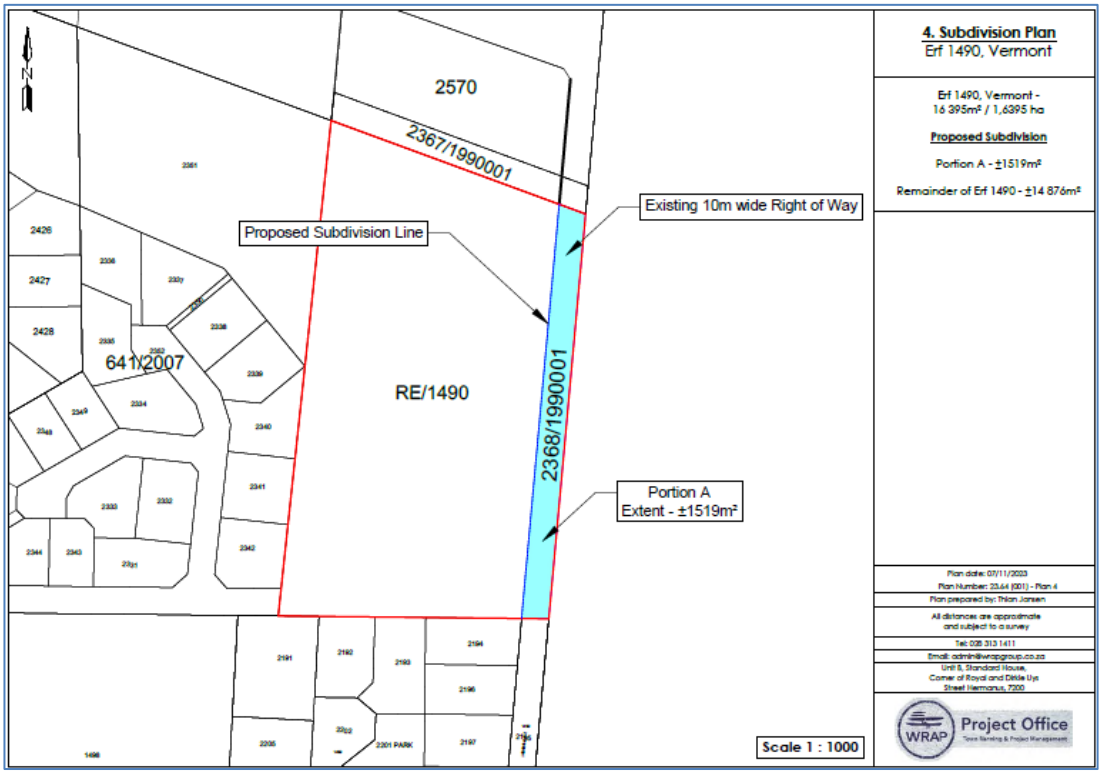

Figure 6. Proposed subdivision of Erf 1490 Vermont.

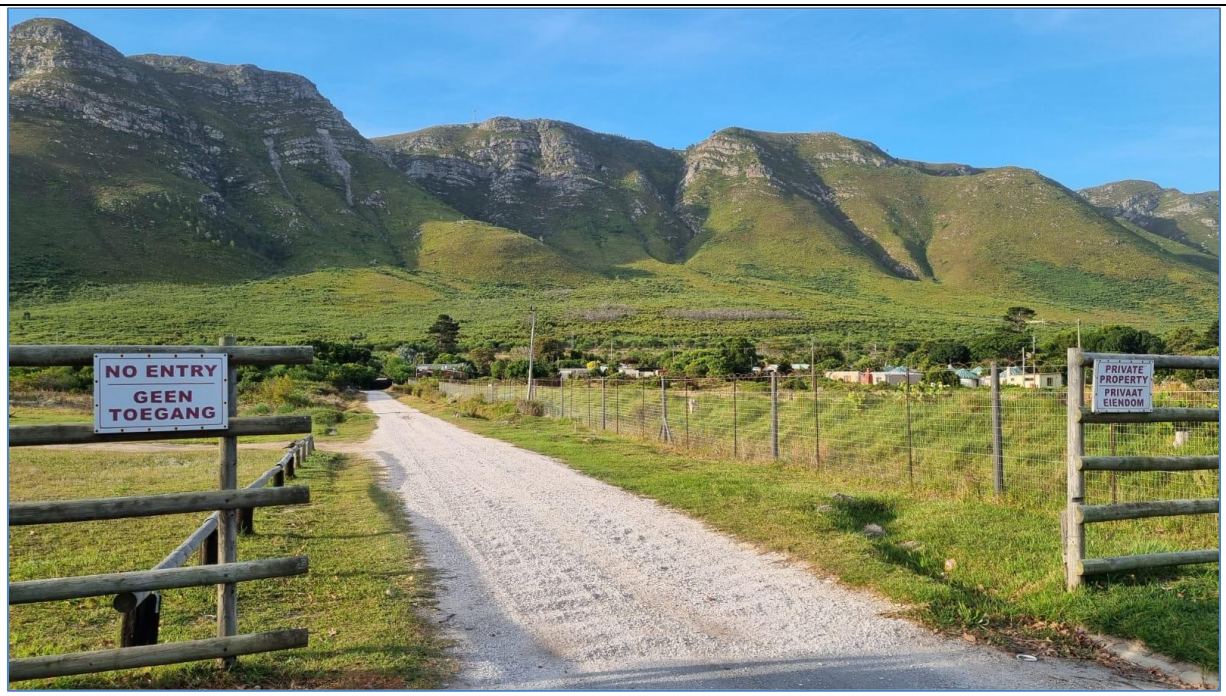

Photo 4. Photograph of the extension of Kolgans Close looking towards RE/1489 in the background. (*Source:* Lornay 2025).

ASSOCIATED INFRASTRUCTURE

Electricity Supply

Electricity will be supplied directly by Eskom. The surrounding properties are similarly supplied.

Water Supply

The development area is accommodated within the existing Vermont reservoir zone. The connection to the existing system will be done though the existing 110 mm diameter pipe south of Erf 1489. The existing Vermont reservoir network has sufficient capacity to accommodate the proposed development on Erf 1489. The existing bulk supply system from the Preekstoel Water Treatment Plant to the Vermont reservoirs has sufficient capacity to accommodate the proposed development. There is sufficient reservoir storage capacity in the existing Vermont reservoirs to accommodate the proposed development.

Sewer Network

The existing 110 mm diameter small bore sewer system from Erf 1489 to Malmok Street, and the 110 mm diameter small bore sewer system in Malmok Street towards the 200 mm outfall sewer in Malmok Street (as shown on Figure 2 of attached GLS Engineers Report), have sufficient hydraulic spare capacity to accommodate the peak sewage flow from the proposed development. Accommodation of the proposed development on the existing small-bore system is however not supported due to operational problems that are experienced with smaller diameter sewer systems, specifically frequent sewer blockages. In the sewer master plan upgrading of the existing system in Malmok Street is proposed in order to accommodate potential future development areas within the upstream drainage area. It is therefore proposed that the existing 110 mm diameter small bore sewer system from the proposed development to the existing 200 mm diameter outfall sewer in Malmok Street is upgraded to 160 mm diameter and 200 mm diameter outfall sewers in order to accommodate the proposed development in the existing sewer system.

The proposed development gravitates to the Onrus Main PS from where sewage is pumped to the Hermanus Waste Water Treatment Works (WWTW). The pump station has sufficient spare capacity to accommodate the proposed development.

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 existing zoning is Residential Zone 1: Single Residential (SR1). A Land use application is underway with the Overstrand Municipality for the following:

- → Subdivision of Erf 1490 Vermont into Portion A, ±1519m², and the Remainder of Erf 1490 Vermont, ±14876m², in terms of Section 16(2)(d) of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020.
- → Consolidation of Portion A, ±1519m² and the Remainder of Erf 1489 Vermont, 10479m² in terms of Section 16(2)(e) of the Overstrand Municipality Amendment By-Law on Municipal Land Use Planning, 2020.

The intended use of the land is for 18 single residential (Town Houses (GR1), public open space and transport zone which will include the access road and roads within the residential area. This will require:

- → Subdivision of the resulting property into Eighteen (18) Residential erven, one (1) Open Space Zone 2: Public Open Space (OS2) erf and one (1) Transport Zone 2: Road and Parking (TR2B).

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.

N/A

4.	Explain how the proposed development will be in line with the following?
4.1	The Provincial Spatial Development Framework.

The proposed development aligns with the Western Cape Spatial Development Framework (WCSDF) in several ways:

The development is residential, specifically within the urban area and residential suburb of Vermont. This corresponds with the PSDF's emphasis on guiding development to appropriate zones and ensuring compatibility with existing land uses. The sustainable use of spatial assets to develop integrated and sustainable settlements is considered a priority.

The development supports the PSDF's goal of directing development towards urbanized zones to optimize infrastructure use and support sustainable urban growth this is the case with this proposed development.

The PSDF provides a spatial vision for the province, emphasizing sustainable and coordinated development. The proposed residential development, being within established urban boundaries, is consistent with the principles of concentrated and well-planned spatial growth outlined in the PSDF.

The PSDF often encourages minimizing the impact on viable agricultural land. In this case, since the property is described as not viable for agriculture and located within a built-up suburb, it suggests alignment with the PSDF's principles of avoiding unnecessary impact on agricultural areas.

4.2	The Integrated Development Plan of the local municipality.

The Overstrand Local Municipality's Integrated Development Plan (IDP) Review and Amendment (2025) suggests that residential development in urban areas should prioritize infill development, densification, and the creation of mixed-use nodes. This includes focusing on developing vacant or underutilized land within existing urban areas instead of

expanding outwards, thereby limiting urban sprawl. This also involves redeveloping brownfield sites or filling in gaps between existing buildings. It also promotes a more compact and efficient urban form, reducing sprawl and the need for new infrastructure.

The population of the Overstrand municipality was 132 495 as at the census in 2022. (Statistics South Africa Census 2022). It is projected to be in excess of 139 674 by 2025. This is almost 70% more than the population in 2011.

Densification:

1. Increasing the number of housing units per hectare through various strategies like building taller buildings or creating smaller lot sizes, or denser residential properties.

2. This can help to accommodate population growth without requiring significant land expansion.

3. Denser development can also create a more vibrant and walkable urban environment.

Mixed-Use Nodes:

Developing areas that combine residential, commercial, and other land uses within close proximity.

→ This promotes a more integrated and sustainable community by reducing reliance on cars and providing access to amenities within walking distance.

→ Mixed-use nodes can also create a more vibrant and diverse urban environment.

No new development areas or urban edge amendments are proposed for this area due to the number of densification proposals for the area. However, the Hermanus West 'vacant land study' identifies the possibility of extending the urban edge to establish an integrated development area.

The EMOZ (Environmental Management Overlay Zone) referred to in the OMSDF, is included in the IDP.

4.3.	The Spatial Development Framework of the local municipality.

The Overstrand Municipality Spatial Development Framework (OMSDF) for 2023 -2024 highlights the challenges in determining housing demand in the region, citing factors such as fluctuating demand, inclusion of households in backyard dwellings, and overcrowded conditions. Limited suitable land and rising infrastructure costs exacerbate these challenges.

The proposed residential development is aligned with the OMSDF, addressing the pressing need to provide housing options for the growing population, including the Vermont area. Vermont is identified as part of the Greater Hermanus area within the OMSDF, categorized under Hermanus West (Vermont, Onrus, and Sandbaai). The framework does not propose new development areas or urban edge amendments for Hermanus West, emphasizing the importance of development within existing urban areas. This is mainly due to the extensive amount of vacant land within the settlement as well as densification proposals for the area. The site for this proposed development is also included in this proposal.

To accommodate the increasing demand for housing, the development adheres to densification measures, aligning with the OMSDF's objective of providing additional dwelling units within the subject property's designated boundaries, which are within the urban edge. The decision to initiate this development now is essential to prevent

future overwhelming pressures, as delaying it could pose challenges and lead to missed external investment opportunities accompanying population growth.

While the proposed 18 dwelling units may represent a fraction of the overall housing demand for Hermanus, it is a crucial step to proactively address future challenges. Timely action is necessary for sustainable and prosperous growth, ensuring the region's resilience and avoiding the loss of valuable investment opportunities associated with population growth.

The increase in residential opportunities aligns with the vision for sustainable urban development. This approach allows more residents to enjoy the area's benefits while minimizing the need for further urban sprawl, contributing to the overall well-being of the Overstrand region. Development should be confined within the urban edge and growth managed based on sustainable densification. Promoting infill development within the built-up urban environment will help to maximises land use efficiency, fosters compact, denser communities and reduces urban sprawl. This not only increases the municipal rates base but also reduces the infrastructure required to service the residential area.

Key policies directing development include the provision of housing for different income groups, lifestyles and household sizes. This should include affordable housing options and opportunities for the aged.

The OMSDF 2020 includes the development site within the Hermanus West urban edge. The adjacent R43 National Road is a route of scenic significance. The R43 is included in the Mountain Management zone EMOZ which includes a small portion of the property adjacent to the R43.

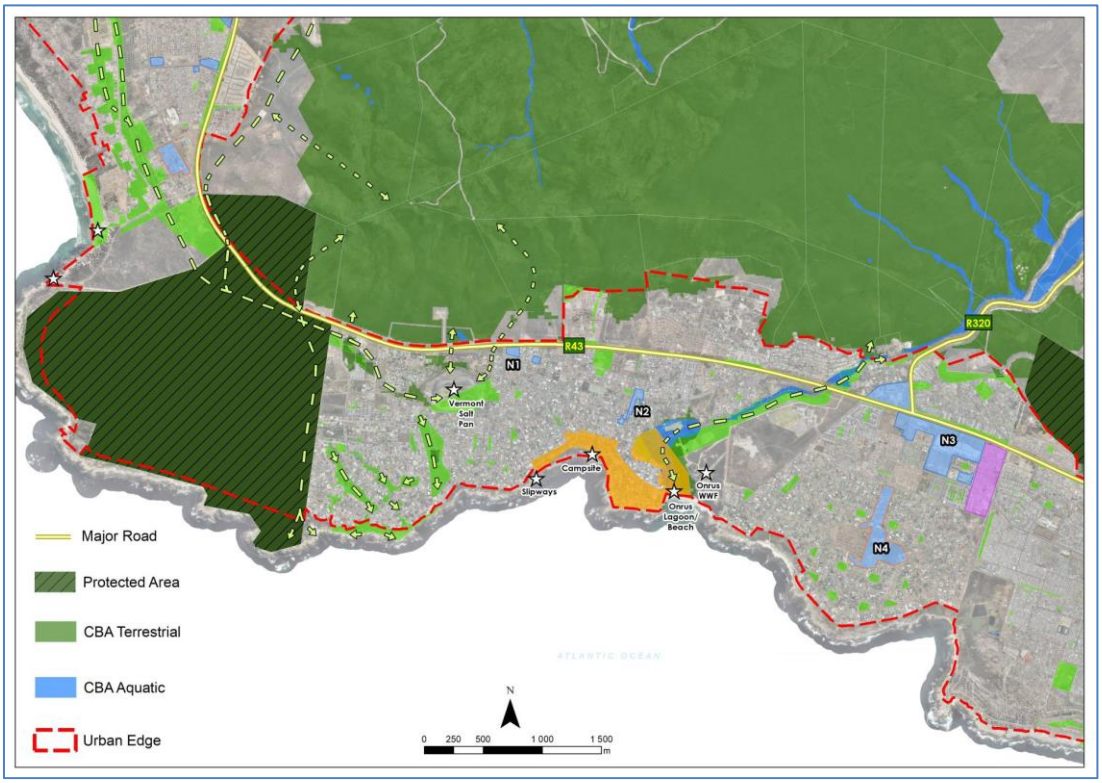

Figure 7. Spatial Proposal Hermanus West 2050**.**

4.4.	The Environmental Management Framework applicable to the area.

The property is included in the Urban Conservation EMOZ as Category D. This is defined as Private Property with priority conservation-worthy ecological corridors from mountain to coast and/or across priority conservation-worthy

area. The ecological corridor indicated over the property imply good connectivity. This is unlikely due to the extent of the development and fencing on adjacent properties.

Properties within the wetland, Erven 1940 and 2351 are Conservation Worthy Public Open Space. Erf 1492 is a Category A Urban Conservation area. There is very good connectivity between these properties and the Ecological corridor is much more likely to occur in this UVB wetland area than within RE/1489 Vermont.

The proposed development aligns with the Overstrand vision for sustainable urban development promoting infill and densification within the built environment which will foster a denser compact community using land and infrastructure efficiently and minimising urban sprawl. This will contribute to the overall well-being and resilience of the Overstrand.

The proposed development does fall within the Sensitive Development Area (Composite HPOZ's and EMOZ's) which includes adjacent properties, including Paradise Park Resort. These properties have been developed and utilized as part of the residential and tourism landscape for many years.

This application for Environmental Authorisation recognises the possibility that there may be environmental issues and endeavours to ensure that any issues are identified and addressed.

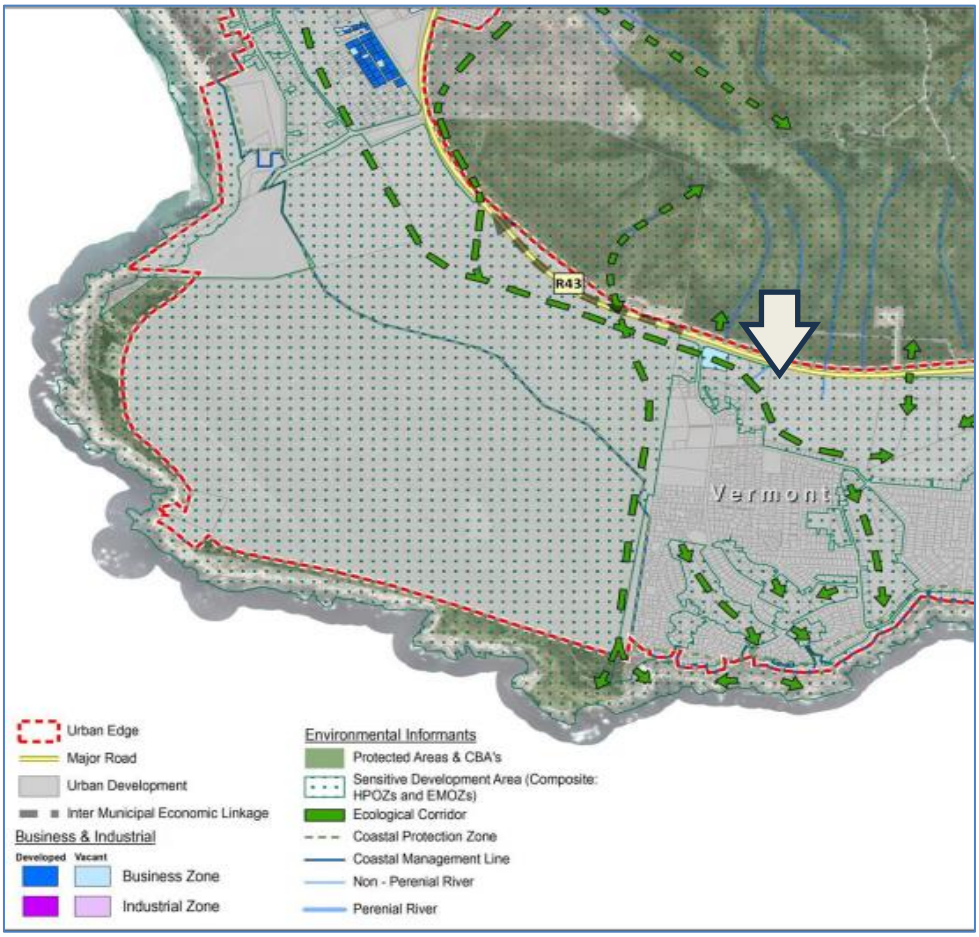

Figure 8. Spatial proposal plan for Hermanus West (Overstrand Municipality IDP 2023/24). The white arrow indicates the approximate position of the proposed development. This plan is included in the 2025 IDP.

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

Public Participation Process 1

BOCMA

During the Public Participation Process (PPP 1), comments were received from the Breede-Olifants Catchment Management Agency (BOCMA). The authority noted that the Aquatic Biodiversity Impact Assessment undertaken for the proposed development indicated that the property is located within the regulated area in terms of Section 21(c) and (i) of the National Water Act. BOCMA advised that any activities occurring within this regulated area may trigger water use activities, which would require authorisation from the relevant authority.

Section 21(c) refers to activities that may impede or divert the flow of water in a watercourse, while Section 21(i) refers to activities that may alter the bed, banks, course, or characteristics of a watercourse. In response to these comments, the development proposal and associated infrastructure were reviewed to determine which components of the project may fall within the regulated area and potentially trigger these water use activities.

The review confirmed that the proposed upgrade of the existing access road (Kolgans Close Road) and the replacement and installation of sewer and water supply pipelines are the only listed activities likely to trigger water use in terms of Section 21(c) and 21(i). These infrastructure components are located within or in close proximity to the regulated area associated with the delineated UVB wetland, and their construction or upgrade could potentially impede flow or alter the physical characteristics of the watercourse.

This finding is consistent with the impact identification undertaken in the Aquatic Biodiversity Impact Assessment, which identified three primary aquatic impacts associated with the development: wetland habitat disturbance, alteration of the flow regime, and water quality impairment — all of which are directly relevant to the Section 21(c) and 21(i) concerns raised by BOCMA.

In direct response to BOCMA's comments, and to ensure full compliance with applicable water resource management legislation, an application for a General Authorisation (GA) was submitted to the Breede-Olifants Catchment Management Agency. This is consistent with the recommendation of the Aquatic Biodiversity Impact Assessment, which concluded that the Risk Assessment Matrix (RAM) prescribed by GN4167 of 2023 produced an overall "Low Risk" rating for the proposed development.

CAPE NATURE

Comments were also received from Cape Nature during the public participation process. Cape Nature indicated that, based on the review of historical Google Earth imagery dating back to 2002, the site does not appear to have been fully transformed or formally landscaped as a garden. As a result, the authority raised concerns that remnants of natural vegetation may still be present on the property and that potential biodiversity sensitivities should be verified prior to development proceeding.

Cape Nature's comments directly resulted in the commissioning of an additional specialist assessment that had not originally formed part of the scope of work for the environmental process. A Plant Species and Terrestrial Biodiversity Compliance Statement was undertaken in response to Cape Nature's recommendation, in line with applicable assessment requirements. The findings of the Plant Species and Terrestrial Biodiversity Compliance Statement confirmed that the site is indeed in a degraded and transformed state, and that the vegetation present onsite is of low ecological value, since no plant species of conservation concern were identified within the development

footprint. The Site Ecological Importance (SEI) is very low, reflecting the extent of transformation and disturbance that has already occurred on the property.

Another comment from Cape Nature highlighted concern regarding the presence of aquatic features on and around the site. The comment noted that a wetland delineation had initially been undertaken to inform the Aquatic Biodiversity Screening Study. The delineation identified an unchanneled valley bottom wetland adjacent to Erf 1489; however, **the wetland does not extend onto the property** itself. The comment further noted that, apart from this wetland, there was no clear evidence on site of the non-perennial river mapped for the property. As a result, clarification was requested regarding whether there is evidence of the non-perennial river upstream of the R43 and whether the road may act as a termination point for the watercourse.

In response, it was confirmed that there is evidence of the non-perennial river upstream of the R43. However, the watercourse does not affect the proposed development area. The construction of the R43 has altered the natural drainage pattern, and the flow of water has effectively been diverted. At present, runoff and drainage are channelled into the stormwater infrastructure running alongside the R43, rather than continuing through the development property.

Cape Nature made further comment indicating that impacts associated with the proposed infrastructure had not been adequately assessed in the Aquatic Biodiversity Impact Assessment. It was noted that the resurfacing of the access road presents an opportunity to incorporate a design that could potentially improve the hydrology of the adjacent wetland system. Furthermore, concern was raised regarding the alignment of the proposed water and sewer pipelines, as these could influence both surface and subsurface hydrological processes. It was recommended that a hydropedology specialist study be undertaken to better understand the hydrological functioning of the system and to inform appropriate design measures for the access road, as well as potential rehabilitation interventions for the wetland located on Erf 1490. The study was also advised to consider the functioning of the broader wetland system between the Whale Coast Nature Reserve and Vermont Pan.

In response, the potential impacts associated with the proposed infrastructure have been assessed by a freshwater specialist as part of the aquatic biodiversity investigations. The findings indicate that the proposed development footprint, including the upgrade of the access road and the installation of water and sewer pipelines will largely occur within the existing disturbed road reserve. As indicated in the report the impact on Erf 1490 is low, provided that all the mitigation measures recommended by the freshwater specialist are fully implemented onsite. The proposed road upgrades are also expected to improve the current hydrological functioning of the area, as additional culverts will be installed to facilitate the natural flow of water across the road alignment. Given these findings and the limited extent of the works within already transformed areas, a Hydropedological specialist study will not be undertaken for this development.

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

In the Western Cape Province, about 80% of land that has important biodiversity on it, does not fall within formally protected areas, but is privately or communally owned land. The Biodiversity Stewardship Programme offers conservation options to set up partnerships for managing and protecting natural assets (Western Cape Biodiversity Spatial Plan Handbook, 2017).

→ Critical Biodiversity Areas (CBAs) are unique and valuable places on Earth that are home to a wide variety of terrestrial and aquatic plant and animal species, including many rare and endangered species. These areas must be kept in a natural or near-natural state to ensure the long-term survival of the biodiversity that they support.

→ ESAs are areas that support the functioning of Protected Areas or CBAs and are often vital for delivering ecosystem services. They need to be maintained in at least a functional state, but some limited habitat loss may be acceptable. The Ecological Support Areas (ESAs) included in the WCBSP 2017 for this property are no longer indicated on this site.

The Western Cape Spatial Biodiversity Plan (WCBSP, 2023) was used in the determination of the conservation areas and sensitivities of the site. The WCBSP Map provides a biodiversity-sensitive perspective for assessing the potential impacts of proposed developments.

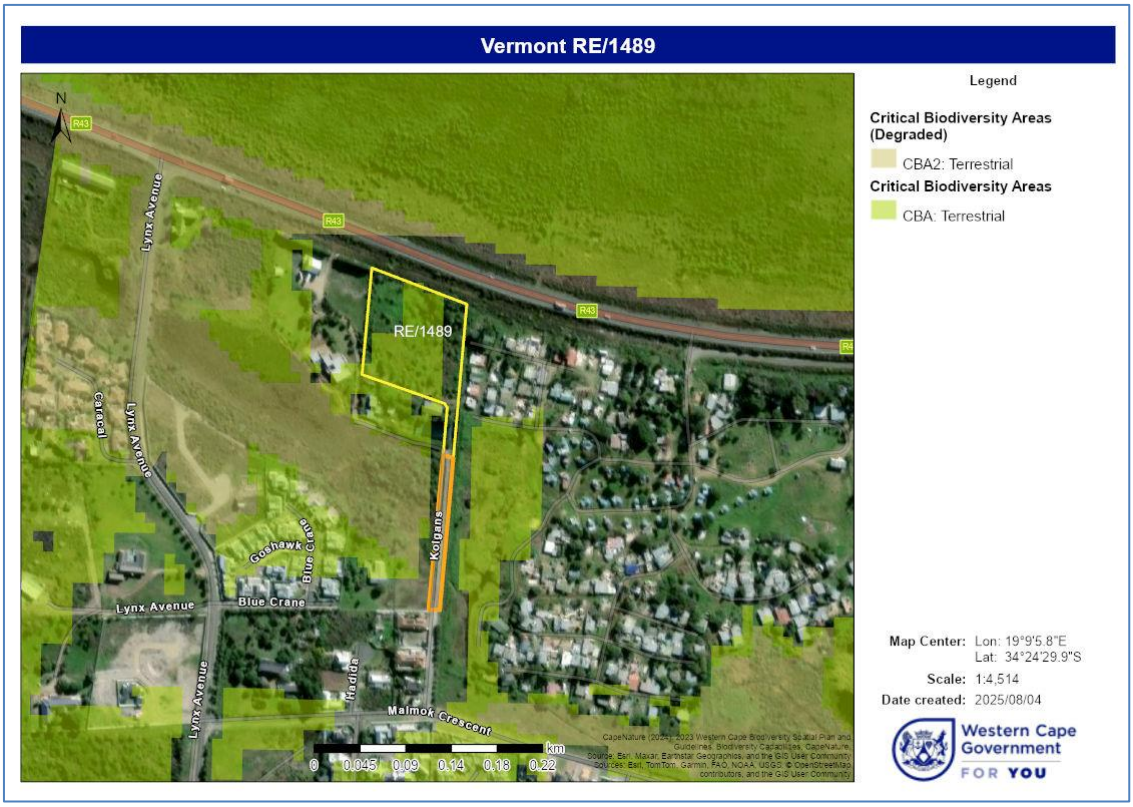

Figure 9. Terrestrial Critical and Degraded Critical Biodiversity Areas (WCBSP, 2023). (The area outlined in orange is the proposed subdivision of Erf 1490, existing access road extension of Kolgans Close. This area falls outside the CBA).

The WCBSP handbook presents five steps to undertake when making use of the WCSBP Map to determine the biodiversity context of a site to inform the initial project plans.

i) Preliminary Desktop investigation

The above map was downloaded indicating the Critical Biodiversity Area on the RE/1489, the area proposed for residential development. The Kolgans Close and extension access road is not included in the above CBA.

ii) Site Visit

The site was visited on 31 March 2025 and the wetland scientist in December 2024. The site has been included in a residential garden for many years. There are large numbers of alien invasive species, including *Cenchrus clandestinus* (kikuyu lawn grass), *Acacia saligna* (Port Jackson) and other woody invasive plants. A vegetable garden has been established. There are remnants of terrestrial fynbos species, but in the absence of fire it is unlikely that these plants will set seed.

The Ecological Support Areas (ESA) indicated in the Aquatic Biodiversity Screening Assessment showed a presumed link between the mountainous area outside the urban footprint as an ESA. The R43 National Road completely isolates the property from the undeveloped area north of the site, outside the urban area. Not only is the road a barrier with high-speed traffic but the road is constructed on top of more than 2m high fill which is an insurmountable physical barrier to most wildlife. The Aquatic Biodiversity Impact Assessment has been updated to reference the WCBSP 2023.

The Paradise Park Resort has very dense residential development immediately adjacent to the eastern boundary. Some of these buildings are being demolished but the area has not been rehabilitated or redeveloped.

(South and East of the proposed residential area there are established homes with large gardens that have been cleared of natural vegetation and have mowed lawn around the houses (Erven 2570 and 1488)).

iii) Assess impact on Biodiversity

It appears as though the inclusion of this site as a Critical Biodiversity Area, whether degraded or not, may have not been supported by ground truthing at the time of mapping. The residential area, resort, and commercial, developments have been in existence for many years. Fire has been excluded from the site; this is essential for healthy Fynbos terrestrial systems. As this is an urban area it will not be possible to use burning to restore the biodiversity. A properly managed residential development will ensure that all alien invasive species are removed. The biodiversity of both RE/1489 and the access road over Erf 1490, which will be subdivided, retained and upgraded have been substantially compromised over many years.

The Aquatic Biodiversity Screening and Impact Assessment confirm that the Non Perennial River and associated CBA (See Fig 4-4 and Fig 4-5 of attached Aquatic Screening Report) indicated on the map **do not** exist.

iv) Identify opportunities to conserve biodiversity

Densification of the built environment, within the urban edge, on land currently zoned for residential development, will go some way to reducing urban sprawl and therefore conserve biodiversity.

v) Include biodiversity considerations within the EIA report

The Aquatic Biodiversity Impact Assessment as required due to the proximity to a wetland, is attached. The need for further investigation was established during the Aquatic Biodiversity Screening process. The development will require General Authorisation due to the proximity to the wetland.

The Aquatic Impact Assessment process established that the biodiversity along the access road and of the area proposed for the residential development has been substantially impacted by the inclusion within the urban area over many years. This issue will be addressed in the EMPr, especially with respect to the construction phase.

Search and rescue will be required to ensure that plants and animals, especially chameleons and amphibians are relocated.

The Western Cape Biodiversity Spatial Plan Handbook (2023) provides guidelines for land-use within mapped ESA, highlighting that these areas may already have some form of development, but should still provide ecosystem services. Notwithstanding the fact that R

RE/1489 no longer falls within an ESA, and that the owners of the residential units will have no control over the design and use of the road over Erf 1490, which will become part of the municipal infrastructure; the management of

stormwater from this very small section of the delineated wetland will assist in maintaining functionality and connectivity of this urban wetland.

Ground truthing has established that the Critical Biodiversity Area (CBA: Terrestrial) has not been maintained in a natural or near natural state for many years. The location near to the R43 main road, and houses and holiday resort preclude the use of fire required to allow Fynbos to regenerate. Domestic gardens and lawns have introduced species not found in natural Fynbos area and infestation with alien invasive trees (*Acacia sp*) has further transformed the portion of the property shown as being a CBA. It is not possible to determine this area from the surrounding disturbed area on the ground.

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

N/A

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.

N/A

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

The primary focus of the development is to create 18 single residential erven, formalise the access road, open space and associated internal roads. This means that the available vacant land will be utilized to accommodate individual households, contributing to the optimization of space within the urban area and in line with surrounding existing land use. The Town Planners involved with this development have considerable experience working with the Overstrand Municipality and have ensured that the proposal complies with all Town Planning regulations regarding densification.

The parent property, Erf 1489 Vermont, was originally developed with a single house as it is zoned SR1. This property was subdivided and the portion with the original buildings is now Erf 2570. An undeveloped portion of this property (RE/1489 Vermont) is proposed for the construction of the 18 residential erven.

The type of housing envisaged should go some way towards fulfilling the very high demand for more affordable homes in the Overstrand and is in line with surrounding development on the property.

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

The proposed development is located within the built-up urban area and suburb of Vermont and is accessed by the existing road networks (Kolgans Close) and connected to existing municipal services infrastructure, including water and sewer systems and electricity. The subdivision of Erf 1490 is to formalise an existing access road, which currently has a right of way agreement with the owners of this property, and provides the only route to access to RE/1489, Erf 1488 and Erf 2570. This will become a Public Road and form part of the municipal road system.

This proposal will ensure that the access to the development is formalised at the same time it reduces the demand on the Overstrand Municipality to construct a new public access road, as it is already providing access to these properties. However, it will need to be upgraded to municipal specifications. This approach minimizes the need for greenfield infrastructure development.

The property is adjacent to the R43 however it cannot be accessed from this road.

The property can be serviced by already existing service infrastructure with only minor upgrades required to accommodate the proposed development.

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

See attached correspondence and Service Reports from GLS Consulting (Pty) Ltd regarding the existing services and requirements for minor upgrades.

The developer of RE/1489 in Vermont may be liable for the payment of a Development Contribution (as calculated by the Overstrand Municipality) for bulk water and sewer infrastructure as per Council Policy. There is sufficient capacity in the existing water reticulation system to accommodate the proposed development. Link services items 1 & 2 will however be required to connect the internal reticulation network of the proposed development to the existing water network. There is sufficient capacity in the existing sewer reticulation system downstream of the 200 mm diameter outfall sewer in Malmok Street to accommodate the proposed development. Upgrading of the existing small-bore system from the development to the 200 mm diameter outfall sewer in Malmok Street is however proposed in order to accommodate the proposed development in the existing sewer system.

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.

Integrated Environmental Guideline on Need and Desirability in terms of the EIA Regulations, 2010 are "Consistent with the aim and purpose of EIA, the concept of "need and desirability" relates to, amongst others, the nature, scale, and location of development being proposed, as well as the wise use of land. While essentially, the concept of "need and desirability" can be explained in terms of the general meaning of its two components in which need primarily refers to time and desirability to place (i.e. is this the right time and is it the right place for locating the type of land-use/activity being proposed?), "need and desirability" are interrelated and the two components collectively can be considered in an integrated and holistic manner". The proposed development is also aligned with the Department of Environmental Affairs' Integrated Environmental Management Guideline on Need and Desirability. The guideline states that developments should be considered desirable if they:

→ Promote sustainable development.
→ Contribute to the quality of life of the community.
→ Are consistent with the principles of equity and social justice.
→ Are consistent with the principles of environmental protection.

In assessing the need and desirability of the proposed development this proposal refers to the Department's Guideline on Need and Desirability (March 2013).

Need

→ The proposed development is driven by the ongoing and increasing demand for housing in the Hermanus area. The creation of 18 residential erven directly addresses the need for additional housing units, contributing to alleviating the housing shortage.
→ With a growing population in the urban area of Vermont, there is an inherent need for expansion and the provision of housing options to accommodate the increasing number of residents.

- → The development is specifically designed to cater to the needs of single families. Recognizing the diversity in household structures, the creation of single units meets the demand for family-oriented housing in the community.
- → The construction and subsequent habitation of the residential erven contribute to economic stimulus. Job creation during the construction phase and potential growth in local businesses due to increased population density contribute to the economic well-being of the community.
- → In addition to housing and employment, the development will work towards revitalizing the urban area, making it more attractive to both current residents, new permanent residents and visitors, including holiday makers. This enhancement of the living environment aligns with the need to improve the quality of life in urban areas, contributing to the overall welfare of the community.

Desirability

- → The proposal contributes towards infill development as opposed to urban sprawl.
- → The proposed development enhances the desirability of the community by providing much-needed housing options.
- → The development's location in an existing urban area promotes the principle of urban infill, optimizing the utilization of available land within established communities. This approach aligns with sustainable urban planning principles.
- → Placing residential units within the existing urban fabric improves accessibility to amenities, public services, and transportation, enhancing the overall desirability of the location.
- → There are existing shops and services in Vermont, Onrus and Hermanus. Hermanus has appropriate health facilities and schools and other municipal infrastructure.
- → Creating single-family units fosters social connectivity, contributing to the formation of a cohesive and vibrant community. Residents are likely to benefit from shared spaces and community interactions.
- → The development considers creation of the open spaces which reduces the area of hardened surface and allows for a more sustainable land use.
- → An increase in the number of residents will increase the rates and tax base of Overstrand municipality.
- → The formalisation of the right of way access road over Erf 1490 to RE/1489, and the upgrade of the existing road to municipal specifications and inclusion of the road together with the services located in the road reserve with the municipal infrastructure for their ongoing management and maintenance promotes sustainable landuse.

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.

N/A

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

Public Participation is undertaken in line with NEMA EIA Regulations as outlined in the NOI and application form.

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

The following Organs of State have been consulted:

Overstrand Municipality
Overberg District Municipality
Cape Nature
DEA&DP Landuse
Breede-Olifants Catchment Management Agency (BOCMA)

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

N/A

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

N/A

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.

Authority/ Name	Comment	Response
	PUBLIC PARTICIPATION 1	
Overberg District Municipality	No objection to the proposed development.	Noted.
DEADP	Since Activity 19 of Listing Notice 1 is triggered by the proposed development, it is recommended that a Maintenance Management Plan ("MMP") forms a component of the Environmental Management Programme. Should the Department agree to the proposed MMP, future maintenance work specified within the MMP would not	A Maintenance Management Plan is compiled and attached.

	require and Environmental Authorisation prior to the undertaking thereof.	
	Written confirmation from the municipality and relevant service providers of sufficient capacity to provide the necessary engineering services to the proposed development must be obtained.	Written service confirmation is attached as attached.
	Proof of submission of the application to the BOCMA and a copy of the WULA Information must be included in the BAR.	A GA has been submitted to BOCMA, refer to **Appendix J.**
	Comment from, but not limited to the following Organs of State must be obtained → CapeNature. → Heritage Western Cape. → BOCMA. → Overstrand Municipality → The relevant road authority/ies.	Comment from Cape Nature attached Comment from BOCMA attached. Comment from Overstrand Municipality attached.
BOCMA	Based on the Aquatic Biodiversity Screening Report by Delta Ecology, the properties are located in the Regulated Area in terms of Section 21 (c and i) of the National Water Act, 1998. Regulated area of a watercourse for section 21(c) or (i) of the Act water uses means: (a) The outer edge of the 1 in 100 year flood line and /or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; b) In the absence of a determined 1 in 100 year flood line or riparian area the area within 100m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench (subject to compliance to section 144 of the Act); or c) A 500 m radius from the delineated boundary (extent) of any wetland or pan. 3. Please note that any activity within the regulated area triggers a water use activity in terms of Section 21 (c) & (i) of the National Water Act, 1998 (Act 36 of 1998) and requires authorization from this office before the activity (development commences).	Noted. A General Authorisation was submitted, proof of submission is attached.
	Cape Nature indicated that, based on the review of historical Google Earth imagery dating back to 2002, the site does not appear to have been fully transformed or formally landscaped as a garden. As a result, the authority raised concerns that remnants of natural vegetation may still be present on the property and that potential biodiversity sensitivities should be verified prior to development proceeding. In light of this observation, Cape Nature recommended that a minimum Botanical Compliance Statement be undertaken for the site. The purpose of this assessment is to confirm the current ecological condition of the property and to determine whether any plant species or vegetation types of conservation concern occur within the development footprint.	A plant species and terrestrial biodiversity compliance statement was undertaken, which confirmed that the site vegetation is in degraded and transformed state.
	Cape Nature is willing to accept the findings from the faunal study for Erf 1486 in place of a new study for Erf 1489, however all of the mitigation measures which were recommended for Erf 1486 must be applicable for Erf 1489. We further wish to note however that there may also be additional mitigation measures specific to the access road.	Noted. Mitigation measures are included.
Cape Nature	A wetland delineation was initially undertaken which was used to inform the aquatic biodiversity screening study. An unchannelled valley bottom wetland was identified adjacent to Erf 1489, however it does not extend on to the	The proposed development area does not affect the mapped drainage line. The construction of the R43 has altered the natural drainage pattern, and the

	property. Apart from the wetland, there was no evidence of the non-perennial river mapped for the property. Cape Nature Query if there is evidence of the non-perennial river upstream of the R43 and whether the road may be a termination point for the watercourse.	flow of water has effectively been diverted. At present, runoff and drainage are channelled into the stormwater infrastructure running alongside the R43, rather than continuing through the development property.
	The impact associated with the associated infrastructure has not been adequately assessed in the aquatic biodiversity impact assessment. The resurfacing of the access road provides the opportunity to incorporate a design which will improve the hydrology of the wetland. The alignment of the water and sewer pipelines will also need to be assessed. As the hydrology of the wetland is influenced by both surface and subsurface flow, we recommend that a hydropedology specialist study must be undertaken to better understand the hydrology of the system and to make recommendations regarding the design of the access road and rehabilitation interventions for the wetland on Erf 1490. The hydropedology specialist study must take into consideration the functioning of the broader wetland system between Whale Coast Nature Reserve and Vermont Pan.	The potential impacts associated with the proposed infrastructure have been assessed by a freshwater specialist as part of the aquatic biodiversity investigations. The findings indicate that the proposed development footprint, including the upgrade of the access road and the installation of water and sewer pipelines will largely occur within the existing disturbed road reserve. The proposed road upgrade will largely occur within the existing disturbed road reserve. As indicated in the report the impact on Erf 1490 is low, provided that all the mitigation measures recommended by the freshwater specialist are fully implemented onsite. Given these findings and the limited extent of the works within already transformed areas, a Hydropedological specialist study will not be undertaken for this development.
	With regards to alternatives, two alternative layouts for the residential development were evaluated with the preferred alternative consisting of 18 erven and a larger open space erf and the other alternative, 22 erven and a smaller open space. The selection is supported; however, we recommend that the outcome of the botanical study will also need to be taken into account	A plant species and terrestrial biodiversity compliance statement has been undertaken and is attached under **Appendix G6**.
	Alternatives will also need to be investigated for the linear infrastructure. In this regard, we note from historical Google Earth imagery that the access to the property was obtained from the north up until at least 2006 along a road extending past the access to Paradise Park. We therefore recommend that reinstatement of the access road from the north must also be investigated as an alternative to the existing access road which traverses the wetland, in addition to any other feasible alternatives.	This system is already actually quite disturbed, most of the water from the wetland seems to go through one culvert at the moment (under the current existing road). One would need to add in more culverts, remove the drains/channels, remove those houses that are currently in the wetland etc. but that is a separate issue. Based on the freshwater specialist report, the recommendation is to upgrade the road, "Given that the wetland's hydrological status quo is seriously modified, should multiple culverts, etc. be constructed during the road upgrade, there will more likely be positive impacts associated with the road upgrade in this respect (increased hydrological connectivity)." All individual existing access points from the R43 were closed by the Western Cape Department of Transport a few years ago and no new access points will be allowed onto the R43. In

		our recent interactions with the Department regarding the access to the proposed Featherlands (Paradise Park) development, the Department insisted that the current access onto the R43 be permanently closed and that access to the proposed development is taken from Malmok Street.

Note:

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

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

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

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

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

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

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

SECTION G
DESCRIPTION OF THE RECEIVING ENVIRONMENT

All specialist studies must be attached as Appendix G.

1. Groundwater

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

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.		
Kimberley van Zyl and Robyn Morton, Delta Ecology			
2.3.	Explain how the presence of watercourse(s) and/or wetlands on the property(ies) has influenced your proposed development.		

Aquatic Biodiversity Screening Assessment

Initially, an aquatic biodiversity screening process was undertaken for the site, which identified and delineated an Unchanneled Valley Bottom wetland (UVBW) directly adjacent to the site, which is considered to be relic or historical (see **Figure 10** below). Sparse wetland vegetation, including *Cyperus textiles,* was identified by the freshwater specialist, however, it is also of the specialist opinion that the area has lost all wetland functionality and there is no rehabilitation potential due to the level of disturbance (**Figure 11**) by existing development.

The area situated southwards, outside RE/1489, is within the functional UVBW downslope adjacent to the access road, consists of wetland obligate species *Juncus krausii, Cyperus textilis*, with wetland facultative *Senecio halimifolius* and *Zantedeschia aethiopica* along the outer boundary. Based on the screening tool report, this functional wetland area was determined to be of Very High Sensitivity and therefore may be impacted by the proposed development. This level of Aquatic biodiversity sensitivity rating of therefore required a Full Aquatic Biodiversity Impact Assessment to be initiated onsite.

The NFEPA wetland layer and the 500m DWS regulated were overlayed across the whole site, and it was indicated that the site falls within the 500m regulated area and that there is a presence of large unnatural Channelled Valley Bottom wetland system which is links to the Vermont Salt Pan. However, the specialist disputes the desktop findings and asserts

that the wetland is natural Unchanneled Valley Bottom wetland. After site inspection by the freshwater specialist, the wetland area along the southern boundary of the site was delineated, with the majority of the site exhibiting terrestrial conditions (van Zyl & Morton, 2025).

NGI topo-cadastral map was consulted which it indicated the presence of a non-perennial drainage line flowing from the mountain over the R43 and on to the site (**Figure 12**), after site verification it was determined to be absent.

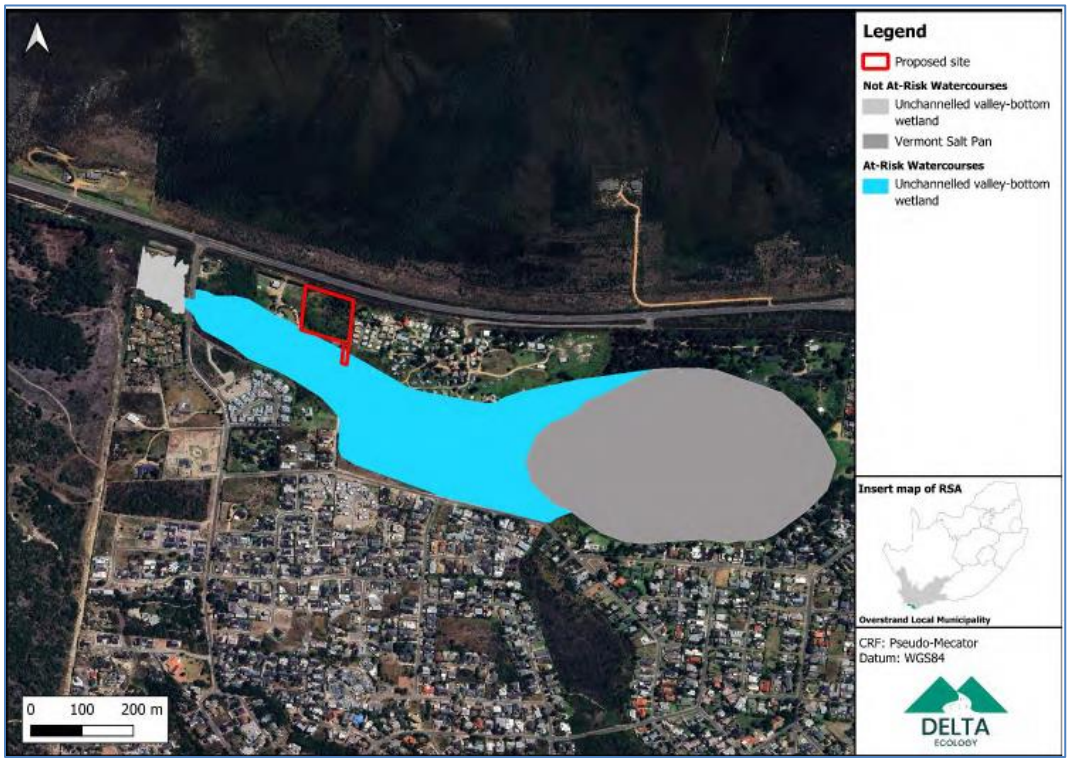

Figure 10: "At Risk" UVBW associated with RE of Erf 1489, Vermont. *Source:* (van Zyl, 2025)

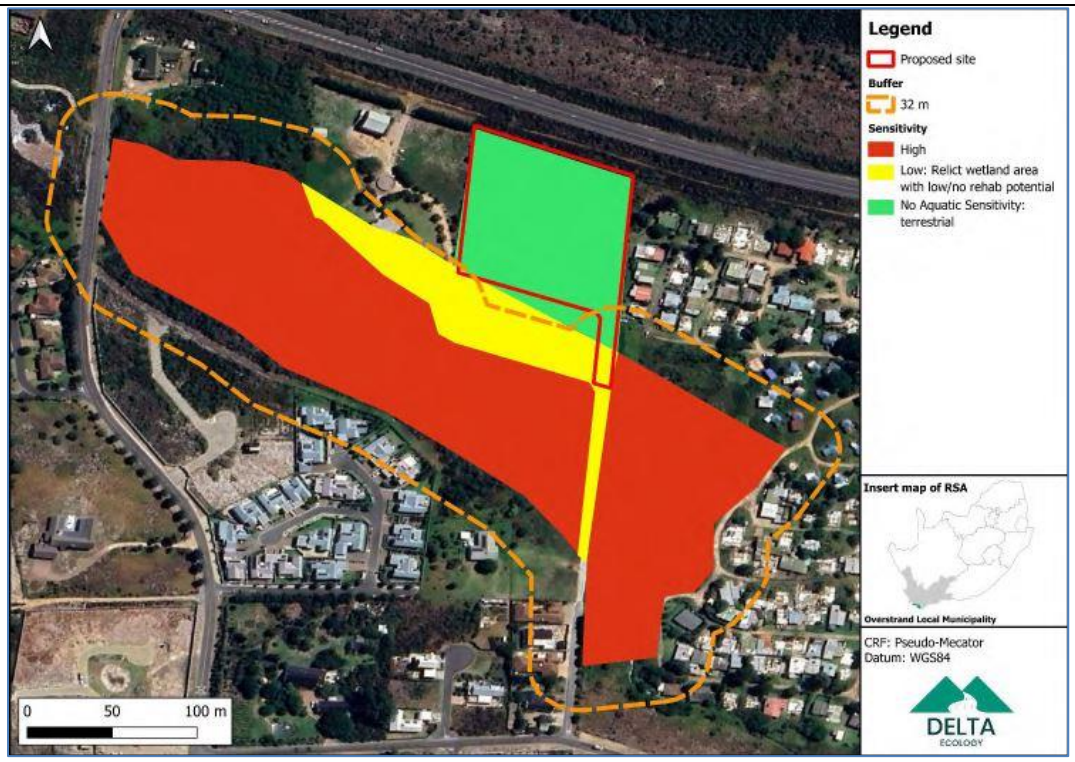

Figure 11: Aquatic Sensitivity Map.

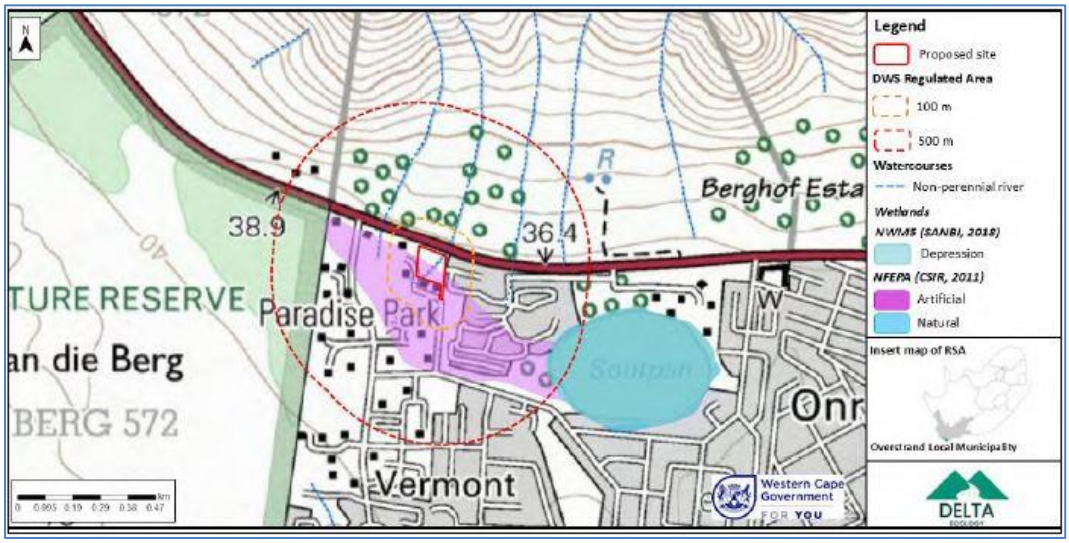

Figure 12: Regional Drainage Map (NGI Rivers, NWM5 Wetlands and NFEPA Wetlands).

Aquatic Biodiversity Assessment

The main intent of this Aquatic Biodiversity Assessment is to identify and assess the impact of the proposed subdivision of RE/1489 to create several erven for the single residential development, as well as the subdivision of the access road (Kolgans Close) portion of Erf 1490 and consolidate it with RE/1489 (refer to **Figure 13**). The section of the road will be a public road built to municipal standards and transferred to the municipality. Additionally, it is proposed that the existing 110 mm diameter small bore sewer system from the proposed development to the existing 200 mm diameter outfall sewer in Malmok Street is upgraded to 160 mm diameter and 200 mm diameter outfall sewers, in order to accommodate the proposed development in the existing sewer system (van Zyl & Morton, 2025). In terms of water

supply, it is proposed that the development area is accommodated within the existing Vermont reservoir zone. The connection to the existing system should be done via a 170 m x 110 mm Ø supply pipe from the south of Erf 1489, running along the access road (Erf 1490), connecting via a 20 m x 110 mm Ø inter-connection pipe (van Zyl & Morton, 2025).

Western Biodiversity Spatial Plan (2023) was consulted by the freshwater specialist, (see **Figure 14**), a terrestrial Critical Biodiversity Area (CBA) was mapped within the subject property (RE/1489), whereas aquatic Critical Biodiversity (CBA) and Ecological Support Areas (ESA) are absent. Therefore, the absence of aquatic CBA and ESA onsite supports the freshwater specialist statement about the site vegetation that it is indicative of terrestrial vegetation, as shown in **Photo 4**. Soils that were sampled in the functional UVB wetland did not differ markedly from terrestrial soils, aside from appearing darker and with a higher organic content than the terrestrial baseline (van Zyl & Morton, 2025).

The Aquatic Biodiversity Assessment considers the entire wetland, as shown in the wetland delineation map in **Figure 10,** of which the existing access road (Portion A) is constructed over a very small portion, (refer to **Figure 13** below). The impact of this road is considered together with the surrounding landuse. The study area is within the Breede-Olifants Catchment Management Area (BOCMA).

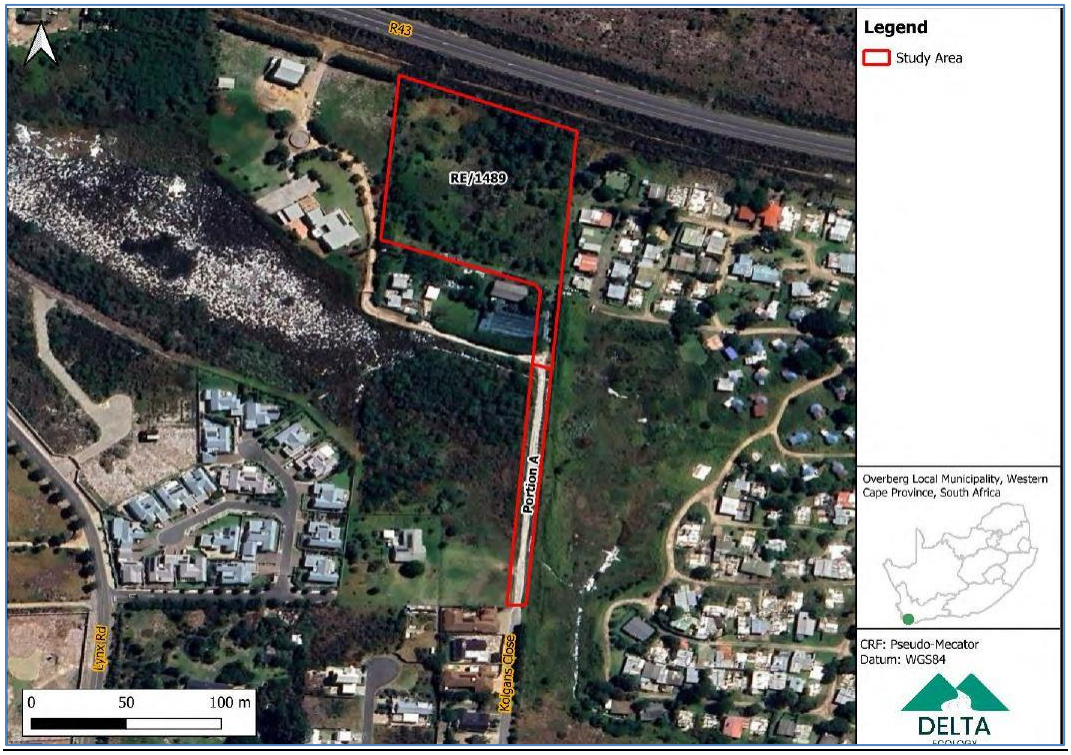

Figure 13: Study area, including Portion A and RE/1489 Vermont. Source; van Zyl & Morton, 2025).

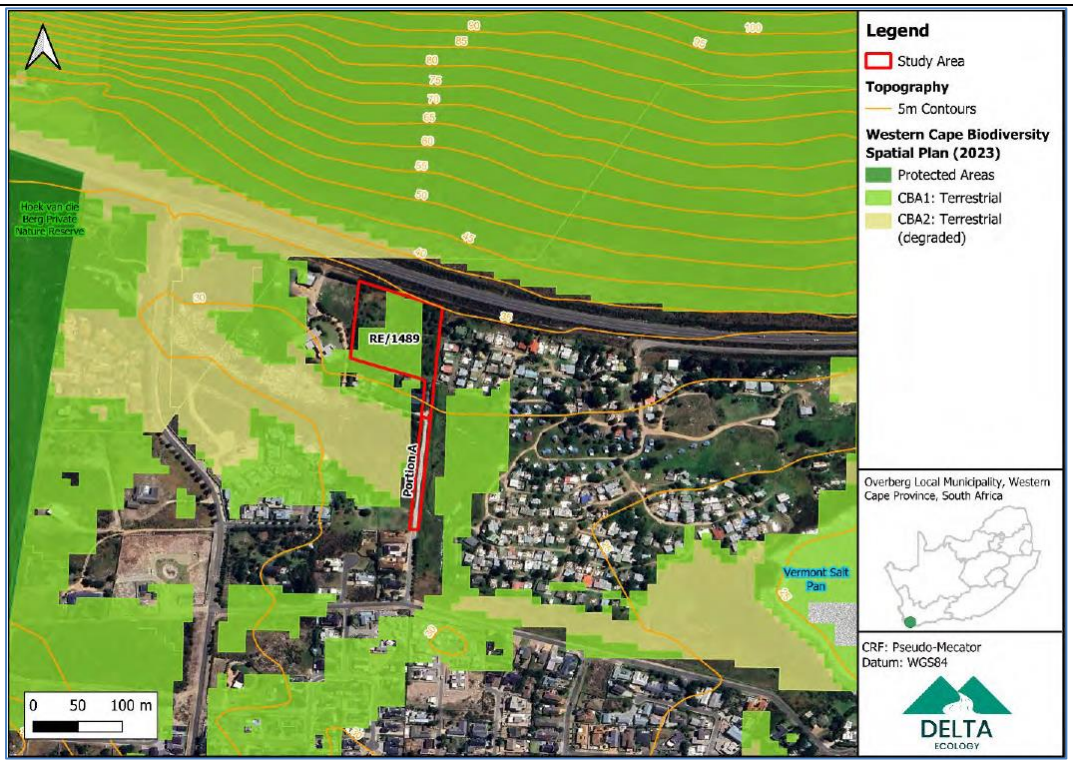

Figure 14: WCBSP (2023).

Photo 4: Overview of Erf RE/1489, facing east. *Source*: (van Zyl & Morton, 2025).

Photo 5: Numerous mole hills present within RE/1489, exposing the deep sandy soils. *Source*: (van Zyl & Morton, 2025).

Photo 6: Mixture of common indigenous terrestrial vegetation and alien invasive vegetation on RE/1489. *Source*: (van Zyl & Morton, 2025).

Photo 7: Alien invasives within RE/1489. *Source*: (van Zyl & Morton, 2025).

Photo 8. Channel within the UVB wetland, adjacent to the entrance / access road. *Source:* (van Zyl & Morton, 2025).

Photo 9. Stormwater channel along the access road which will be upgraded, within the UVB wetland. *Source:* (van Zyl & Morton, 2025).

Photo 10. *Zantedeschia aethiopica* in the UVB wetland along the access road to be upgraded. *Source:* (van Zyl & Morton, 2025).

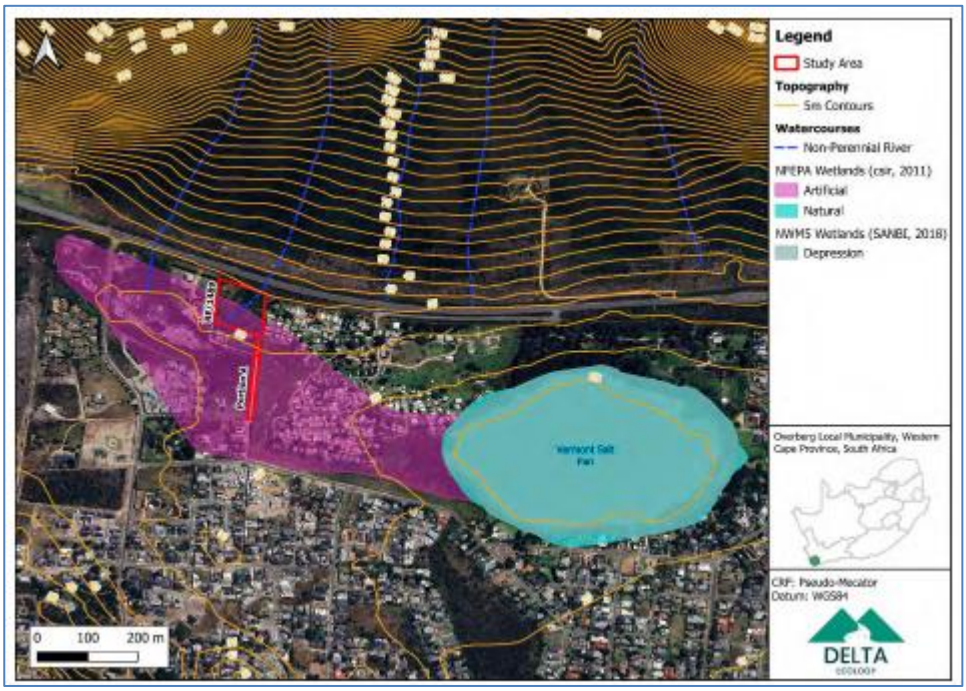

Figure 15. Watercourses within the study area (NGI, 2017 and NFEPA, 2011).

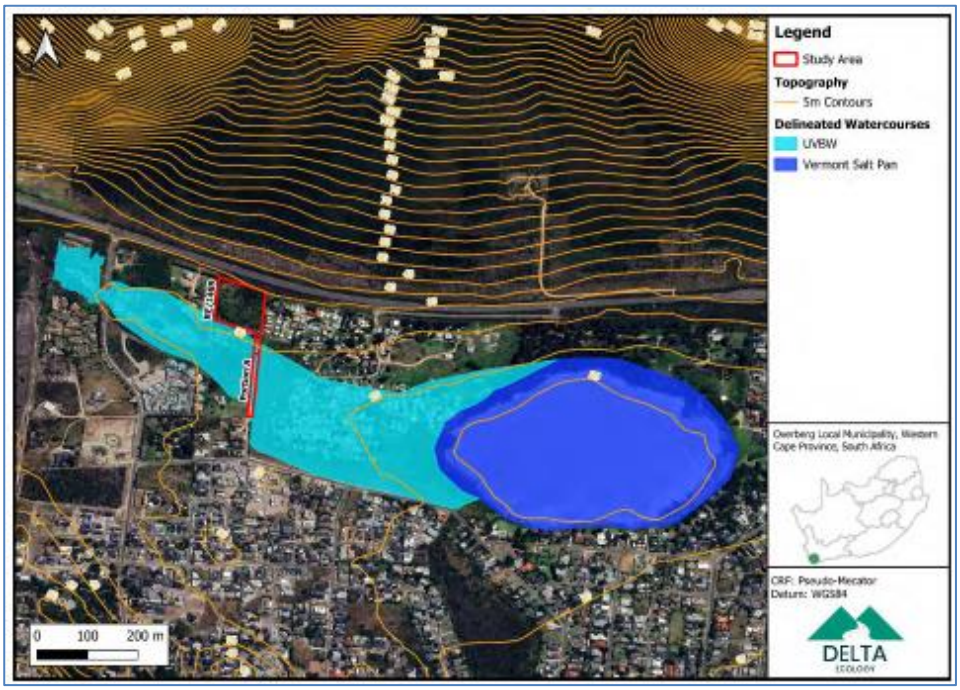

Figure 16. Wetland Delineation Map (Delta Ecology).

The wetland within the development area was assessed to determine the Present Ecological State (PES), Ecological Importance and Sensitivity (EIS) and Wetland Ecosystem Services (WES). The Present Ecological State of the delineated wetland onsite score falls within Category D, indicating highly modified state. This level of score for this wetland area was due to the following, as described by the freshwater specialist:

PES Assessment	Hydrology	Geomorphology	Water Quality	Vegetation
Impact Score	6.3	5.9	4.1	4.3
PES Score (%)	37%	41%	59%	57%
Ecological Category	E	D	D	D
Trajectory of change	↓	↓	↓	↓
Confidence (revised results)	Not rated	Not rated	Not rated	Not rated
Combined Impact Score	5.5			
Combined PES Score (%)	45%			
Combined Ecological Category	D			
Hectare Equivalents	4.7 Ha			

Table 2. Outcome of the WET-Health Assessment for the delineated UVBW

Hydrology

- Urban residential development within the catchment and wetland has resulted in flow diversion and increased hardened surfaces which increases volume and velocity of surface flow, especially of peak flows.
- Excavation, vegetation clearing, construction which required infilling for roads and development areas, has altered the natural flow regime.
- The wetland has been canalised in various locations, including parallel to the road, which concentrates the flow and contributes to drying out the wetland.
- The dominance of alien and invasive species (AIS) is associated with the nutrification of soils, that would be naturally nutrient poor, by enrichment with laterite soils associated with construction.

Vegetation

- No wetland specific species of conservation concern were noted by the specialist.
- A mixture of alien and indigenous species was noted within the wetland including *Cenchrus clandestinus* (Kikuyu grass), *Acacia mearnsii* (Black Wattle) and *Acacia saligna* (Port Jackson). This is due to wetland clearing, canalisation and dumping due to surrounding, long term residential development.

Water Quality

- The residential nature of the catchment area has probably impacted the water quality.
- Infilling and compaction have introduced cement, nitrates and other nutrients to the wetland.
- Stormwater runoff from stormwater outlets off roads will be contaminated with hydrocarbons and other pollutants.

Ecosystem services provided by UVB wetlands include trapping sediments and assimilating phosphates, nitrates and toxicants and reducing peak flows. These services are important in the urban landuse within the wetland and surrounding catchment.

Maintenance of biodiversity is of moderate importance due to the proximity to the Vermont Pan, downstream, and because the vegetation type (Hangklip Sand Fynbos) is Critically endangered (CR). However, as this wetland is within the urban area this service is considered moderate.

	ECOSYSTEM SERVICE	Supply	Demand	Importance Score	Importance
REGULATING AND SUPPORTING SERVICES	Flood attenuation	2.0	1.3	1.2	Low
	Stream flow regulation	2.0	0.3	0.7	Very Low
	Sediment trapping	2.3	2.0	1.8	Moderate
	Erosion control	1.8	1.6	1.1	Low
	Phosphate assimilation	1.8	3.0	1.8	Moderate
	Nitrate assimilation	2.0	3.0	2.0	Moderate
	Toxicant assimilation	2.3	3.0	2.3	Moderate
	Carbon storage	2.4	2.7	2.2	Moderate
	Biodiversity maintenance	2.6	2.0	2.1	Moderate
PROVISIONING SERVICES	Water for human use	1.6	1.3	0.8	Very Low
	Harvestable resources	1.5	0.7	0.3	Very Low
	Food for livestock	1.5	0.3	0.2	Very Low
	Cultivated foods	2.1	0.3	0.8	Very Low
CULTURAL SERVICES	Tourism and Recreation	1.5	0.0	0.0	Very Low
	Education and Research	1.0	0.0	0.0	Very Low
	Cultural and Spiritual	3.0	0.0	1.5	Moderately Low

Table 3. The outcome of the Ecosystem Services assessment for the delineated UVBW.

The **Ecological Importance and Sensitivity** of the wetland had a median score of 2, which is "Moderate" and shows that the wetland is ecologically important and sensitive on a local scale.

Ecological Importance and Sensitivity	UVB Wetland	Reason
Biodiversity Support (Median)	**1.67**	
Presence and status of Red Data species:	2	The Cape Dwarf Chameleon (*Bradypodion pumilum)* is listed as Vulnerable and was noted during the site visit on Erf RE 1489, although this is not a wetland dependant spp. Lesser Flamingo (*Phoeniconaias minor)* has been sited within the Vermont Salt Pan which is Near Threatened according to BirdLife International, 2023. The Vermont Salt Pan is located approximately 420 m downstream.
Populations of unique species/uncommonly large populations of wetland species:	0	None noted.
Migration/breeding/feeding sites: (Importance of the unit for migration, breeding sites and/or feeding):	4	Possibility to be a breeding site for hardy amphibians; considered to be an important corridor to downstream Vermont Salt Pan.
Landscape Scale (Median)	**1.80**	
Protection status of the wetland: (National (4), Provincial/Private (3), municipal (1 or 2), public area (0 or 1)	0	The at risk wetland area is located within a privately owned property and is not protected.
Protection status of the vegetation type: (SANBI guidance on the protection status of the surrounding vegetation)	4	Southwest Sand Fynbos (CR-PP) NFEPA (2011) WetVeg type, however vegetation within the wetland at present is disturbed.
Regional context of the ecological integrity: (Assessment of the PES (habitat integrity), especially in light of regional utilisation)	1	PES – D for the UVBW.
Size and rarity of the wetland type/s present: (Identification and rarity assessment of wetland types)	3	CR status indicates slight rarity, but degraded status has left only common, tolerant elements of the ecosystem intact. The size of the UVBW is relatively large and unique in this respect.
Diversity of habitat types:	1	One wetland type present in a largely modified ecological

Ecological Importance and Sensitivity	UVB Wetland	Reason
(Assessment of the variety of wetland types present within a site)		condition; representation of permanent and seasonal – temporary zones provide some diversity of habitat types.
Sensitivity of the Wetland (Median)	**2.00**	
Sensitivity to changes in floods: (Floodplains at 4; valley bottoms 2 or 3; pans and seeps 0 or 1)	2	The wetland is augmented by SW flow from adjacent residential areas, and there is an overflow pipe that crosses beneath Lynx Road and flows into the wetland on the far side, and excavation within the centre of the wetland area, creating a dam within the centre of the UVBW.
Sensitivity to changes in low flows/dry season: (Unchanneled VB's probably most sensitive)	2	UVBW's are naturally very sensitive to changes in low flows/dry season; current impacts in the catchment affecting the wetlands natural flow regime render the wetland less sensitive.
Sensitivity to changes in water quality: (Especially natural low nutrient waters – lower nutrients likely to be more sensitive)	2	The wetland's immediate surrounding land use is residential which has likely impacted its water quality over the years; however, it is still expected that the water quality within the wetland is sensitive to changes in water quality.
Ecological Importance and Sensitivity Score	**2.0**	
Ecological Importance and Sensitivity Category	**Moderate**	

Table 4. Results of EIS Assessment

The delineation map in **Figure 15 & Figure 16** above shows the existing right of way access road to the site (Portion A) is over the delineated wetland, however, the proposed residential area is outside the wetland and upslope of adjacent residential development on Erf 2570. The existing access road will not be widened, but rather the existing road surface will be replaced and improved by removing the old surface and underlaying layers before adding new materials (asphalt) (van Zyl & Morton, 2025).

The UVB wetland is deemed to be "At-Risk" of the proposed development. Given the distance and implementation of mitigation measures recommended, the Vermont Salt Pan is not deemed to be "At-Risk" of the proposed development

The majority of the study area is terrestrial and therefore has no Aquatic Sensitivity. A natural UVB wetland was delineated along the southern boundary of RE/1489. The wetland area directly adjacent to RE/1489 and coinciding with the Portion A, is considered to be relic or historical and currently consists of residential areas, associated gardens / lawns, and a gravel/shell lined access road (Kolgans Close). Although there was sparse wetland vegetation present (such as *Cyperus textilis*), it is the specialist's opinion that this area has lost all wetland functionality and there is no rehabilitation potential due to the level of disturbance. Given the above, this area was determined to be of "Low Aquatic Sensitivity".

The potential impacts to the UVB wetland as a result of the proposed development are listed below:

- Potential wetland habitat disturbance as a result of the road upgrade, installation of services for the proposed residential development, and maintenance activities.
- Alteration of the flow regime of the UVB wetland during construction and operation of the residential development / upgrade of the road/services installation, and associated erosion within the watercourse. Flow alteration may occur due to potential flow diversion / impediment / increase in storm flows.
- Water quality impairment due to increased sediment input, potential spillage, or release of potentially contaminated runoff into the UVB wetland during construction of the residential housing and upgrade of the road/services installation. Additionally, during operation, water quality impairment may occur due to the release of potentially contaminated stormwater (potentially polluted with hydrocarbons) or leakage from sewage pipes into the UVB wetland.

Mitigation Measures

All of the following are applicable at all times during construction and maintenance.

Planning

- Design sewer and water pipelines to accommodate operating and surge pressures.
- Allow for scour valves along sewer pipelines to ensure sewage can be pumped out in a controlled manner.
- Allow for surcharge containment and emergency storage of 2 hours peak flow at manholes outside the wetland.
- Backup storage capacity may be improved by raising the height of the manholes.
- Construct sewage pipeline in accordance with the relevant SANS / SABS specifications.
- Use material specifically designed for application.
- Natural sheet water flow in the UVB wetland must be maintained by the use of multiple culverts or open bottom structures. Permeable shoulders and subgrades also allow natural water infiltration through wetland soils.
- Engineers must address stormwater management in developments located outside and away from the wetland to limit the need to address these issues in the wetland.

Disturbance of Wetland Habitat

- Works within the UVB wetland should be confined to the road reserve and limited in extent and duration.
- High sensitivity areas must be considered No Go areas. The construction footprint must be clearly demarcated with appropriate fencing prior to commencement of construction
- Camps, laydown areas, material and equipment storage areas, refuelling areas and bunded vehicle servicing and/or batching areas must be located outside the No Go areas, and in areas with hardened surfaces and disturbed areas approved by an ECO
- Demarcation of the construction footprint / working servitude must be signed off by the ECO.
- Dumping of excavated material, building material or removed vegetation within the No Go area is prohibited.

- Undisturbed top and subsoil removed must be stored separately in a designated stockpile for future rehabilitation.
- Vegetation clearance should be restricted and indigenous vegetation should be maintained.
- Vegetation suitable for rehabilitation should be carefully removed and stored for later rehabilitation use.
- Any rubble and litter must be removed and disposed of at an appropriate facility.
- The ECO must inspect the road and services upgrade area on a weekly basis and take immediate measures to address unforeseen disturbances. Input may be required from a suitably qualified contractor or wetland scientist.
- Post construction the site must be made good and any waste, rubble, hazard tape and/or equipment must be removed.
- AIP's must be removed and regrowth controlled.
- A rehabilitation, maintenance and Management Plan must be drafted by a suitably qualified specialist.

Altered Flow Regime

Site clearance, infilling and compaction results in alteration of the flow regime. Increased volume and velocity of and peak flow may occur as a result of increased area of hardened surfaces, together with sedimentation and erosion. Note that there may be **positive** benefits to the existing hydrology if multiple culverts are constructed during the upgrade of the road over the UVB wetland.

- Should temporary diversion or impediment of flow be required during construction then construction activities should take place during the dry summer months.
- Diverted water should be piped past the works and discharged immediately downstream of the works area.
- Work should be undertaken as quickly as possible to minimise the diversion period. Downstream sedimentation and erosion must be mitigated.
- Should work be unavoidable in the wet winter months a method statement must be compiled for undertaking work in higher flow situations that address issues, including contamination and sedimentation of downstream habitats.
- Silt fencing and/or sediment basins may be installed prior to construction to reduce the above.
- Stormwater management during construction, particularly runoff from the road, must ensure that water quality is not impaired, erosion does not occur and sedimentation is not increased.
- Any flaws in or damage to the functionality of stormwater infrastructure must be rectified immediately,
- The following erosion control measures may be required:
    - Cover steep/ unstable/ erosion prone areas with geotextile.
    - Alternatively, or in addition, brush packing, straw bales or mulch may be used.
    - Stabilise cleared /disturbed areas with sandbags.
    - Construct silt fences/traps. These must be cleared after heavy rainfall.
- Harvest rainwater from roof to reduce runoff.
- Slow runoff using permeable road surface materials.
- Remove AIP's

Water Quality Impairment

During road construction and upgrade of pipelines accidentally spilled cement, construction chemicals, and / or petrochemicals from vehicles and machinery, and / or sewage may contaminate the wetland. Solid waste from litter and other dumping may also contaminate the wetland.

- Fuel, chemicals and hazardous substances must be stored off site in secure, weather proof containers with impermeable bunded floors.

- Inspect storage facilities, vehicles and machinery daily for any leaks or early detection of deterioration. Prohibit the use of any vehicle or machine that may contaminate the wetland.
- Mixing and transferring of chemical must take place outside the No Go Area, and take place on drip trays or other impermeable surfaces.
- Drip trays must be utilized at fuel dispensing areas and during maintenance of sewer pipe lines
- Vehicle should be cleaned off site.
- Pollutants must be disposed of at an appropriate licensed landfill site. (Oil, wash water from cement, solvents etc).
- In situ infill earthen material should be used to reduce leachate from imported materials which may contaminate the wetland.
- "Ready Mix" concrete should be used in preference to batching concrete on site. If this is not possible mixing must be on an impermeable surface.
- Waste concrete and cement mortars must be disposed appropriately off site.
- Temporary bunds must be erected around areas where concrete is cast in situ.
- Washout must not be discharged into the No Go area.
- Appropriate spill kits must be available on site for chemicals. Contaminated material must be disposed at an appropriate registered landfill.
- Provide appropriate toilets close to where work is undertaken and ensure they are regularly serviced and maintained.
- Provide adequate litter bins and encourage personnel to dispose of litter regularly. Ensure that bins are emptied and garbage is removed from site at least weekly.

The wetland scientist established in their initial screening in December 2024, that the Aquatic Biodiversity sensitivity of the study area is "Very High". In terms of NEMA (Act 107 of 1998) regulations (GN R.320 of 2020) an Aquatic Biodiversity Impact Assessment was required.

The potential aquatic impacts were assessed with and without application of mitigation measures. Post mitigation measures scores fell within the "Low" impact category.

The "No Go" scenario was assessed and it was established that this would result in the continuation of existing impacts.

The Risk Assessment Matrix assed a 'Low Risk' rating for the proposed development, provided the mitigation measures are implemented. The project should be registered under the GN4167 (2023) General Authorisation.

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.		
N/A			
3.3.	Explain how the relevant considerations of Section 63 of the ICMA were taken into account and explain how this influenced your proposed development.		
N/A			
3.4.	Explain how estuary management plans (if applicable) has influenced the proposed development.		

N/A	
3.5.	Explain how the modelled coastal risk zones, the coastal protection zone, littoral active zone and estuarine functional zones, have influenced the proposed development.
N/A	

4. Biodiversity

4.1.	Were specialist studies conducted?	YES ✓	NO
4.2.	Provide the name and/or company who conducted the specialist studies.		
Jan-Hendrik Keet – EcoFloristix Specialist Botanical Surveys			
4.3.	Explain which systematic conservation planning and other biodiversity informants such as vegetation maps, NFEPA, NSBA etc. have been used and how has this influenced your proposed development.		

A range of systematic conservation planning tools and biodiversity informants were consulted to guide the assessment of the application site (RE/1489 Vermont), including the South African National Vegetation Map (2024), the National Freshwater Ecosystem Priority Areas (NFEPA), and the Western Cape Biodiversity Spatial Plan (WCBSP, 2023). These, together with site verification and specialist studies (Aquatic Biodiversity Impact Assessment and the Plants Species and Terrestrial Biodiversity Compliance Statement), provided the baseline information to determine the biodiversity value of the site and its sensitivity.

Plants Species and Terrestrial Biodiversity Compliance Statement

According to the SA Vegetation Map (2024), the natural vegetation type of the site is Hangklip Sand Fynbos (**Figure 17-1**), which is listed as Critically Endangered under NEM:BA (2004). This vegetation type is highly restricted in distribution, supports numerous endemic and threatened species, and depends on periodic fire to maintain ecological functioning. However, the site inspection and ground-truthing confirmed that the study area is highly degraded and transformed and does not bear any meaningful resemblance to the Hangklip Sand Fynbos (FFd 6) vegetation type with which it is mapped to coincide. Specifically, the site is dominated by alien and weedy species, including *Cenchrus clandestinus, Acacia saligna* (Port Jackson willow; NEM:BA A&IS Category 1b), *Acacia cyclops* (Red eye; Category 1b), *Carpobrotus edulis subsp. edulis, Axonopus fissifolius, Stenotaphrum secundatum, Schinus terebinthifolius, Pinus radiata*, and *Leptospermum laevigatum*, among others. A total of 14 alien plant species were recorded on site, of which 5 are listed as invasive under the NEM:BA Alien and Invasive Species (A&IS) Regulations.

The specialist confirmed that there is a near-complete absence of species characteristic of and dominant in Hangklip Sand Fynbos. Species that would be expected in an intact or functional example of this vegetation type such as *Euclea racemosa subsp. racemosa, Leucadendron coniferum, Searsia laevigata, various Erica spp.,* and members of the Proteaceae, Rutaceae, and Restionaceae were essentially absent from the study area. Only a single restio individual *(Thamnochortus insignis)* was recorded on site, and this was considered to be associated with the adjacent road corridor rather than being a genuine indicator of intact Hangklip Sand Fynbos. The only native species recorded that are loosely associated with Hangklip Sand Fynbos (*Passerina corymbosa, Metalasia muricata*, and *Carpobrotus edulis*) are very widespread and common species occurring across numerous vegetation types and therefore cannot be treated as indicator species of this ecosystem.

Finally, parts of the site have been altered completely, such as the southern area close to the vibracrete wall (see bottom right in D3, **Figure 17-3**), the parking lot area, and driveway.

The WCBSP (2023) identifies the central portion of the property as a Critical Biodiversity Area (CBA), with the remainder (including the access road) not mapped as priority biodiversity areas. However, field verification by the EAP found no ecological distinction between the area mapped as CBA and the rest of the property, as all parts are similarly degraded and dominated by alien vegetation. This demonstrates that while the site is mapped as falling within a CBA, its current ecological condition does not align with the intended conservation value reflected in the plan. The botanical specialist suggests that since the vegetation occurring onsite is in a degraded and transformed state, the study area cannot be considered as a CBA, due to vegetation present that is of low ecological value and the SEI is very-low.

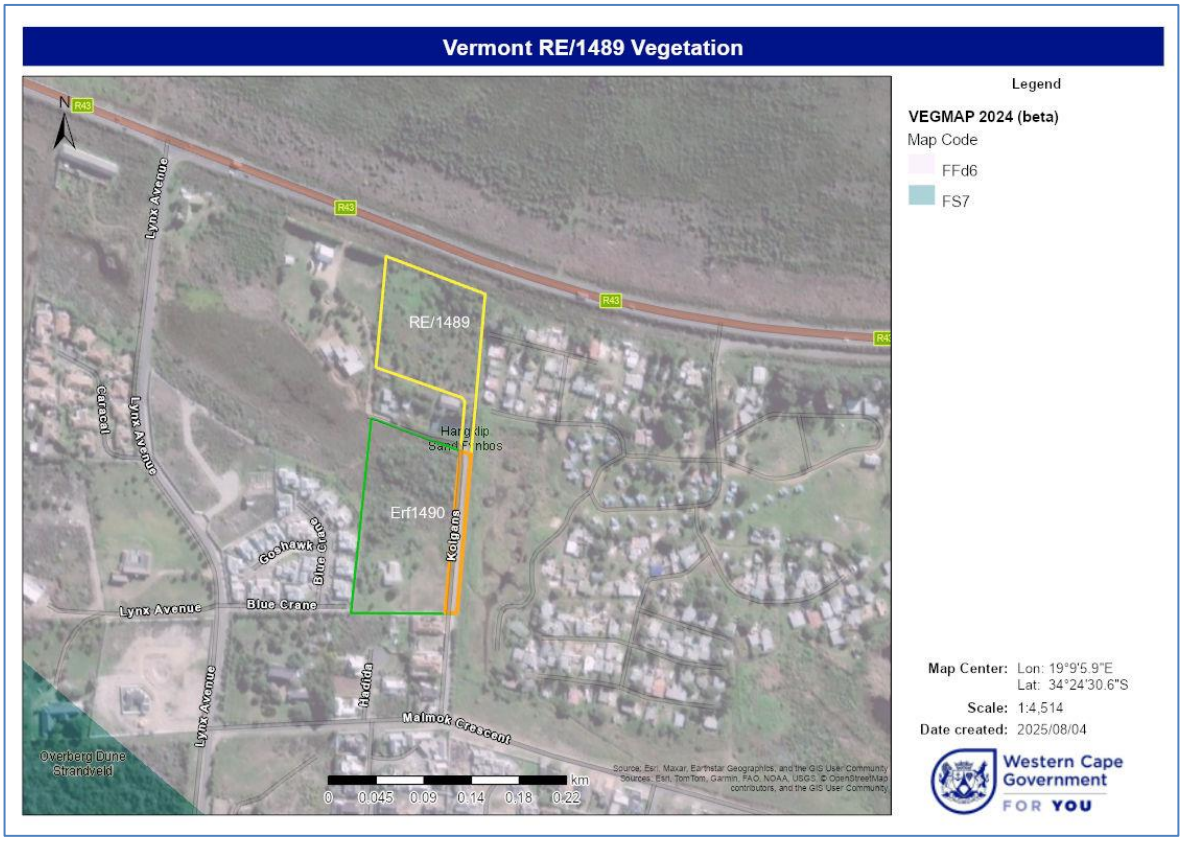

Figure 17-1: Extract of the SA Vegetation Map of the Study Area.

Figure 17-2: Plant communities that were observed in the study area and surrounds, as well as general site ecology and other relevant information. **Source;** (Keet, 2026).

Figure 17-3: Aerial photos of the study area. Clearly visible is the degraded nature of the site and remnants of high densities of invasive alien plant species (mostly *Acacia saligna* in this case), as well as the high densities of grasses (a mixture of alien and native species). ***Source;*** (Keet, 2026).

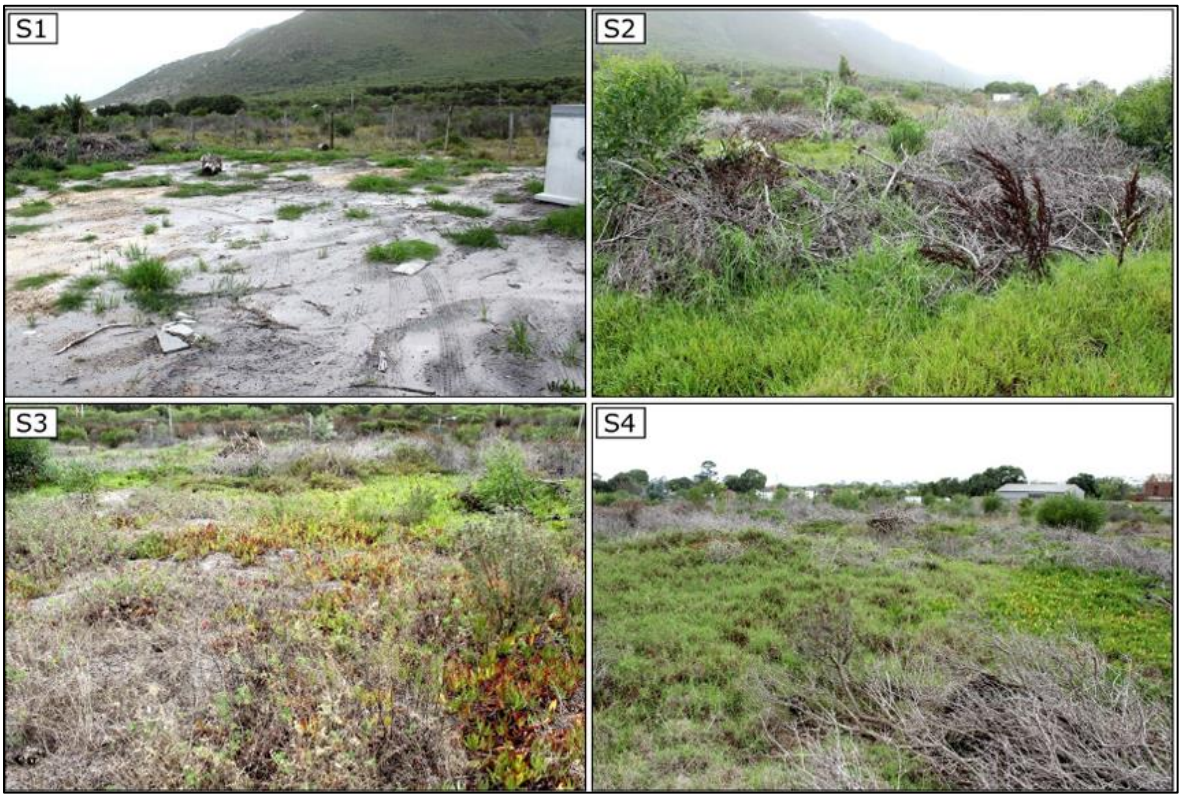

Figure 17-4: On-site photos of the study area. All of the photos showcase the degraded and transformed nature of the study area, which does not bear resemblance to Hangklip Sand Fynbos. S1 showcases a completely transformed parking area, while S2 – S4 show the high densities of grasses, *Carpobrotus edulis*, or stacks of invasive alien *Acacia saligna* (there are still many of these trees present). **Source;** (Keet, 2026).

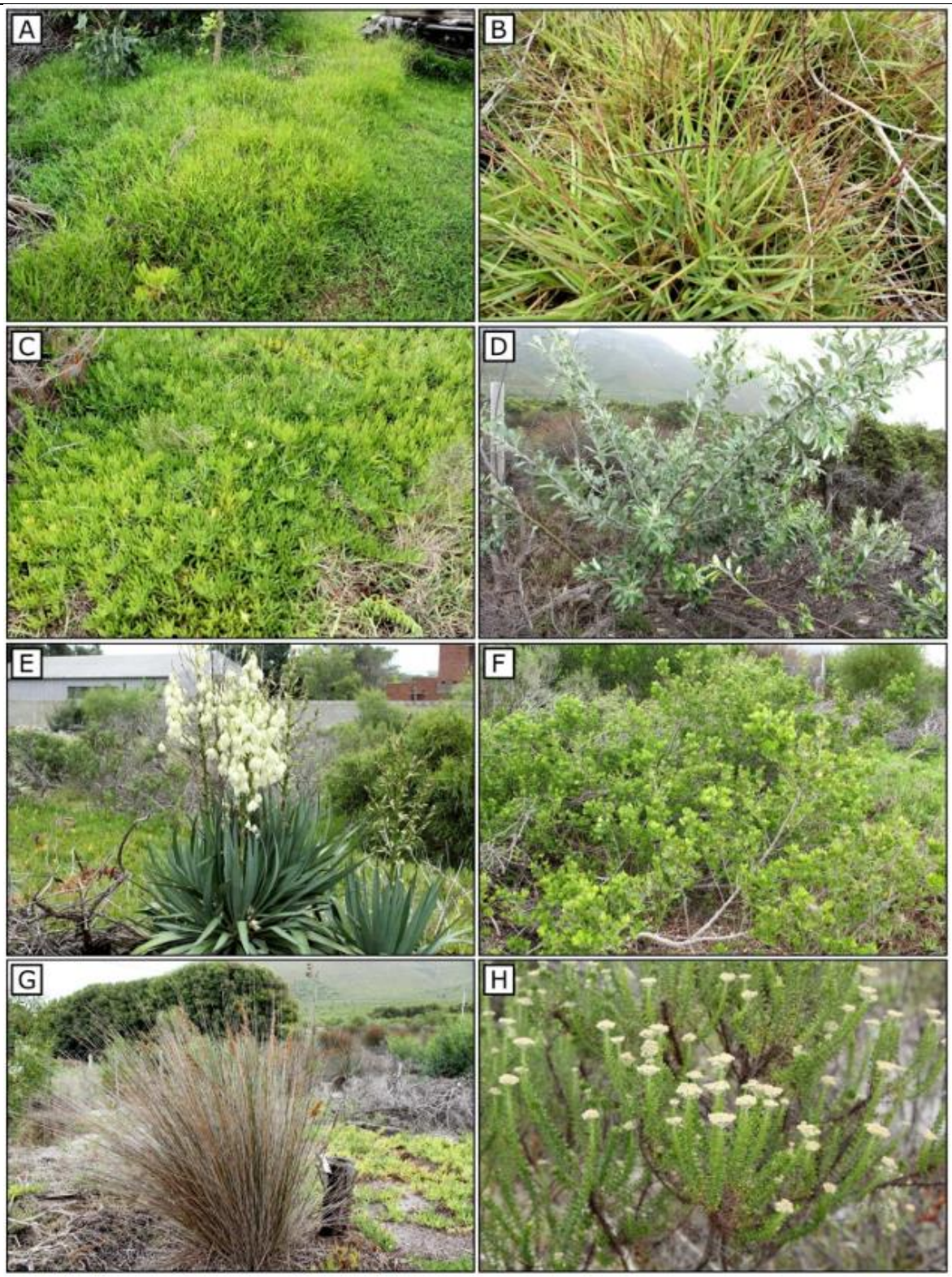

Figure 17-5: Selected photos of plant species found in the study area. A) *Axonopus fissifolius,* B) *Stenotaphrum secundatum,* C) *Carpobrotus edulis subsp. edulis*, D) *Brachylaena discolor,* E) *Yucca gloriosa,* F) *Searsia glauca*, G) *Thamnochortus insignis,* and H) *Metalasia muricata*. ***Source;*** (Keet, 2026).

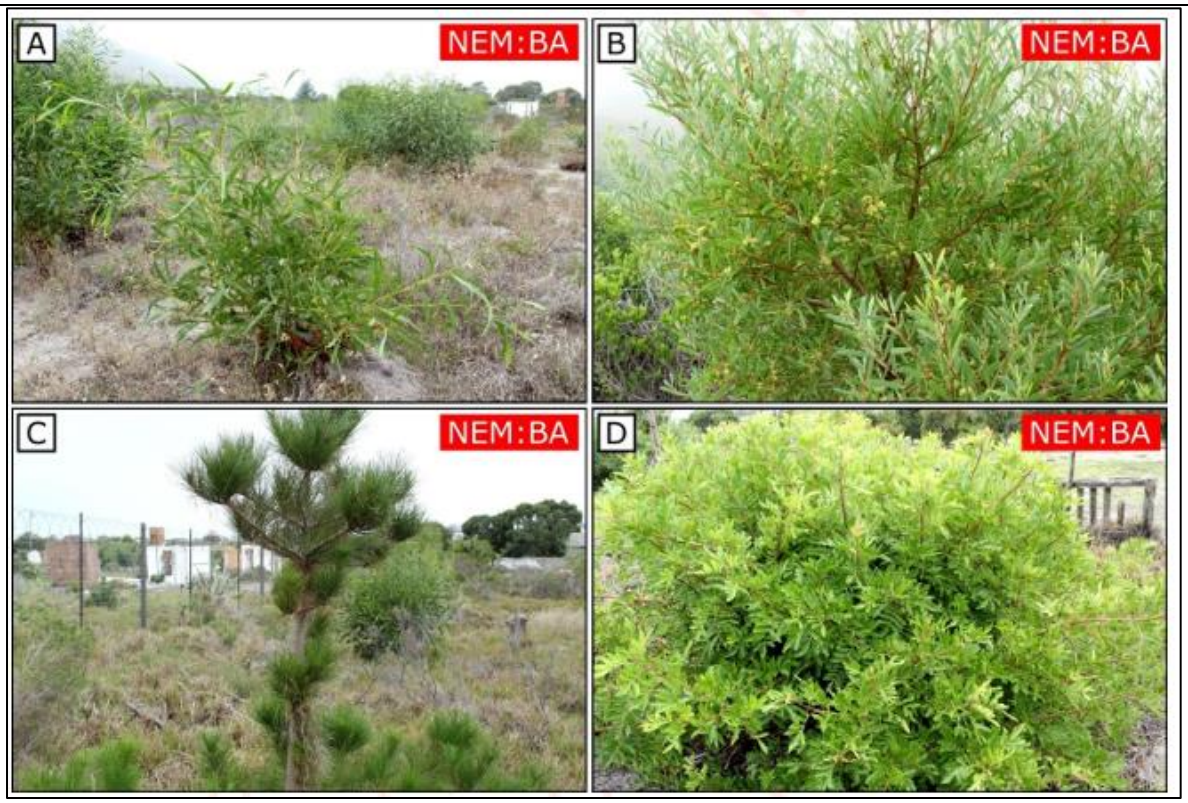

Figure 17-6: NEM:BA A&IS Regulations listed invasive plant species that were observed. A) *Acacia saligna*, B) *Acacia cyclops,* C) *Pinus radiata*, and D) *Schinus terebinthifolius*. ***Source;*** (Keet, 2026).

Ground truthing confirmed that no SCC occur within the study area. Given the highly disturbed and transformed nature of the study area, it is unlikely that any plant SCC will occur in it. Also, given the highly disturbed nature of the site currently, the true Relative Plant Species Theme Sensitivity of the site can instead be considered as "Low" according to the criteria given by Government Notice 1150 of Government Gazette 43855.

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

Plants Species and Terrestrial Biodiversity Compliance Statement

During the desktop phase of the assessment, GIS analysis using the WCBSP (2023) spatial dataset confirmed that the study area is mapped to overlap a CBA1 (Terrestrial) area. CBA1 areas, also referred to as CBA are defined as areas that are critical for meeting biodiversity targets and thresholds, and which are required to ensure the persistence of viable species populations and ecosystem functionality. In terms of the management guidelines associated with CBA1 areas, such land should ideally be maintained in a natural or near-natural state, with no further loss of habitat or species. Where degraded, such areas should be rehabilitated toward natural or near-natural conditions, and only low-impact, biodiversity-sensitive land uses are considered appropriate.

The Site Sensitivity Verification confirmed that the study area is highly degraded and transformed and does not bear any meaningful resemblance to the Hangklip Sand Fynbos (FFd 6) vegetation type with which it is mapped to coincide. Specifically, the site is dominated by alien and weedy species, including *Cenchrus clandestinus, Acacia saligna* (Port Jackson willow; NEM:BA A&IS Category 1b), *Acacia cyclops* (Red eye; Category 1b), *Carpobrotus edulis subsp. edulis, Axonopus fissifolius, Stenotaphrum secundatum, Schinus terebinthifolius, Pinus radiata,* and *Leptospermum laevigatum*, among others. A total of 14 alien plant species were recorded on site, of which 5 are listed as invasive under the NEM:BA Alien and Invasive Species (A&IS) Regulations.

The specialist confirmed that there is a near-complete absence of species characteristic of and dominant in Hangklip Sand Fynbos. Species that would be expected in an intact or functional example of this vegetation type — such as *Euclea racemosa subsp. racemosa, Leucadendron coniferum, Searsia laevigata, various Erica spp.,* and members of the *Proteaceae, Rutaceae,* and *Restionaceae* were essentially absent from the study area. Only a single restio individual (*Thamnochortus insignis*) was recorded on site, and this was considered to be associated with the adjacent road corridor rather than being a genuine indicator of intact Hangklip Sand Fynbos. The only native species recorded that are loosely associated with Hangklip Sand Fynbos (*Passerina corymbosa, Metalasia muricata, and Carpobrotus edulis*) are very widespread and common species occurring across numerous vegetation types and therefore cannot be treated as indicator species of this ecosystem.

Implication for the CBA1 Classification and Development Proposal

Given the highly degraded and transformed condition of the site, the botanical specialist concluded that the study area cannot legitimately be classified as a functional CBA1 area. It cannot be deemed critical for meeting biodiversity targets and thresholds, as it does not support the species composition or ecological processes characteristic of Hangklip Sand Fynbos. As a result, the study area does not qualify to contribute to national ecosystem protection levels or conservation targets associated with the Hangklip Sand Fynbos ecosystem.

Furthermore, no plant Species of Conservation Concern (SCC) were confirmed on site during the field survey. While confirmed records of plant SCC associated with the Hangklip Sand Fynbos vegetation type have been recorded in the broader Vermont area, none of these species were found within the study area. Given the highly degraded state of the site, it is considered highly unlikely that any plant SCC would establish, or persist within the study area in the future.

The Site Ecological Importance (SEI) of the study area was accordingly assessed as "Very Low" for all plant community types identified on site (namely the Transformed community type and the *Stenotaphrum–Carpobrotus* community type). This SEI classification, per the guidelines of the South African National Biodiversity Institute (SANBI, 2020), indicates that minimisation mitigation is appropriate, and that development activities of medium to high impact are acceptable, with restoration activities not necessarily required.

Influence on the Proposed Development

The application of the WCBSP management objectives and guidelines has directly influenced the proposed development in the following ways. First, the desktop identification of the CBA1 mapping triggered a comprehensive field-based SSV, ensuring that the true ecological condition and sensitivity of the site were accurately characterised rather than relying solely on broad-scale desktop classifications. Second, the field verification findings — confirming the degraded and transformed nature of the site and the absence of SCC — provided the evidential basis for concluding that the proposed development (a subdivision to accommodate 18 single residential units, open space, and a private road) would not result in the loss of any functionally significant CBA area or any meaningful component of Hangklip Sand Fynbos. Third, the WCBSP management guidelines have been incorporated into the proposed impact management actions for the development. These include, among others, the mandatory control and removal of all NEM:BA A&IS listed invasive plant species on and surrounding the property, the prevention of further spread of alien species, the restriction of vehicle movement to demarcated roads, and the prohibition on the importation of alien plant species for landscaping or rehabilitation purposes.

Aquatic Biodiversity Impact Assessment

The WCBSP (2023) does not identify any aquatic Ecological Support Areas (ESAs) or aquatic Critical Biodiversity Areas (CBAs) within the study area itself. This is a significant finding as it means the study area does not fall within a spatially designated priority aquatic conservation area according to the WCBSP. However, a non-perennial drainage line

associated with an aquatic ESA is identified in the broader vicinity, linked to the watercourse system flowing through the area toward the Vermont Salt Pan downstream. However, this stream has been cutoff by the R43 road and therefore no indicators of watercourses have been identified onsite (RE/Erf 1489). It can be noted that the non perennial drainage line originates from the mountains and its flows was diverted through stormwater infrastructure associated with the R43.

The absence of aquatic ESAs or CBAs within the study area boundary, combined with the presence of a degraded terrestrial CBA2, directly informed the specialist's determination of the ecological significance of the site and shaped the approach to the development proposal in several important ways:

The WCBSP findings were used in conjunction with other spatial datasets particularly the National Freshwater Ecosystem Priority Area (NFEPA, 2011) wetland vegetation layer to contextualise the ecological importance of the wetland system traversing Erf 1490. The NFEPA dataset identifies the applicable wetland vegetation type as Southwest Sand Fynbos, which is classified as Critically Endangered (CR) and Poorly Protected (PP). Although the WCBSP does not designate an aquatic CBA or ESA within the study area, the CR-PP status of the wetland vegetation type significantly elevated the ecological importance of the delineated Unchanneled Valley-Bottom (UVB) wetland and contributed to the "Very High" aquatic sensitivity classification that triggered the full impact assessment process.

The WCBSP's identification of biodiversity sensitivity in the broader landscape reinforced the imperative to clearly demarcate functional wetland areas as construction No-Go zones. The functional UVB wetland area downslope and adjacent to the access road — characterised by wetland obligate species *Juncus krausii* and *Cyperus textilis*, and rated as "High" Aquatic Sensitivity — was designated as a strict No-Go area for all construction activities. This spatial delineation directly translates the conservation objectives of biodiversity spatial planning into on-the-ground construction controls.

The WCBSP biodiversity planning context therefore supported the conclusion that the proposed development is unlikely to materially impact the SWSA, and that the sensitivity classification was driven primarily by geographic co-occurrence with the SWSA boundary rather than direct hydrological significance.

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.

While the property is formally mapped as part of a Critical Biodiversity Area (CBA1) and overlaps Critically Endangered Hangklip Sand Fynbos, the terrestrial biodiversity of the site is assessed as low due to the site's degraded and transformed nature. The proposed development is therefore expected to have minimal impact on terrestrial biodiversity onsite, specifically the small portion of the remaining indigenous vegetation onsite. More importantly, no plants species of conservation concern have been identified onsite, and as a result the Site Ecological Importance of the site is considered to be very-low. The key biodiversity consideration is the wetland crossing located adjacent to the RE/1489, however, the freshwater specialist findings highlights that the proposed development will result to low impact onsite.

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.

N/A. The development is not within a protected area.

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

The presence of fauna on and adjacent to the proposed development site has been considered in the design and planning of the project. The site is largely transformed and surrounded by urban development, which significantly limits the diversity and movement of terrestrial fauna. As a result, no further faunal assessment is deemed necessary. Moreover, the Aquatic Biodiversity Impact Assessment recorded the likelihood presence of a single Dwarf Chameleon

within the wetland area. To ensure the protection of slow-moving species a Search and Rescue protocol has been included as a condition of approval and will form part of the Environmental Management Programme (EMPr).

The adjacent R43 and high perimeter walls of neighbouring residential properties act as barriers, further constraining the movement of small animals and limiting potential habitat connectivity.

5. Geographical Aspects

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

RE/Erf 1489 is situated within the existing built urban area in Vermont and access to the site is gained via the existing access road adjacent to Erf 2570 and Erf 1490, that will be upgraded from a gravel to a tar road. In terms of the current SR1 zoning, the site may accommodate a single residential dwelling. Although the proposal represents a form of densification within the existing zoning, the change in landscape character will not be significant, given the proximity of the site to existing residential developments on adjacent properties. No significant geographical features have been identified that would preclude the construction of residential homes within the 1.04 ha development footprint.

An existing hardened road (±1 519 m²), surfaced with shells, is located on the portion A to be subdivided from Erf 1490. This access road, which is currently hardened with shells and containing drainage ditches on both sides, will be upgraded into a tar road and incorporated into the proposed extension of Kolgans Close.

The NGI-mapped non-perennial drainage line (Regional Drainage Map, NGI Rivers) is not evident on site, a finding confirmed by both the Aquatic Screening Report and the Aquatic Biodiversity Impact Assessment. An outcrop of sandstone occurs on and adjacent to the site but does not present a constraint to the proposed development.

The R43 National Road lies immediately upslope and adjacent to the site. Significant earthworks have been undertaken in the past to create an embankment, upon which the tarred road surface is located. This major road acts as a physical barrier, effectively isolating the site and surrounding Vermont properties from the undeveloped mountain areas to the north. No surface runoff from upslope areas is anticipated due to the embankment, and there is no evidence of surface or subsurface drainage from the road reserve into the proposed residential area.

Given that the property is visually exposed to vehicles travelling along the R43, which forms part of a designated Scenic Route, the architectural design, scale, and construction of future residential dwellings will need to be sensitive to the visual landscape.

Although earlier (2017) versions of the Western Cape Biodiversity Spatial Plan (WCBSP) mapped portions of the site as Critical Biodiversity Area (CBA) and Ecological Support Area (ESA), these were considered to overstate the ecological importance of the site due to its highly transformed condition and surrounding development. The updated WCBSP (2023) mapped the portion of the site as CBA, which no longer reflects these designations. The potential biodiversity loss associated with the proposed development is therefore regarded as low.

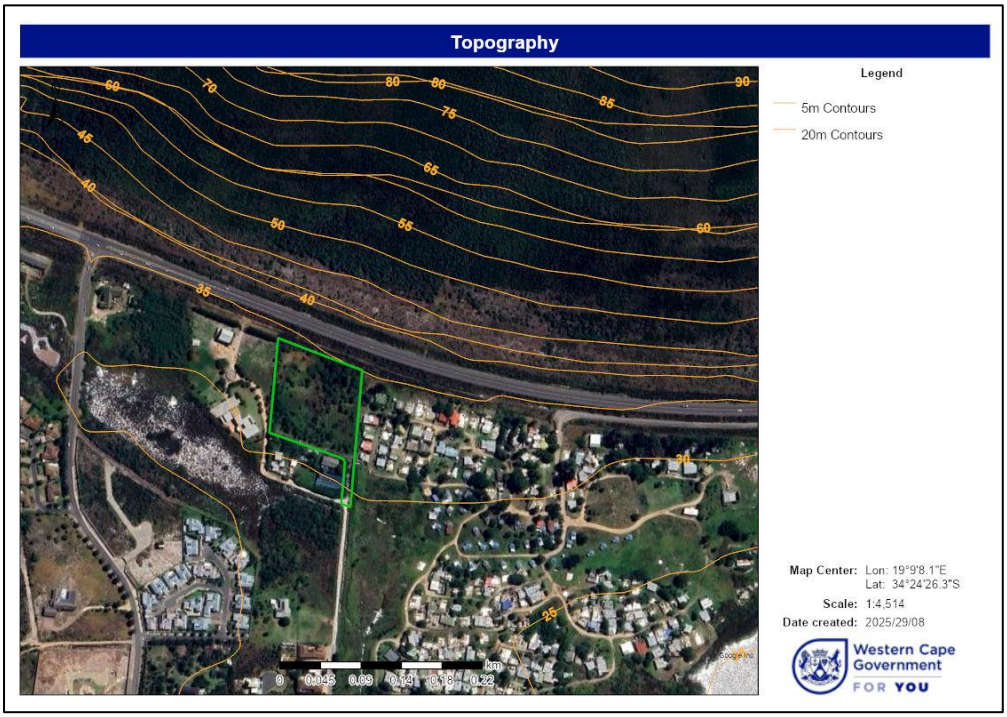

Figure 18: Topographical map of the subject property (outlined in green), showing 5m and 20m contours in relation to surrounding land uses and the R43 National Road. The site is located on relatively gentle topography, with elevations ranging between approximately 35 m and 45 m above mean sea level. The R43 National Road, situated immediately north of the site, lies at a higher elevation.

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.		
N/A			
6.3.	Explain how areas that contain sensitive heritage resources have influenced the proposed development.		
The Notice of Intent to Develop (NID) was submitted to Heritage Western Cape and the matter was discussed at the Heritages Officers meeting held on 26 September 2023. They confirmed that no further Heritage specialist assessment was required as there is no reason to believe that the proposed rezoning, subdivision and residential development will impact on heritage resources. However, should any human remain or archaeological discoveries come to light during construction this matter will be addressed in the EMP.			

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.
N/A

8. Socio/Economic Aspects

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

The project site falls within the jurisdiction of the Overstrand Municipality and the Overberg District Municipality (ODM). The visual metrics of the ODM's socioeconomic profile (2023) are presented below.

Overstrand Municipality is located along the south-western coastline of the Overberg District Municipal area bordering the City of Cape Town to the west and Cape Agulhas Municipality to the east. Its northern neighbour is Theewaterskloof Municipality. Overstrand is a dynamic unity combining great potential and a beautiful setting. Their task is to bring about growth and development to the benefit of all their people, in their different communities, whilst maintaining a balance with nature. The Municipality covers a land area of approximately 1708 km^2 and covers the areas of Hangklip-Kleinmond, Greater Hermanus, Stanford and Greater Gansbaai. The population of ODM was 132 495 (Statistics South Africa Census 2022) a significant 42% increase from 93 407 in 2016. The population for the municipality is expected to increase, making it the most populated municipal area in the Overberg District.

According to the Overstrand IDP 2024/2025, the Overstrand has a growing population that will increase the demand for housing, employment, service delivery and related infrastructure developments. The increased population growth will therefore place increased pressure on the municipal resources to develop new as well as maintain existing infrastructure. The ability to work from home has enabled households to move away from the economic hubs and settle in smaller towns such as Hermanus. The number of people retiring to the ODM is increasing and stands at 15.2%. These trends can be a valuable injection for the local economy as well as the municipality in terms of income generation through rates and taxes, despite the increased demand for services (Source: Western Cape Provincial Treasury, MERO 2021 and SEP 2021).

Overstrand's 2023 projected economic forecast was to contract by -0.2%, which is lower than the anticipated growth rate for both the District and Western Cape projection over the same period. In 2020, a total of 33 096 workers were employed in the Overstrand municipal area, contributing 27.4% to Overberg District employment during the year. Between 2016 and 2020, the Overstrand municipal area experienced an average annual decline of 520 jobs. Estimates for 2021 indicated a further deterioration in Overstrand's employment, with a total of 1 475 jobs lost, a lingering effect of the Covid-19 pandemic. The estimated decline in employment opportunities is likely to result in a decline in household income, which in turn will continue to restrain municipal revenue and increase the demand for free basic services.

Overall, all development and growth in Overstrand must be sensitive to the area's most important asset, that being the natural environment. Sustainable development in Overstrand will be guided by the municipal spatial development framework (SDF) and related sector plans. The SDF identified Kleinmond-Hawston, Hermanus (which includes Vermont), Stanford and Gansbaai with its suburbs as areas prioritized for further development. This is due to bulk services being available to support densification and developments.

The continued outward spread of low-density development on the edges of Overstrand towns is leading to significant and rapid increases in the urban footprint of the towns. This urban sprawl threatens the long-term sustainability of the Overstrand environment and raises the following concerns:

- Natural undeveloped area and agricultural land are increasingly being consumed by urban development,
- Low density urban sprawl results in long travel distances. Due to a lack of public transport, this results in more private road transport that leads to increasing traffic congestion and CO2 emissions.

Low density development increases the cost of infrastructure provision and maintenance. It dissipates the positive effect of agglomeration and economies of scale, causing operational inefficiencies and a wastage of supporting economic resources and infrastructure. To address these concerns, the Municipality developed a Growth Management Strategy

(GMS). The GMS uses densification as the main tool to positively redress and counteract the effects of urban sprawl. The GMS forms part of the SDF and was approved by Council in January 2011. The municipality received an award from the South African Planning Association for this work. The GMS does not have legal standing but is used to guide and inform the Town Planning Department. The objectives of the GMS are to:

- Inform the SDF with an integrated densification policy that is area specific and sensitive to the character, heritage and environmental conditions unique to each area and town.
- Integrate, update and rationalize service provision and infrastructure planning,
- Provide an integrated policy framework that will guide the detailed planning and design of market driven development initiatives and inform the compilation of more detailed precinct plans for specific areas or identified opportunities, and
- Align density patterns, trends and proposals with the land use management regulations, zoning schemes, infrastructure capacity and future infrastructure requirements.

These aims are also included in the Integrated Development Plan Review 2024/25.

The proposed site is situated in the Overberg Municipal area, specifically in Vermont, which falls under the urban jurisdiction of Hermanus. The existing social and economic characteristics of the community in the vicinity of the proposed site are influenced by several factors:

- Job creation is identified as a critical need in the area. The proposed development is expected to contribute significantly to economic growth by generating employment opportunities. This, in turn, can lead to increased investments in the area, fostering economic prosperity.
- The area has an active real estate market conducive to property transactions. The development's focus on creating residential erven aligns with the demand for property in the area driven by continuing in-migration to this area. The sale of these properties to new residents is anticipated to contribute to the economic dynamics of the community.

The proposed development is an opportunity to attract further investment in the Overstrand which will stimulating the local economy. The size and position of the development will be attractive to permanent residents, including retired people and for use as holiday properties.

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

The proposed development holds several socio-economic values and contributions to the community and the broader area:

- One of the significant contributions is the creation of employment opportunities, both directly and indirectly. The proposed development will have both short and long-term economic impacts on the Overstrand Municipality and the surrounding area. It will create employment opportunities during the construction phase, generate additional rates and taxes, and attract new residents to the region, all of which will contribute positively to the local economy. The development has the potential to generate revenue for the local municipality through property taxes and other associated fees. This additional revenue can be reinvested in community services and infrastructure.
- By attracting investments and stimulating economic activities, the development contributes to the overall economic growth of the area. Increased economic activities will lead to the growth of local businesses and services, benefiting the community.
- The creation of additional residential erven, above the original single residential unit, adds value to the real estate market in the area. The sale of properties to new residents contributes to the local property market, potentially increasing property values and attracting further investments.
- The increased number of units increases the rates and tax base for the area above that of a single residential unit.

- The combined development is expected to attract at least 54 new residents to the Hermanus area, based on a calculation ratio of 3 people per dwelling unit. These new residents will contribute to the local economy by spending money on various items such as food, petrol, restaurants, repairs, and other goods and services, thereby boosting the local economy. The development will lead to improvements in local infrastructure. Increased housing demand could necessitate enhancements to utilities, roads, and other essential services, benefiting both existing and new residents.
- The location of the proposed development, away from the coastal zone which is attractive to tourists and holiday makers and will allow for a development that is more affordable and possibly be more attractive to permanent residents.

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 will contribute towards job creation during the construction and operational phase as well as skills transfer opportunities for local labour pool.

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.

It is unlikely that the proposed residential development on RE/Erf 1489 will have any significant implications for people's health and well-being, and that these considerations are likely to influence the planning and execution of the project.

The formalisation of the access road extension of Kolgans Close and upgrade and maintenance of service pipelines (sewer and water) within the road reserve will contribute positively to wellbeing of not only the subject properties but the surrounding community.

- Construction activities and increased human presence can contribute to elevated noise levels on a local scale. This has a relatively small potential to impact the well-being of nearby residents, especially as there is a higher ambient road noise from the R43. Measures to minimize construction-related noise and consideration are given in the EMPr to mitigate noise disturbances.
- Construction chemicals and materials may produce odours that could affect the quality of life for residents in the neighbourhood. Dust from earth works and batching may also have an adverse effect. These temporary impacts on air quality are not expected to pose a health risk. Dust suppression, proper storage of materials and site management and maintenance to mitigate nuisance for the surrounding neighbourhood are included in the EMPr
- Changes to the visual character of the area, especially if it involves significant alterations to the landscape from vegetation to built infrastructure, can influence the sense of place for existing residents.
- Changes in the community structure, influx of new residents, or alterations to the neighbourhood's character can impact social cohesion. The development aims to foster a sense of community, through the inclusion of open spaces in the development plan.

Architectural and Design Elements are included in the "Kolgans Design Guideline" Annexure E of the WRAP Town Planning application for the Rezoning, Subdivision and Consolidation of RE/1489 and Erf 1490, Vermont. This comprehensively addresses issues of design and sense of place in respect of the proposed development to mitigate any impact. The proposed layout is consistent with surrounding residential land uses and supports the Overstrand Municipality's strategic growth vision of aligning urban expansion and densification within the demarcated urban edge.

SECTION H: ALTERNATIVES, METHODOLOGY AND ASSESSMENT OF ALTERNATIVES

1. Details of the alternatives identified and considered

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

Provide a description of the preferred property and site alternative.

The preferred property proposed for residential development is the Remainder of Erf 1489 (RE/1489) Vermont, owned by the applicant. Alternative 2 is the preferred residential area development plan.

The existing access road, which is located on a portion of Erf 1490, is owned by Mr E Gillepsie who has permitted 'right of way' access to RE/1489 and adjacent residential developments. This development will formalise the access road to the proposed development site. There are no alternative locations for this access road.

These properties fall within the suburban boundary and have a residential zoning. No alternative sites have been considered for the residential development. The site is located at the end of the 'dirt' road extension of Kolgans Close, Vermont and is accessed via Malmok Road, approximately 9km from Hermanus. There are a number of single residential houses and denser cluster housing developments in this area. The proposed development is infill on a vacant erf that was created by the subdivision to create the adjacent residential property (Erf 2570).

The WCBSP notes that the property is characterised by Hangklip Sand Fynbos and a portion of the property is indicated as CBA. However no biophysical features were identified on the residential erf that should be avoided. The proposed layout seeks to optimise the development, well within the restrictions of the Town Planning Scheme. Due to past land use as a residential garden, RE/1489 Vermont is not in a natural condition, notwithstanding the designation as a CBA area with Critically Endangered Hangklip Sand Fynbos vegetation indicated on site.

The subject property is 1,0479 Ha in extent which will be used for the development of residential erven comprising free standing residential housing, internal roads, parking facilities, and an allocated open space.

The access road, (Portion A), will be upgraded, as required.

Several layout alternatives were assessed within the same site boundary. The preferred option, Alternative 2, provides a larger and more functional open space while accommodating 18 freestanding residential units. This layout further enhances accessibility and circulation through improved urban design of the internal road network. This comprehensive plan is designed to optimize use of existing infrastructure and residential zoning. There are very few remaining erven in Vermont that are suitable for densification and single residential development. The proposed layout is primarily guided by good town planning as there are no environmental constraints on the property.

The existing "right of way access road", an extension of Kolgans Close, over the subdivided portion of Erf 1490, will become a public road. There is no alternative location for this road, or for the services (water and sewer) located within the road reserve.

RE/1489 site is entirely terrestrial, and no wetland indicators exist in the property as assessed by the freshwater specialist. The adjacent property (Erf 2570) which has a large house and various sheds and is entirely surrounded by walls and fences, is partially located within the wetland. This adjacent development effectively isolates the proposed development from the wetland.

The R43 is located immediately north of the property and separates the property from the natural vegetation on the mountain and precludes the required fire regime needed for healthy regeneration of fynbos vegetation.

Two site development plans were investigated and are described below:

Alternative 1 (non-preferred)

- → 22 Residential erven: Covering a total footprint of ± 8147m^2
- → Open Space Zone: Covering a total footprint ± 1003m^2
- → Roads: Covering a total development footprint of ± 3821m^2

Alternative 2 (Preferred)

- 18 Residential erven: Covering a development footprint of ± 7047m^2
- Open Space Zone: ± 1090m^2
- Roads: Covering a development footprint of ± 3861m^2

Residential Use

The new dwellings will comply with municipal design guidelines.

- Coverage 65% for all buildings
- Single storey with a max height of 7m.

Access road

In addition to the upgrade of the existing road over Erf 1490 of 1519m^{2,} a further 2342m^2 will be required for 2 internal roads

Open space

The designated open space will serve a community function rather than a conservation role. Its inclusion will reduce the extent of hardened surfaces, thereby assisting in the management of stormwater runoff from the property.

In addition, the open space will contribute to the overall sense of place by providing an area for recreation, social interaction, and communal activities. This will create opportunities for children to play and for neighbours to gather, thereby supporting the development of a cohesive community aligned with the objectives and guidelines of the Homeowners Association.

Electricity Supply

Electricity services will be supplied via a connection to the municipal Eskom electricity network in line with these specifications and requirements.

Water Supply

Water supply is via a 200mm Ø pipeline from the Preekstoel Water Treatment Plant and Vermont Reservoir to the existing 110mm Ø pipeline south of Re/1489. GLS Consulting Engineers confirm there is capacity to supply 13,2 kL/d and fire flow to the proposed development.

Sewer and Effluent Management

The development is within the Onrus Main pumping station drainage area and connected to the existing sewer pipeline south of the property. However, the upgrading of the existing Malmok Cresent pipeline, to accommodate this development and future development within the area, is required by replacing the existing pipeline with a 160mm Ø pipe in the road reserve of the "right of way" access over Erf 1490, (refer to the GLS Consulting Engineer report for more information).

There is capacity at the Hermanus Wastewater Treatment Works to accommodate the development.

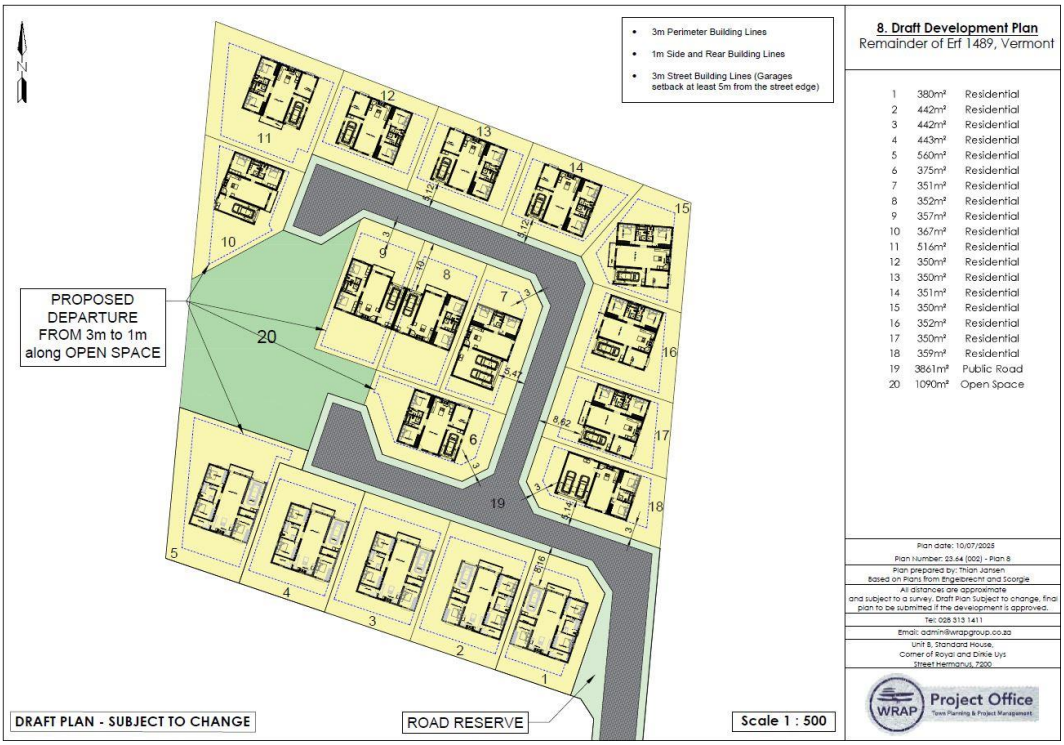

Figure 19: Proposed site development plan – Alternative 2 (Preferred).

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

No alternative properties or sites were investigated.

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

The selection of the preferred property and site alternative is motivated by the unique circumstances surrounding the development.

The property is zoned for residential development, currently Single Residential Zone 1 and will be rezoned to Subdivisional Area Zone. The identified property stands as the one of the last viable options for the proposed residential development and contributes to infill development as opposed to urban sprawl. Given the commitment of the local authority to densification within the urban area this rezoning from a single Residential development (SR1) to Subdivisional Area Zone and subsequent subdivision of the resulting property into Eighteen (18) residential erven, one (1) Public Open Space (OS2) erf and one (1) Road and Parking (TR2B), is appropriate for the location and size of the property.

The access road, an existing "right of way" over Erf 1490, Portion A, is an extension of Kolgans Close. This will be subdivided off from Erf 1490 and is the only access road available.

There are existing water and sewage pipelines that are located within close proximity to the residential property and connected to existing municipal infrastructure.

The absence of alternative sites restricts the options available to the owner. This property is the only viable choice for meeting the development objectives. Given the singular nature of the available property, a comprehensive site selection matrix may not be applicable in this scenario. The owner is compelled to focus on the specific attributes of the chosen property. The motivation for selecting this property lies in the imperative to proceed with the development, considering Overstrand housing needs and the absence of alternative sites. There are few undeveloped sites within the Vermont urban area which are appropriate for densification to the extent possible on RE/1489 Vermont, which is a key policy objective of the Overstrand municipality.

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

The Remainder of Erf 1489 (RE/1489), Vermont, is zoned for residential development in terms of municipal planning provisions. While the property could accommodate a single residential dwelling under its current zoning, this option was not pursued as it would not align with the Overstrand Municipality's development strategy, which promotes the densification of urban properties within the urban edge. In addition, the vegetation present on site is degraded and largely transformed, and no plant species of conservation concern were identified during the site investigation.

A single residential unit would also not address the need for upgrading and formalising the existing access road, nor would it facilitate the extension of the municipal road network to engineering standards. These infrastructure requirements necessitated consideration of alternative residential layouts that would make more efficient use of the site. Through the proposed upgrade of the existing access road, the development will also provide an opportunity to improve the current hydrological functioning of the wetland area. The installation of additional culverts along the road alignment will facilitate the natural flow of water across the site and assist in managing stormwater more effectively.

Consideration of Layout Alternatives

Two layout options were explored, all within the same site boundary. Both layout alternatives proposed rezoning of the property from Single Residential Zone 1 to Subdivisional Area Zone for the proposed residential development and subsequent subdivision to General Residential Zone 1, an Open Space and Roads. However, the alternatives differed in the number of units, the configuration of internal roads, and the size of the open space provided.

Alternative 2 (Preferred Layout) was selected as it:

- → Provides a larger and more functional public open space, easily accessible to residents;
- → Improves the design and layout of internal roads, ensuring better circulation and compliance with municipal access standards;
- → Accommodates 18 free-standing residential units, a density that balances municipal densification objectives with the character of the surrounding neighbourhood; and
- → Optimises the use of existing infrastructure while limiting unnecessary environmental impacts.

Access Considerations

Access to the site will remain via the existing 'right of way' road, which is an extension of Kolgans Close over Erf 1490, Vermont. As this is the only viable route into the property, no alternative access points were considered. The upgrading of this road to municipal standards forms an integral part of the development.

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

No property alternatives were considered as RE/1489. The existing right of way access over Erf 1490 is the only possible route to access RE/1489 and adjacent properties.

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

Positive Impacts:

→ The proposed development contributes to addressing housing needs, providing residences for single families.
→ Job creation and economic growth are anticipated during the construction phase, fostering local economic development.
→ The property is easily connected to water, sanitation and electricity and there is capacity for services for the proposed 18 houses.
→ The property is relatively close to and easily assessable to all members of the community.
→ The inclusion of reasonably large open space and reducing the number of houses on the property demonstrates an effort not to maximise the densification of the property.
→ The property is appropriate for densification and falls within an area that the Overstrand municipality considers appropriate for densification.
→ It is one of very few remaining undeveloped appropriate residential erven in Vermont.

Negative Impacts:

→ The property includes Critical and Degraded Critical Biodiversity Areas (CBA). However, ground truthing has established that very little of the Hangklip Fynbos vegetation remains and that, without regular burning, this vegetation type cannot survive
→ The primary negative impact is the removal of vegetation (just over 1Ha (±10 700m^2)). Some of the removed vegetation may be natural, although most is transformed by past inclusion in an urban garden and invasion by AIP. The clearance of vegetation may result in habitat loss and potential impacts on biodiversity; however, the site is highly transformed and would require significant rehabilitation to return to its natural state
→ The development may alter the visual character of the area, transitioning from vegetation to urban infrastructure, although in line with surrounding development already in place in Vermont.
→ Construction activities may contribute to soil erosion, especially in areas where vegetation is removed, necessitating erosion control measures.
→ During the construction phase, noise and dust generation may occur, impacting the immediate environment.
→ The increased area of hardened surfaces may increase volume and velocity of run off into and contamination of the UVB wetland.

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

Provide a description of the preferred activity alternative.

N/A

Provide a description of any other activity alternatives investigated.

N/A

Provide a motivation for the preferred activity alternative.

N/A

Provide a detailed motivation if no activity alternatives exist.
N/A
List the positive and negative impacts that the activity alternatives will have on the environment.
N/A

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

Provide a description of the preferred design or layout alternative.

It should be noted that there is limited scope to develop significantly different layouts for the development of RE/1489. The layout design is directed or constrained by the existing access road over Erf 1490, need and desirability and existing development in Vermont. The difference between layout alternatives 1 and 2 only relate to the number and size of the erven and size of the open space. For this reason, Alternative 2 is the preferred layout.

Retaining the status quo as reflected in the no-go alternative, is not preferred. There are no fatal flaws identified that would preclude development of the RE/1489. A single residential house and outbuildings could be built on the property, within the existing zoning.

The existing right of way over Erf 1490 must be retained as it is the only road to access this and a number of neighbouring properties. The access issues relating to formalising the extension of Kolgans Close, by subdividing a 10m wide portion from the approximately 150m long eastern boundary of Erf 1490, are critical in the long term to allow for appropriate maintenance and management of the road and infrastructure in the road reserve, by the municipality.

The Remainder of Erf 1489 is one of the last remaining vacant erven in Vermont that can potentially contribute to infill development within the built-up suburb of Vermont.

ALTERNATIVE LAYOUT 2 (PREFERRED)

The preferred design or layout alternative for the proposed development is based on the establishment of 18 residential erven, a significantly larger private open space area, internal road and parking within the pre-existing property (RE/1489) situated within the urban area in Vermont. The primary objective is the creation of a cohesive community featuring free standing, individual-family residences.

The layout incorporates designated areas for roads, parking, and an area designated for private open space. Town planning issues relating to the turning radius required, especially for service and emergency vehicles have been addressed. The Public Open Space is larger (1280m^2) and more 'usable' for all residents.

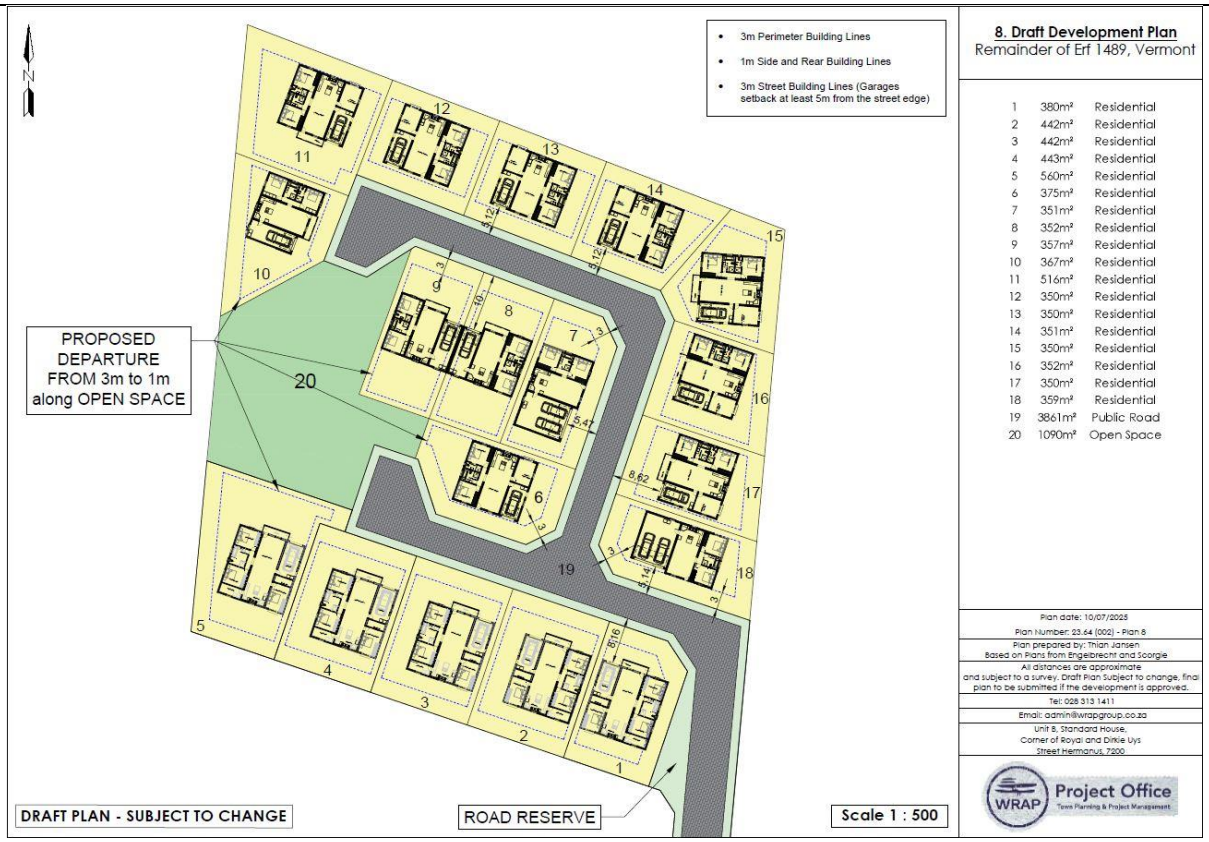

Figure 20: Preferred site development plan (Alternative 2).

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

ALTERNATIVE LAYOUT 1

The location of the development footprint in Alternative 1 is substantially similar to the preferred layout but with more erven (**22 residential)** but differs in the smaller size of each erf and the smaller less "usable" Open Space.

The orientation and size of the private open space is largely different. There is a relatively smaller area of approximately 1003 m^2 designated for open space for Alternative 1 compared to the preferred layout (Alternative 2), however the anticipated impacts are not expected to be significantly different.

Negative impacts associated with Alternative 1 are largely town planning issues:

- → 22 residential erven will result in properties that are too small, although this would still be permitted within the GR1 zoning of 35 units/hectare.
- → The turning circle does not comply with road design regulations
- → Access to each residential property from the road is not acceptable
- → The design of stormwater runoff drains should be improved.
- → The size and access to the Public Open Space is not optimal.

The formalisation of the existing right of way over Erf 1490 into a Public Road, benefits not only the proposed developments residents but neighbours and owners as well. The use of an already established road reduces possible impacts associated with the construction of a completely new road.

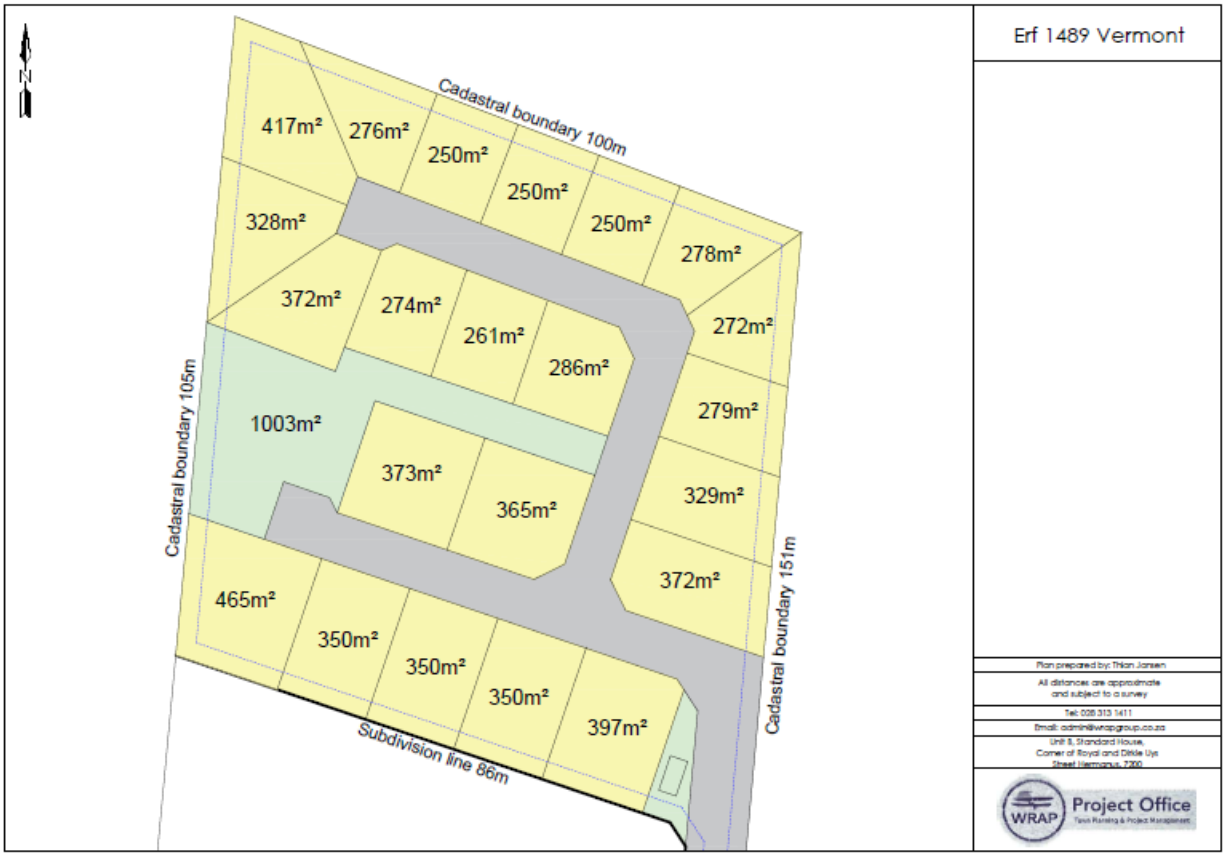

Figure 21. Alternative 1 layout of 22 residential erven on Rem/1489 Vermont.
(The access over Erf 1490 cannot be relocated and is therefore not shown on the above SDP)

NO - GO

The no-go alternative entails retaining the status quo and not pursuing densification of the site. While this option would avoid all potential ecological impacts associated with the development, it would also forego the potential benefits such as job creation and economic activity generation and provision of housing that would be accessible for a wider range of incomes. No development on site would also result in development opportunities being sought elsewhere rather than infill development within a built-up area. This could ultimately promote urban sprawl and increased environmental impacts in more pristine, less developed areas.

No fatal flaws have been identified that would preclude this site being developed with a single residential house, as per the existing zoning and adjacent landuse. Although the No-Go alternative would mitigate direct (construction phase) and the few identified ecological impacts, its potential negative impacts, including visual and noise disturbances, remain significant. The demand for services (Water, Sewer, Electricity) would be reduced. However, it is important to note that this alternative would eliminate the potential benefits of the property owner and to the rates base of the local municipality. Additionally, the issue of access to the above and neighbouring properties would not be resolved.

Overall, the no-go alternative possibly offers very limited positive impacts due to its lower direct ecological and social impact especially during the construction phase. The degraded natural environment due to previous land use as a residential garden and alien infestation suggests that this small property of just over 1Ha, and proximity to the R43 National road, will not ever contribute in any way to maintaining biodiversity in Vermont. This will also be a missed opportunities for provision of housing, job creation and economic activity generation.

Comparative Analysis

The preferred alternative (Alternative 2) offers a slightly reduced ecological impact due to the increased size of the Open Space and the reduced number of residential units. However, the additional 4 units would have also resulted in a slightly higher demand on the local authority for water, sewage and electricity services.

The existing access (extension of Kolgans Close) over Erf 1490 will be retained, but it will need to be formalised and upgraded to cope with increased traffic in the future. In addition, the sewer pipeline must be replaced and upsized, not specifically for subject development but also to service a number of erven in proximity to the site. The upgrade of the existing road will have short term impacts on the wetland over which it traverses during the construction phase, but it is unlikely to have a significant change from the environmental impact of existing road and services once this upgrade is completed, and with improved road design the functionality of the wetland could be improved. This access road is shown as having no possibility for rehabilitation of a relict wetland in the Aquatic Biodiversity Assessment Report.

The required upgrade to the existing access road is applicable to both alternatives. The electricity, sewer and water services are already in place serving the homes on adjacent properties.

Provide a motivation for the preferred design or layout alternative.

Alternative 2 is the preferred alternative.

This alternative is consistent with town planning zoning requirements, the principles of need and desirability, and the findings of the Aquatic Biodiversity Assessment. The design provides a balanced approach to residential development by integrating environmental considerations, particularly with respect to Open Space provision and stormwater management.

The preferred layout reduces the overall number of residential units while increasing the extent and functionality of the designated Open Space. This not only lessens the development footprint but also enhances community value by offering a usable and accessible open area. Furthermore, the layout improves vehicle circulation and access through a more efficient internal road design.

Importantly, the preferred alternative also provides municipal benefits. The proposed access road will be upgraded and incorporated into the Vermont public road network, contributing to broader infrastructure improvements in the area. The access road serving the development will be upgraded and formally incorporated into the Vermont public road network, representing a tangible contribution to broader infrastructure improvements in the area that extends beyond the boundaries of the development itself. This is an important consideration in evaluating the desirability of the preferred alternative, as it demonstrates that the development does not merely extract value from the surrounding public infrastructure but actively contributes to it.

With regard to access, no alternative layout options have been taken into consideration for this development. For this reason, it is important to note that all individual existing access points from the R43 were closed by the Western Cape Department of Transport and Public Works some years ago, and no new access points onto the R43 will be permitted. This position was confirmed during recent engagements with the Department in the context of the proposed Featherlands (Paradise Park) development, where the Department explicitly required that the existing access onto the R43 be permanently closed and that access to the development be taken from Malmok Street. This regulatory position is binding and non-negotiable, and it means that there are no viable alternatives to the proposed access arrangement for the current development. The access solution incorporated in Alternative 2 is therefore not merely preferred but is the only feasible

option available, and no other access alternatives to the site have been or could reasonably be explored given the Department's firm stance on this matter.

Overall, Alternative 2 represents a sustainable and context-sensitive design that balances development needs with environmental and community considerations.

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

N/A

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

There are potential impacts associated with both layout alternatives on the receiving environment. Layout Alternative 2 (preferred) and Alternative 1 will have similar positive impacts, especially with respect to the upgrade of the access road.

Alternative 1

Positive Impacts

- → Contribute to the very high demand for residential opportunities
- → Increase investment in the area.
- → Upgrade and / or contribute to service and road infrastructure in the area.
- → Construction employment opportunities
- → Increased rates and taxes from a single erf.

Negative Impacts

- → A smaller allocation of Open Space area limits opportunities for indigenous plants to be cultivated.
- → 22 residential units will create a higher demand for services from the municipality.
- → Town Planning and Road Design regulations regarding access within the residential area on RE/1489 are not addressed.
- → Stormwater management issues remain.

Alternative 2: Preferred

Positive Impacts

- → Supply of residential erven, although not to the maximum permitted, is increased while maintaining a sense of place.
- → Allows for densification within the urban area on land that has been transformed over many years as an urban garden.
- → The incorporation of open spaces within the development provides opportunities for recreation, benefitting the well-being of residents.
- → Limiting the number of residential units to 18 reduces the demand for services and allows for an improved sense of place.
- → Maximum Coverage for all buildings is 65%. The reduced number of buildings reduces this coverage.
- → Construction employment opportunities
- → Stormwater / Wetland management is improved by proper design and construction

Negative Impacts

- → The clearance of vegetation, within this transformed landscape, could result in increased run off and soil erosion
- → Limiting the number of houses to 18 could impact the economic viability of the development.

NO - GO

No fatal flaws have been identified that would exclude the site from any development. The site could still be developed as per the existing Single Residential zoning (SR1)

No densification would have the following impacts.

Positive Impacts

- → Reduces the demand for services from the local municipality.
- → Retain open area, even if transformed, next to the R43.

Negative Impacts

- → No provision of new housing to accommodate the growing population.
- → No investment opportunities or employment opportunities within the construction sector.
- → Vacant urban land does not comply with the Overstrand Town Planning Scheme and Spatial Development Plan requirement for densification.

The formalisation of the right of way access, the upgrading of this access road and the upsizing of existing services all need to take place.

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

Provide a description of the preferred technology alternative:

While the owner will prioritize responsible development practices, no specific alternative construction technologies were explicitly explored for this project. However, the final design and construction methods outlined in the EMPr will incorporate best practices and readily available technologies that minimize environmental impact, considering factors like resource efficiency, waste reduction, and sustainability. The newest technology will be explored to reduce ecological impacts in respect of energy use.

Provide a description of any other technology alternatives investigated.

N/A

Provide a motivation for the preferred technology alternative.

N/A

Provide a detailed motivation if no alternatives exist.

N/A

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

Positive:

→ Energy-saving lighting equipment
→ Reducing energy consumption
→ Environmentally friendly and eco-friendly

Negative:

→ Air conditioners - while air conditioning systems cool indoor spaces, they release heat into the external environment, potentially contributing to localized heat effects and increasing overall environmental impacts.

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

Provide a description of the preferred operational alternative.

The operational alternative for the upgrade of the existing access road over Erf 1490 is not considered as it already exists but must be upgraded in line with municipal road construction specifications and methodology.

The preferred operational alternative for the proposed residential development on RE/1489, Vermont, Overstrand Municipality involves the following measures to avoid negative impacts, mitigate unavoidable negative impacts, and maximize positive impacts:

Management of Open Spaces:

Open spaces must be managed to keep them free of alien vegetation at all times. These areas must be maintained in a natural state as much as possible. No permanent infrastructure will be permitted in these open spaces, and no dumping or stockpiling activities will be allowed. As it will not be possible to burn the vegetation due to the close proximity to the R43 and homes on this and neighbouring properties this area is no longer natural vegetation.

Management of Private Gardens:

Private gardens within the development should be predominantly indigenous, with limited hardened surfaces and areas. Gardens are required to be kept free of alien vegetation. Aggressive lawns and gardens should be limited to minimize negative impacts. Down pipes must discharge onto vegetated areas.

Fauna Protection:

The wetland specialist located a dwarf chameleon during the assessment process. This is not a wetland obligate species. Other animals that will also be impacted are those that are slow or reluctant to move during clearing, including frogs, tortoises, and the fossorial animals (including invertebrates). The only feasible mitigation is a faunal Search and Rescue prior to site clearing. The direct impacts could be slightly reduced.

Energy Efficiency Measures:

Design and construction practices will incorporate energy-efficient measures to minimize the environmental impact associated with energy consumption during the operational phase. This may include the use of energy-efficient appliances, lighting, and renewable energy sources where feasible.

Waste Management:

The operational phase will involve waste management practices that include regular collection by the municipality. Recycling activities will be conducted at the dumping site to reduce the environmental impact of waste disposal. On site waste separation and sorting at the household level must be encouraged.

Landscaping Strategies:

Landscaping strategies will be implemented to minimize the visual impact of construction and operational activities. This must involve the use of indigenous vegetation in landscaping to maintain a natural feel and reduce visual disruptions. Indigenous landscaping is recommended and is also the waterwise option.

Environmental Monitoring:

Continuous environmental monitoring will be carried out to assess and manage potential impacts during the post commencement phase. This includes monitoring the preservation of the open spaces, and other sensitive wetland area adjacent to the existing access road to ensure that pollutants do not contaminate the area and to assist downstream conservation efforts.

Provide a description of any other operational alternatives investigated.

No other operational alternatives investigated. The proposed residential land use is within the existing zoning for the site.

Provide a motivation for the preferred operational alternative.

The preferred post construction / commencement alternative for the proposed residential development on RE/1489, and the access road over Erf 1490, Vermont, Overstrand Municipality has been carefully chosen to align with sustainable development practices, and the reduction of environmental impacts, whilst meeting the needs of the community and aligning with the required planning parameters and specifications, specifically with respect to limiting urban sprawl and densification. The motivation for this preferred operational alternative includes several key considerations:

- → The upgrade of the existing access road to comply with municipal infrastructure engineering requirements, while acknowledging the sensitivity of the wetland / drainage line it traverses, will formalise the existing right of way landuse.
- → The management of open spaces areas reflects a commitment to preserving the natural environment within the development as far as practically possible. By keeping these areas free of alien vegetation, avoiding permanent infrastructure, and prohibiting dumping, the development seeks to maintain ecological integrity.
- → Specific measures, such as replanting sensitive plant species in open spaces, contribute to biodiversity protection. The development plan acknowledges the importance of preserving and enhancing local flora and fauna.
- → The incorporation of energy-efficient measures, such as the use of energy-efficient appliances and lighting, aligns with sustainable development goals. These practices aim to reduce the environmental footprint associated with energy consumption during the operational phase.
- → The incorporation of water use reduction measures, such as low volume flush mechanisms, aligns with sustainable development goals. These practices aim to reduce the environmental footprint associated with water consumption during the operational phase.
- → Waste management practices, including waste management and encouraging household recycling initiatives, demonstrate a commitment to responsible waste disposal. By encouraging waste separation and segregation at the household level, the development contributes towards minimizing the environmental impact of waste streams at the source

→ The prohibition of feeding wild animals and the avoidance of poisons or traps demonstrate a commitment to wildlife protection. Engaging professional help for addressing 'problem' animals ensures that fauna is treated with care and expertise.
→ Landscaping strategies and the use of indigenous vegetation aim to minimize the visual impact of construction and operational activities, especially with regard to the scenic route along the R43 national road. This consideration helps in maintaining the aesthetic appeal of the area and reducing disruptions to the natural landscape.

The commitment to continuous environmental monitoring reflects a proactive approach to address any emerging issues during the operational phase. This adaptability ensures that the development remains in compliance with environmental regulations and standards.

Provide a detailed motivation if no alternatives exist.

N/A

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

Positive impacts

→ The property is within the urban boundary and will retain a similar residential zoning and landuse to adjacent properties.
→ Investment opportunities for people wanting to invest in property.
→ Provision of housing for families or individuals relocating in the area and looking to buy a house.
→ Location of the development will provide housing opportunities for retired people or permanent residents rather than holiday accommodation only utilised during holiday season.
→ Job construction and skills transfer during the post commencement phase
→ Investment in the area.
→ Infill and densify remaining residential areas within the already built-up urban areas, ahead of disturbing more intact or ecologically sensitive greenfield sites elsewhere.
→ Maintenance of public open space will ensure that alien invasive plant species are permanently removed.

Negative impacts

→ Operational phase impacts will take effect as soon as any of the natural vegetation and faunal habitat on this small site is lost or disturbed, and will persist in perpetuity during the post-commencement phase
→ The cumulative impacts in the region are loss of natural vegetation and faunal habitat, urban development and alien plant invasion.

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' Option, which involves not implementing the proposed development activity, is not the preferred choice due to several reasons:

→ The 'No-Go' Option would result in the existing access road over Erf 1490 remaining a right of way instead of becoming a public road with associated infrastructure managed by the Overstrand municipality.
→ The construction and operational phases of the development would generate employment opportunities, contributing to economic growth and improved livelihoods for individuals in the community which would not exist if the proposed development did not go ahead.
→ The absence of the proposed development could lead to a negative impact on socioeconomic dynamics, potentially hindering local economic development initiatives.

- → The development of residential erven is aligned with the community's need for more residential housing, and not implementing the project would contribute to a shortage of housing options.
- → The absence of the proposed development may lead to challenges in meeting the growing housing demand in the area, potentially affecting the overall social well-being of the community. Densification of a single erf with a residential zoning to provide housing opportunities to more than one family is in line with the Overstrand Municipal SDF.
- → From the developer's standpoint, not proceeding with the project means a missed opportunity for investment and potential economic gain.
- → The 'No-Go' Option may not align with the developer's goals and aspirations, impacting their ability to contribute to community development and economic growth.
- → The proposed development is likely to bring about positive changes in the community, including improved infrastructure, increased housing options, improved security and potential economic investments.
- → No fatal flaws have been identified that would preclude the development of the residential property.
- → Removal and management of alien invasive plants from the site is likely to be periodic at best, with associated high fire risks within the built urban environment.

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.

Layout Alternative 1 (22 residential erven) and Alternative Layout 2 (18 residential erven) are the only two alternatives considered for RE/1489. There are no other alternatives identified that would avoid the negative impacts associated with the proposed development.

RE/1489 Vermont is one of the last remaining large erven, suitable for rezoning and subdivision, in Vermont. The proposal is in line with adjacent and surrounding development concept and the existing residential zoning. Densification within the urban boundary is desirable to the alternative of urban sprawl.

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

The preferred location for the subdivision of RE/1489, with existing zone Single Residential (SR1), property, and the subdivision of the existing right of way access road over Erf 1490, to create a public road to access the above and adjacent residential dwellings. The development encompasses the establishment of 18 residential erven, road infrastructure, parking facilities, and an open space.

This location ensures responsible land use practices, fostering sustainable development within the existing urban area of Hermanus, particularly in Vermont, complying substantial with the SDP in that it limits urban sprawl while providing homes for an increasing population.

The preferred alternative for the proposed development is Alternative 2, as it demonstrates significant positive socioeconomic impacts, including job creation, economic growth, and housing investment opportunities; while maintaining a sense of place in respect of the density of development in close proximity.

The property is currently in degraded and transformed state, as identified by the botanical specialist. Moreover, findings from the plant species and terrestrial biodiversity assessment suggest that the site is degraded in nature with high densities of alien invasive plants species as well as high densities of grasses. No plants species of conservation concern were identified during the site survey. For the above findings the Site Ecological Importance was assessed as being very-low.

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).
During the identification of alternatives, no "no-go" areas were identified within the RE/Erf 1489. The no-go option is not applicable for the proposed subdivision of the existing access road on Erf 1490 Vermont. The impact on the wetland the road traverses has been assessed In the Aquatic Biodiversity Assessment. The specialist assessment conducted as part of the evaluation process have not highlighted any specific areas deemed unsuitable or restricted for the proposed development. Therefore, there are no coordinates associated with "no-go" areas on the property, as the assessments have not identified such constraints.

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.

An impact is any change to a resource or receptor brought about by a project component or through the execution of a project related activity. The evaluation of baseline data provides information for the process of evaluating and describing how the project could affect the biophysical and socio-economic environment.

The Preferred and Alternative site development plans a substantially similar apart from the number of units and the envisaged.

Impact is described according to their nature or type, as follows:

Nature / Type

Nature/ Type of impact	Definition
Positive	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Negative	An impact that is considered to represent an adverse change from the baseline, or introduces a new undesirable factor.
Direct	Impacts that result from a direct interaction between a planned project activity and the receiving environment/receptors (e.g. between occupation of a site and the pre-existing habitats or between an effluent discharge and receiving water quality).
Indirect	Impacts that result from other activities that are encouraged to happen as a consequence of the Project (e.g. in-migration for employment placing a demand on resources).
Cumulative	Impacts that act together with other impacts (including those from concurrent or planned future third-party activities) to affect the same resources and/or receptors as the Project.

Significance

Impacts are described in terms of significance. Significance is a function of the magnitude of the impact and the likelihood of the impact occurring:

Impact Magnitude	
Extent	**On site** – impacts that are limited to the boundaries of the development site.
	Local – impacts that affect an area in a radius of 20 km around the Development site.
	Regional – impacts that affect regionally important environmental resources or are experienced at a regional scale as determined by administrative boundaries, habitat type/ecosystem.
	National – impacts that affect nationally important environmental resources or affect an area that is nationally important/ or have macro-economic consequences
Duration	**Temporary** – impacts are predicted to be of short duration and intermittent/occasional.
	Short-term – impacts that are predicted to last only for the duration of the construction period.
	Long-term – impacts that will continue for the life of the Project but ceases when the project stops operating
	Permanent – impacts that cause a permanent change in the affected receptor or resource (e.g. removal or destruction of ecological habitat) that endures substantially beyond the project lifetime
	BIOPHYSICAL ENVIRONMENT
	Negligible – the impact on the environment is not detectable.
	Low – the impact affects the environment in such a way that natural functions and processes are not affected.
	Medium – where the affected environment is altered but natural functions and processes continue, albeit in a modified way.
Intensity	**High** – where natural functions or processes are altered to the extent that they will temporarily or permanently cease
	SOCIO-ECONOMIC
	Negligible – there is no perceptible change to people's livelihood
	Low - people/communities are able to adapt with relative ease and maintain pre-impact livelihoods

	Medium – people/communities are able to adapt with some difficulty and maintain pre-impact livelihoods but only with a degree of support
	High - affected people/communities will not be able to adapt to changes or continue to maintain pre-impact livelihoods.

Likelihood – the likelihood that an impact will occur

Likelihood	
Unlikely	The impact is unlikely to occur
Likely	The impact is likely to occur under the most conditions.
Definite	The impact will occur

Once an assessment is made of the magnitude and the likelihood, the impact significance is rated through a matrix process:

Significance				
Magnitude		Unlikely	Likely	Definite
	Negligence	Negligible	Negligible	Minor
	Low	Negligible	Minor	Minor
	Medium	Minor	Moderate	Moderate
	High	Moderate	Major	Major

Definition of significance:

Negligible	An impact of negligible significance (or an insignificant impact) is where a resource or receptor (including people) will not be affected in any way by a particular activity, or the predicted effect is deemed to be 'negligible'.
Minor	An impact of minor significance is one where an effect will be experienced, but the impact magnitude is small (with and without mitigation) and within accepted standards, and/or the receptor is of low sensitivity/value.
Moderate	An impact of moderate significance is one within accepted limits and standards. The emphasis for moderate impacts is on demonstrating that the impact has been reduced to a level that is as low as reasonably practicable. This does not necessarily mean that 'moderate' impacts have to be reduced to 'minor' impacts, but that moderate impacts are managed effectively and efficiently.

Major	An impact of major significance is one where an accepted limit or standard may be exceeded, or large magnitude impacts occur to highly valued / sensitive resource / receptors. A goal of the EIA process is to get to a position where the Project does not have any major residual impacts.

Significance of an impact is then qualified through a statement of the degree of confidence. Degree of confidence is expressed as low, medium or high.

Significance colour scale (if applicable):

Negative	Positive
Negligible	Negligible
Minor	Minor
Moderate	Moderate
Major	Major

Impact rating colour scale:

Negative	Positive
Negligible	Negligible
Low	Low
Medium	Medium
High	High

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.

SUMMARY OF ALTERNATIVES

ALTERNATIVE 1

Subdivision of Erf RE/1489 into **22** residential erven, Open Space and Public Road and Parking. Subsequent development and construction.

Existing "Right of Way" access over Erf 1490 formalised by being subdivided from the property and included in the Public Road system

Positive

- → Responds to high demand for residential properties in Vermont and Hermanus
- → Improved design of road over UVB wetland
- → Investment in the area.
- → Increased rates and taxes base
- → Upgrade of infrastructure
- → Job creation

Negative

- → Open space largely unusable and inaccessible.
- → Inadequate turning radius, especially for service and emergency vehicles within the residential area
- → Stormwater runoff into wetland

ALTERNATIVE 2

Subdivision of RE/1489 into **18** residential erven, Open Space and Public Road and Parking. Subsequent development and construction.

Existing "Right of Way" access over Erf 1490 formalised by being subdivided from the property and included in the Public Road system

Positive

- → Responds to high demand for residential properties in Vermont and Hermanus
- → Reduces the number of houses on the property.
- → Increases size of Public Open Space and other Town Planning considerations
- → Formalisation of right of way access over Erf 1490
- → Improved design of road over UVB wetland
- → Investment in the area.
- → Increased rates and taxes base
- → Upgrade of infrastructure
- → Job creation

Negative

- → Stormwater runoff into wetland
- → Visual impact from R43 National Road
- → Construction phase impacts

ALTERNATIVE 1	
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk:	**1. Socio-Economic**
Potential Impact:	Job creation during the development / construction phase Provision of housing. Investment and increased rates and taxes Formalisation of the existing right of way access road. Job creation of the upgrading of the access road over Erf 1490 Vermont and sewer and water pipelines in the road reserve.
Nature of impact:	Positive
Extent and duration of impact:	Local; Permanent;
Consequence of impact or risk:	Provision of housing Improved livelihoods for the local community
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Housing opportunities and job creation for local community
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	1. Ensure labour force is sourced locally as far as possible. 2. Consider gender balance during when sourcing labour.
Residual impacts:	1. Improved livelihoods 2. Improvement of local economy, skill transfer, investment in the area.
Cumulative impact post mitigation:	Job creation and skill transfer to local community
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**2. VISUAL**
Potential impact	Visual impacts of construction site and construction activities.

	Houses visible form R43 road.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term to permanent
Consequence of impact or risk:	Built environment replaces open space Construction activities visible
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	Not possible
Indirect impacts:	None
Cumulative impact prior to mitigation:	Visual impacts associated with construction
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Negative
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	1. Good design approved by local authority. 2. Good housekeeping of construction site and working areas. 3. Screen the visual elements of site construction camp with netting. 4. Locate the site camp in a transformed area. Not on proposed Open Space. 5. Site officer to walk the site on a daily basis to check for general site aesthetics and visual impacts, particularly prior to weekends and holidays. 6. Officer to ensure that waste and batching areas are correctly screened and secured to prevent spread by wind, rain or animals
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site. Residential development visible.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**3. DISTURBANCE OF WETLAND**
Potential impact	Disturbance of wetland habitat within the UVBW may occur due to the proximity of the proposed residential development, as well as the upgrade of the existing access road and installation of sewer / water supply pipelines, including but not limited to vegetation clearing, infilling, and construction of the road and housing. The disturbance of aquatic habitat will also provide an opportunity for alien invasive species (AIS) to proliferate. During the operational phase, foot traffic, along with littering and dumping in the wetland area may result in disturbance of wetland habitat.

Nature of Impact:	Low Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk:	- Wetland functionality loss, vegetation loss, connectivity loss - Change in flow patterns due to increased hardened surface area. - Change in hydrology of the wetland by the upgrade of services and the access road, although it is already modified.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low. The existing impacted UVB drainage line has low functionality and highly modified.
Degree to which the impact can be reversed:	Low cost
Indirect impacts:	Continued loss of wetland vegetation.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area). • Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable). • Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go area. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp. • Demarcation of the construction footprint/working servitude must be signed off by an ECO (or similar). Demarcation should not be removed until construction is complete, and rehabilitation (if applicable) has taken place. • Prohibit the dumping of excavated material, building materials or removed vegetation within the No Go area. Building material must be stored at the designated storage

	area located outside of the no-go area. Spoil material must be appropriately disposed of at a registered waste disposal facility. • Undisturbed topsoil and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation. • Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible. • Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities (as applicable). • Clear and remove any rubble or litter that may have been accidentally deposited into the no-go area because of construction activities and dispose of at an appropriate registered facility. • An ECO must inspect the construction footprint of the road upgrade on a weekly basis and must take immediate measures to address unforeseen disturbances to the wetland. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor. • Once construction has been completed, orange hazard fences as well as all construction waste, rubble, and equipment must be removed from the construction footprint. • In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent. • Vegetation which needs to be re-planted (if applicable) within each Erf should be planted with indigenous vegetation. • A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.
Residual impacts:	Loss of remnants of wetland vegetation
Cumulative impact post mitigation:	Loss of remnants of wetland vegetation
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**5. ALTERED FLOW REGIME**

Potential impact	Site clearance, infilling, and compaction will result in alteration of the flow regime of wetland area on the site. The hardened catchment area would result in increased stormwater runoff, velocity and increased flood peaks within the wetland and would also likely result in sedimentation and erosion. Given that the wetland's hydrological status quo is seriously modified, should multiply culverts, etc. be constructed during the road upgrade, there will more likely be positive impacts associated with the road upgrade in this respect (increased hydrological connectivity).
Nature of Impact:	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk:	Change in hydrology of the wetland by the upgrade of services and the access road.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Continued altered flow of the wetland
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable). • Should flow need to be impeded or diverted temporarily within the watercourse while works are being undertaken, it is recommended that the diversion be undertaken during the dry season and that the flow be piped past the works and discharged into the watercourse immediately downstream of the works. The diversion should be kept to a minimum period and should be mitigated to ensure that no sedimentation or erosion is resulting downstream. • Natural water flow within the UVBW must be maintained. Multiple culverts or open-bottom structures to maintain sheet flow is recommended as well as permeable shoulders

	or subgrades to allow natural infiltration of water into wetland soils where and as applicable. • The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat. • Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs, specifically during storm events, such as through vegetated swales. • Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems. • Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately. • Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands. • Implement erosion control measures where required. Examples of erosion control measures include: o Covering steep/unstable/erosion prone areas with geotextiles. o Covering areas prone to erosion with brush packing, straw bales, mulch. o Stabilizing cleared/disturbed areas susceptible to erosion with sandbags. o Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the ECO / site manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand. • Rainwater harvesting schemes (for the residential development) may reduce runoff intensity and thereby mitigate the impact of catchment hardening.

	• The alien invasive vegetation present within the wetland area must be removed and replanted with indigenous wetland vegetation. • A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.
Residual impacts:	Continued altered flow from the road works
Cumulative impact post mitigation:	Continued altered flow from the road works
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**6. WATER QUALITY IMPAIRMENT**
Potential impact	Accidentally spilled cement, construction chemicals, sewage during the upgrade/installation of pipelines, or petrochemicals from construction vehicles may find their way into the wetland area. Additionally, litter and dumping may occur due to the proximity of the proposed development to the wetland area. The removal of vegetation and stripping of soils from the construction footprint will result in the exposure of soils to erosive elements. An increase in stormwater runoff and velocities from exposed and compacted areas, particularly during peak rainfall periods, may result in the formation of erosion gullies and rills in the downslope wetland. In addition, destabilisation of soils during the removal of vegetation and excavation activities, as well as the stockpiling of soils may result in an increase in the runoff of sediment laden stormwater into the downslope wetland from the construction footprint, particularly during the rainy season. During operation, pollutants may enter the wetland via stormwater or sewage leaks (although highly unlikely). However, with the inclusion of stormwater design measures which allow for the infiltration and treatment of stormwater this impact can be greatly reduced.
Nature of Impact:	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk:	Change in hydrology of the wetland by the upgrade of services and the access road.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	Low of the
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low

Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area). • Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable). • The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat. • Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales. • Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands. • The site manager / ECO must check the No Go area for pollution/spills, erosion damage and sedimentation weekly and after every heavy rainfall event. Should pollution, erosion or sedimentation be noted, immediate corrective measures must be undertaken. • Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.

	• Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. • Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces. • Drip trays must be utilised at all fuel dispensing areas; and during the maintenance of existing sewer flow as possible. • Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the No Go area and should only occur on bunded areas with a water/oil/grease separator. • Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site. • Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction to reduce the risk of leachate from imported materials contaminating the wetland area. • Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it. • Construct temporary bunds around areas where cement is to be cast in situ. • Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go area is strictly prohibited. • Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site. • Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility. • Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained. • Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.

	• Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.
	• Design a SWMP which will allow for the infiltration and treatment of stormwater. All stormwaters must receive basic filtering and treatment prior to its release.
	• Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.
	• Stormwater generated from areas with a higher risk of contamination such as parking areas and roads (as applicable) must receive basic filtering and treatment prior to its release into surrounding areas.
	• Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets.
	• Operational phase mitigation implemented during the design/construction phase:
	  ○ Construct sewage pipelines in accordance with the relevant SANS / SABS specifications.
	  ○ Design the pipelines to accommodate the operating and surge pressures.
	  ○ Provide surge protection e.g. air valves.
	  ○ Allow for scour valves along pipelines to ensure sewage pipelines can be emptied in a controlled manner if required.
	  ○ Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the wetland. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter.
	• The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles.
	• These measures should be addressed, implemented and monitored in terms of the Environmental Management Plan for the construction phase.

Residual impacts:	Water quality impairment is expected to be significantly reduced with proper implementation of mitigation measures.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**4. DUST**
Potential impact	Dust generated from site clearing and site preparation.
Nature of Impact:	Negative
Extent and Duration of impact	Local, short term
Consequence of impact or risk:	Visual and health impacts Nuisance for residents adjacent to the site.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High
Indirect impacts:	Potential for reduced visibility in general area. Potential for allergic reactions in people allergic to dust.
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear entire plots and rather clear building sites only . - Ensure vehicle speed limits on site are kept to a minimum. - Delivery vehicles to keep loads covered. - Cover fine material stockpiles. - Wet dry and dusty surfaces using non-potable water. - Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials.
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction, mitigation successful.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential Impact and risk	**5. NOISE**
Potential impact	Noise generated by vehicles and machinery during construction phase.
Nature of Impact:	Negative
Extent and Duration of impact	Local, short term

Consequence of impact or risk:	Noise disturbance to transient receptors, i.e. motorists, pedestrians, residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Will not impact on resources
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Noise from construction works
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium - High
Degree to which the impact can be managed:	Medium - High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noise levels (e.g. install and maintain silencers on machinery) - Provide protective wear for workers i.e. ear plugs. - Ensure that construction vehicles and machinery are maintained regularly to reduce noise generation. - Restrict construction to normal work hours.
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**7. Terrestrial Biodiversity impacts.**
Potential impact	Residential RE/1490 Vermont The removal of vegetation for the proposed subdivision and development would be permanent loss any of the remaining natural vegetation of this disturbed/transformed site of which a portion is identified as critically endangered Hangklip Sand Fynbos.
Nature of Impact	Negative
Extent and Duration of impact	Local, Regional, Permanent.
Consequence of impact or risk	- Vegetation loss, species loss, diversity loss, connectivity loss. - Exposure of soil and degradation thereof. - Change in flow patterns due to increased hardened surfaces
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Reduction in area designated as Hangklip Sand Fynbos.

Cumulative impact prior to mitigation:	Loss of natural vegetation and faunal habitat and threatened species to ongoing agriculture, urban development and alien plant invasion.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium. The site has little remaining natural vegetation
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Loss of critically endangered vegetation
Cumulative impact post mitigation:	Loss of critically endangered vegetation
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**8. Soil erosion and associated degradation**
Potential impact	Residential RE/1489 Vermont. Site clearing and construction activities will expose bare soil surfaces, increasing the risk of erosion and sediment runoff.
Nature of Impact	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk	Exposure and loss of topsoil; sedimentation of downstream drainage lines and wetland areas; degradation of soil structure and fertility; increased runoff due to hardened surfaces.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already highly degraded and transformed with limited soil ecological value.
Degree to which the impact can be reversed:	Medium. Erosion can be rehabilitated with appropriate intervention.
Indirect impacts:	Downstream sedimentation could impact the nearby Endangered wetland area (to the southeast).
Cumulative impact prior to mitigation:	Ongoing soil degradation in the area from existing development, alien plant clearing, and urban runoff.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already degraded, but proximity to sensitive hydrological features elevates the concern.

Degree to which the impact can be avoided:	Medium. Careful construction phasing and footprint minimisation can reduce exposure.
Degree to which the impact can be managed:	High. Standard erosion and sediment control measures are well-established and effective.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Minor, localised soil disturbance during active construction phases.
Cumulative impact post mitigation:	Negligible contribution to broader catchment sediment loads if mitigation is applied.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**9. Spread and/or establishment of alien and/or invasive species**
Potential impact	Residential RE/1489 Vermont. Construction activities, soil disturbance, and movement of vehicles and equipment may facilitate the spread, introduction, or establishment of additional alien and invasive plant species on site and in surrounding areas. The site already hosts several NEM:BA A&IS Regulations Category 1b listed species, including *Acacia saligna, Acacia cyclops, Leptospermum laevigatum, Pinus radiata, and Schinus terebinthifolius.*
Nature of Impact	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk	Increased density and spread of existing invasive species; introduction of new alien species via soil movement or machinery; further transformation and degradation of any residual natural habitat in the surrounding landscape; alteration of soil conditions (e.g. elevated nitrogen from *Acacia spp.)* perpetuating dominance of nitrophilic alien grasses.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already heavily invaded and transformed, with no SCC confirmed. Surrounding areas with higher biodiversity value face greater risk.
Degree to which the impact can be reversed:	Medium. Invasive species can be controlled with sustained management effort, though legacy soil effects (e.g. from *Acacia saligna* nitrogen enrichment) may persist for years.

Indirect impacts:	Spread of invasive species from the disturbed site into adjacent road corridor and remnant vegetation patches where *Thamnochortus insignis* and other native species are present.
Cumulative impact prior to mitigation:	The broader Vermont/Overberg coastal area experiences ongoing invasive alien plant pressure, particularly from *Acacia spp.,* which continue to expand into remnant Hangklip Sand Fynbos patches.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already invaded, but disturbance could worsen spread into adjacent areas.
Degree to which the impact can be avoided:	Low. Some level of disturbance and potential spread is inherent to clearing and construction.
Degree to which the impact can be managed:	High. A systematic invasive species management programme with follow-up treatments is feasible and legally required under NEM:BA.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Minimize the number of disturbed areas. - Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur. - Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success. - Existing access routes and walking paths must be made use of wherever possible. - Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. - These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas - Runoff water on exposed areas should be controlled.
Residual impacts:	Possible re-sprouting or re-seeding of cleared invasive species, particularly Acacia spp., from persistent soil seed banks.
Cumulative impact post mitigation:	Reduced invasive species pressure on the site and adjacent remnant vegetation if management is sustained over time.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk	**1. SOCIO ECONOMIC**
Potential impact:	Access to permanent employment for the community through housekeeping. Provision of residential erven in response to local demand; Investment in the area.
Nature of impact:	Positive
Extent and duration of impact:	Local, long term

Consequence of impact or risk:	- Improves livelihoods; - Influx of people into the area; - Increased investment in the area; - Increases spending in the area.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	- Access to employment for the community during the operational phase; - Job creation; - Provision of residential erven in response to provincial demand; - Investment in the area.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	-
Residual impacts:	Investment in the area; attraction to the area; spending in the area.
Cumulative impact post mitigation:	- Increases investment in the area, - Increases attractivity of the area, - Increases spending in the area, - Access to employment for the community during the operational phase, Job creation, - Provision of residential erven in response to provincial demand,
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High positive
POST-CONSTRUCTION PHASE	
Potential impact and risk	**2. VISUAL**
Potential impact:	Typical visual impacts associated with the operational phase of a residential dwelling or group of residential dwellings that may lead to changes in sense of place of the individual from what was there and what has now changed.
Nature of impact:	Negative – changes in the visual aesthetics of the area during the operational phase. Positive - infill development within an urban area as opposed to the alienation of new land, contributing to more sustainable land use.
Extent and duration of impact:	Long term, local regional

Consequence of impact or risk:	Risk – visual impact of operation within landscape and suburb
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	High
Indirect impacts:	Loss of sense of place due to the removal of the vegetation that is appealing to nature lovers
Cumulative impact prior to mitigation:	Short term impacts associated with changes of the built infrastructure.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Implement landscaping strategies to minimize the visual impact of construction and operational activities. - Incorporate green design principles into the development to enhance aesthetics and mitigate negative visual effects. - Communicate with the community to ensure understanding and acceptance of the changes in the visual character. - Consider the use of native vegetation in landscaping to maintain a natural feel and reduce visual disruptions.
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with operational phase.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very Low Negative
POST-CONSTRUCTION PHASE	
Potential impact and risk	**3. Terrestrial Biodiversity impacts.**
Potential impact	Permanent loss any of the remaining natural vegetation of this degraded/transformed site due to residential development.
Nature of Impact	Negative
Extent and Duration of impact	Local, Regional, Permanent.
Consequence of impact or risk	- Vegetation loss, species loss, diversity loss, connectivity loss. - Exposure of soil and degradation thereof. - Change in flow patterns due to increased hardened surfaces
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Reduction in area designated as Hangklip Sand Fynbos.
Cumulative impact prior to mitigation:	Loss of natural vegetation and faunal habitat and threatened species to ongoing agriculture, urban development and alien plant invasion.

Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium. The site has little remaining natural vegetation
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Cumulative impact post mitigation:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk	**4. Soil erosion and associated degradation**
Potential impact	The new developed houses will contribute to exposed bare soil surfaces, increasing the risk of erosion and sediment runoff during the high rainfall events.
Nature of Impact	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk	Exposure and loss of topsoil; sedimentation of downstream drainage lines and wetland areas; degradation of soil structure and fertility; increased runoff due to hardened surfaces.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already highly degraded and transformed with limited soil ecological value.
Degree to which the impact can be reversed:	Medium. Erosion can be rehabilitated with appropriate intervention.
Indirect impacts:	Downstream sedimentation could impact the nearby Endangered wetland area (to the southeast).
Cumulative impact prior to mitigation:	Ongoing soil degradation in the area from existing development, alien plant clearing, and urban runoff.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already degraded, but proximity to sensitive hydrological features elevates the concern.
Degree to which the impact can be avoided:	Medium. Careful construction phasing and footprint minimisation can reduce exposure.

Degree to which the impact can be managed:	High. Standard erosion and sediment control measures are well-established and effective.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Minor, localised soil disturbance during active construction phases.
Cumulative impact post mitigation:	Negligible contribution to broader catchment sediment loads if mitigation is applied.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk	**5. Spread and/or establishment of alien and/or invasive species.**
Potential impact	Operational activities, soil disturbance, and movement of vehicles and people may facilitate the spread, introduction, or establishment of additional alien and invasive plant species on site and in surrounding areas. The site already hosts several NEM:BA A&IS Regulations Category 1b listed species, including *Acacia saligna, Acacia cyclops, Leptospermum laevigatum, Pinus radiata, and Schinus terebinthifolius.*
Nature of Impact	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk	Increased density and spread of existing invasive species; introduction of new alien species via soil movement or machinery; further transformation and degradation of any residual natural habitat in the surrounding landscape; alteration of soil conditions (e.g. elevated nitrogen from *Acacia spp.)* perpetuating dominance of nitrophilic alien grasses.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already heavily invaded and transformed, with no SCC confirmed. Surrounding areas with higher biodiversity value face greater risk.
Degree to which the impact can be reversed:	Medium. Invasive species can be controlled with sustained management effort, though legacy soil effects (e.g. from *Acacia saligna* nitrogen enrichment) may persist for years.
Indirect impacts:	Spread of invasive species from the disturbed site into adjacent road corridor and remnant vegetation patches where *Thamnochortus insignis* and other native species are present.

Cumulative impact prior to mitigation:	The broader Vermont/Overberg coastal area experiences ongoing invasive alien plant pressure, particularly from *Acacia spp.,* which continue to expand into remnant Hangklip Sand Fynbos patches.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already invaded, but disturbance could worsen spread into adjacent areas.
Degree to which the impact can be avoided:	Low. Some level of disturbance and potential spread is inherent to clearing and construction.
Degree to which the impact can be managed:	High. A systematic invasive species management programme with follow-up treatments is feasible and legally required under NEM:BA.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Minimize the number of disturbed areas. - Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur. - Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success. - Existing access routes and walking paths must be made use of wherever possible. - Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. - These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas - Runoff water on exposed areas should be controlled.
Residual impacts:	Possible re-sprouting or re-seeding of cleared invasive species, particularly Acacia spp., from persistent soil seed banks.
Cumulative impact post mitigation:	Reduced invasive species pressure on the site and adjacent remnant vegetation if management is sustained over time.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
DECOMMISSIONING AND CLOSURE PHASE	
Potential impact and risk	Decommissioning is not applicable for a residential development
Potential impact:	-
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-

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

ALTERNATIVE 2: PREFERRED

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**1. SOCIOECONOMIC IMPACTS**
Potential impact:	Job creation during the development / construction phase on Remainder of Erf 1489 of **18** Residential Houses, Opens Space and Job creation as a result of upgrading of right of way access road and sewer and water pipelines within the road reserve.
Nature of impact:	Positive
Extent and duration of impact:	Local; Permanent
Consequence of impact or risk:	Provision of houses Improved livelihoods for the community
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Housing opportunities and job creation for local community
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High Positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Increase the size of the Open Space - Ensure that the design of the roads is to Municipal specification - Ensure labour force is sourced locally as far as possible. - The gender balance to be considered during employment.

Residual impacts:	- Improved livelihoods - Improvement of local economy, skills transfer, - Investment in the area.
Cumulative impact post mitigation:	Job creation and skills transfer within the local community.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	**High Positive**

PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**2. VISUAL**
Potential impact:	Visual impacts of construction site and construction activities from the R43 and neighbouring properties.
Nature of impact:	Negative
Extent and duration of impact:	Local, short term to permanent
Consequence of impact or risk:	Built environment replaces open space. Construction activities visible from surrounding areas.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	Not possible
Indirect impacts:	None
Cumulative impact prior to mitigation:	Short term visual impacts associated with construction. Long term housing
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Medium
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Good building designs acceptable to the area - Good housekeeping of construction site and working areas. - Screen the visual elements of the site camp with netting - Locate the site camp in a disturbed area and not the proposed Open Space. - Site Officer to walk the site on a daily basis to check of visual impacts and general site aesthetics, particularly prior to weekends and holidays/ - Officer to ensure wate and batching area are correctly screened and secured to prevent spread by wind, rain or animals.
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with a construction site and residential development.

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**3. DISTURBANCE OF WETLAND**
Potential impact	Disturbance of wetland habitat within the UVBW may occur due to the proximity of the proposed residential development, as well as the upgrade of the existing access road and installation of sewer / water supply pipelines, including but not limited to vegetation clearing, infilling, and construction of the road and housing. The disturbance of aquatic habitat will also provide an opportunity for alien invasive species (AIS) to proliferate. During the operational phase, foot traffic, along with littering and dumping in the wetland area may result in disturbance of wetland habitat.
Nature of Impact:	Low Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk:	- Wetland functionality loss, vegetation loss, connectivity loss - Change in flow patterns due to increased hardened surface area. - Change in hydrology of the wetland by the upgrade of services and the access road, although it is already modified.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Low. The existing impacted UVB drainage line has low functionality and highly modified.
Degree to which the impact can be reversed:	Low cost
Indirect impacts:	Continued loss of wetland vegetation.
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area). • Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of

	construction vehicles and personnel outside of the demarcated areas (as applicable). • Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go area. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp. • Demarcation of the construction footprint/working servitude must be signed off by an ECO (or similar). Demarcation should not be removed until construction is complete, and rehabilitation (if applicable) has taken place. • Prohibit the dumping of excavated material, building materials or removed vegetation within the No Go area. Building material must be stored at the designated storage area located outside of the no-go area. Spoil material must be appropriately disposed of at a registered waste disposal facility. • Undisturbed topsoil and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation. • Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible. • Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities (as applicable). • Clear and remove any rubble or litter that may have been accidentally deposited into the no-go area because of construction activities and dispose of at an appropriate registered facility. • An ECO must inspect the construction footprint of the road upgrade on a weekly basis and must take immediate measures to address unforeseen disturbances to the wetland. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor. • Once construction has been completed, orange hazard fences as well as all construction waste, rubble, and equipment must be removed from the construction footprint.

	• In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent. • Vegetation which needs to be re-planted (if applicable) within each Erf should be planted with indigenous vegetation • A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.
Residual impacts:	Loss of remnants of wetland vegetation
Cumulative impact post mitigation:	Loss of remnants of wetland vegetation
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**4. ALTERED FLOW REGIME**
Potential impact	Site clearance, infilling, and compaction will result in alteration of the flow regime of wetland area on the site. The hardened catchment area would result in increased stormwater runoff, velocity and increased flood peaks within the wetland and would also likely result in sedimentation and erosion. Given that the wetland's hydrological status quo is seriously modified, should multiple culverts, etc. be constructed during the road upgrade, there will more likely be positive impacts associated with the road upgrade in this respect (increased hydrological connectivity).
Nature of Impact:	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk:	Change in hydrology of the wetland by the upgrade of services and the access road.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Medium
Indirect impacts:	Continued altered flow of the wetland
Cumulative impact prior to mitigation:	Low
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer

	pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable). • Should flow need to be impeded or diverted temporarily within the watercourse while works are being undertaken, it is recommended that the diversion be undertaken during the dry season and that the flow be piped past the works and discharged into the watercourse immediately downstream of the works. The diversion should be kept to a minimum period and should be mitigated to ensure that no sedimentation or erosion is resulting downstream. • Natural water flow within the UVBW must be maintained. Multiple culverts or open-bottom structures to maintain sheet flow is recommended as well as permeable shoulders or subgrades to allow natural infiltration of water into wetland soils where and as applicable. • The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat. • Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales. • Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems. • Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately. • Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.

	• Implement erosion control measures where required. Examples of erosion control measures include:
	  ○ Covering steep/unstable/erosion prone areas with geotextiles.
	  ○ Covering areas prone to erosion with brush packing, straw bales, mulch.
	  ○ Stabilizing cleared/disturbed areas susceptible to erosion with sandbags.
	  ○ Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the ECO / site manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand.
	• Rainwater harvesting schemes (for the residential development) may reduce runoff intensity and thereby mitigate the impact of catchment hardening.
	• The alien invasive vegetation present within the wetland area must be removed and replanted with indigenous wetland vegetation.
	
	A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Residual impacts:	Continued altered flow from the road works
Cumulative impact post mitigation:	Continued altered flow from the road works
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low -
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**5. WATER QUALITY IMPAIRMENT**
Potential impact	Accidentally spilled cement, construction chemicals, sewage during the upgrade/installation of pipelines, or petrochemicals from construction vehicles may find their way into the wetland area. Additionally, litter and dumping may occur due to the proximity of the proposed development to the wetland area. The removal of vegetation and stripping of soils from the construction footprint will result in the exposure of soils to erosive elements. An increase in stormwater runoff and velocities from exposed and compacted areas, particularly during peak rainfall periods, may result in the formation of erosion gullies and rills in the downslope wetland. In addition, destabilisation of soils during the removal of vegetation and excavation activities, as well as the stockpiling of soils may result in an increase in the runoff of sediment laden stormwater into the downslope

	wetland from the construction footprint, particularly during the rainy season. During operation, pollutants may enter the wetland via stormwater or sewage leaks (although highly unlikely). However, with the inclusion of stormwater design measures which allow for the infiltration and treatment of stormwater this impact can be greatly reduced.
Nature of Impact:	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk:	Change in hydrology of the wetland by the upgrade of services and the access road.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	Moderate
Indirect impacts:	None
Cumulative impact prior to mitigation:	
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	Low
Proposed mitigation	• The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area). • Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable). • The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat. • Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and

	lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales. • Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands. • The site manager / ECO must check the No Go area for pollution/spills, erosion damage and sedimentation weekly and after every heavy rainfall event. Should pollution, erosion or sedimentation be noted, immediate corrective measures must be undertaken. • Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage. • Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected. • Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces. • Drip trays must be utilised at all fuel dispensing areas; and during the maintenance of existing sewer flow as possible. • Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the No Go area and should only occur on bunded areas with a water/oil/grease separator. • Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site. • Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction to reduce the risk of leachate from imported materials contaminating the wetland area. • Concrete should preferably be imported as “ready-mix” concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it.

	• Construct temporary bunds around areas where cement is to be cast in situ.
	• Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go area is strictly prohibited.
	• Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.
	• Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility.
	• Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.
	• Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.
	• Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.
	• Design a SWMP which will allow for the infiltration and treatment of stormwater. All stormwaters must receive basic filtering and treatment prior to its release.
	• Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.
	• Stormwater generated from areas with a higher risk of contamination such as parking areas and roads (as applicable) must receive basic filtering and treatment prior to its release into surrounding areas.
	• Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets.
	• Operational phase mitigation implemented during the design/construction phase:
	  ○ Construct sewage pipelines in accordance with the relevant SANS / SABS specifications.
	  ○ Design the pipelines to accommodate the operating and surge pressures.
	  ○ Provide surge protection e.g. air valves.
	  ○ Allow for scour valves along pipelines to ensure sewage pipelines can be emptied in a controlled manner if required.
	  ○ Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the wetland.

	Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter. • The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles. These measures should be addressed, implemented and monitored in terms of the Environmental Management Plan for the construction phase.
Residual impacts:	Water quality impairment is expected to be significantly reduced with proper implementation of mitigation measures.
Cumulative impact post mitigation:	Low
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**6. Terrestrial Biodiversity impacts.**
Potential impact	The new developed houses will contribute to exposed bare soil surfaces, increasing the risk of erosion and sediment runoff during the high rainfall events.
Nature of Impact:	Negative
Extent and Duration of impact	Local, Regional, Permanent.
Consequence of impact or risk:	- Vegetation loss, species loss, diversity loss, connectivity loss. - Exposure of soil and degradation thereof. - Change in flow patterns due to increased hardened surfaces
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Reduction in area designated as Hangklip Sand Fynbos.
Cumulative impact prior to mitigation:	Loss of natural vegetation and faunal habitat and threatened species to ongoing agriculture, urban development and alien plant invasion.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium. The site has little remaining natural vegetation
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Low

Proposed mitigation	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Cumulative impact post mitigation:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**7. SOIL EROSION AND ASSOCIATED DEGRADATION**
Potential impact	Residential RE/1489 Vermont. Site clearing and construction activities will expose bare soil surfaces, increasing the risk of erosion and sediment runoff.
Nature of Impact:	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk:	Exposure and loss of topsoil; sedimentation of downstream drainage lines and wetland areas; degradation of soil structure and fertility; increased runoff due to hardened surfaces.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already highly degraded and transformed with limited soil ecological value.
Degree to which the impact can be reversed:	Medium. Erosion can be rehabilitated with appropriate intervention.
Indirect impacts:	Downstream sedimentation could impact the nearby Endangered wetland area (to the southeast).
Cumulative impact prior to mitigation:	Ongoing soil degradation in the area from existing development, alien plant clearing, and urban runoff.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already degraded, but proximity to sensitive hydrological features elevates the concern.
Degree to which the impact can be avoided:	Medium. Careful construction phasing and footprint minimisation can reduce exposure.
Degree to which the impact can be managed:	High. Standard erosion and sediment control measures are well-established and effective.
Degree to which the impact can be mitigated:	High

Proposed mitigation	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. - All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Minor, localised soil disturbance during active construction phases.
Cumulative impact post mitigation:	Negligible contribution to broader catchment sediment loads if mitigation is applied.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**8. SPREAD AND/OR ESTABLISHMENT OF ALIEN AND/OR INVASIVE SPECIES**
Potential impact	Residential RE/1489 Vermont. Construction activities, soil disturbance, and movement of vehicles and equipment may facilitate the spread, introduction, or establishment of additional alien and invasive plant species on site and in surrounding areas. The site already hosts several NEM:BA A&IS Regulations Category 1b listed species, including *Acacia saligna, Acacia cyclops, Leptospermum laevigatum, Pinus radiata, and Schinus terebinthifolius.*
Nature of Impact:	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk:	Increased density and spread of existing invasive species; introduction of new alien species via soil movement or machinery; further transformation and degradation of any residual natural habitat in the surrounding landscape; alteration of soil conditions (e.g. elevated nitrogen from *Acacia spp.)* perpetuating dominance of nitrophilic alien grasses.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already heavily invaded and transformed, with no SCC confirmed. Surrounding areas with higher biodiversity value face greater risk.
Degree to which the impact can be reversed:	Medium. Invasive species can be controlled with sustained management effort, though legacy soil effects (e.g. from *Acacia saligna* nitrogen enrichment) may persist for years.
Indirect impacts:	Spread of invasive species from the disturbed site into adjacent road corridor and remnant vegetation patches where *Thamnochortus insignis* and other native species are present.

Cumulative impact prior to mitigation:	The broader Vermont/Overberg coastal area experiences ongoing invasive alien plant pressure, particularly from *Acacia spp.,* which continue to expand into remnant Hangklip Sand Fynbos patches.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already invaded, but disturbance could worsen spread into adjacent areas.
Degree to which the impact can be avoided:	Low. Some level of disturbance and potential spread is inherent to clearing and construction.
Degree to which the impact can be managed:	High. A systematic invasive species management programme with follow-up treatments is feasible and legally required under NEM:BA.
Degree to which the impact can be mitigated:	High
Proposed mitigation	- Minimize the number of disturbed areas. - Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur. - Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success. - Existing access routes and walking paths must be made use of wherever possible. - Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. - These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas. - Runoff water on exposed areas should be controlled.
Residual impacts:	Possible re-sprouting or re-seeding of cleared invasive species, particularly Acacia spp., from persistent soil seed banks.
Cumulative impact post mitigation:	Reduced invasive species pressure on the site and adjacent remnant vegetation if management is sustained over time.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential impact and risk	**4. DUST**
Potential impact	Dust generated from site clearing and site preparation.
Nature of Impact:	Negative
Extent and Duration of impact	Local, short term
Consequence of impact or risk:	Visual and health impacts Nuisance for residents adjacent to the site.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Low
Degree to which the impact can be reversed:	High

Indirect impacts:	Potential for reduced visibility in general area. Potential for allergic reactions in people allergic to dust.
Cumulative impact prior to mitigation:	Dust may be generated as a result of earthmoving activities required for construction and development.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	High
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Maintain ground cover for as long as possible to reduce the total surface area exposed to wind. Do not clear entire plots and rather clear building sites only. - Ensure vehicle speed limits on site are kept to a minimum. - Delivery vehicles to keep loads covered. - Cover fine material stockpiles. - Wet dry and dusty surfaces using non-potable water. - Staff to wear correct PPE if dust is generated for long periods. Road surfaces to be swept and kept clean of sand and fine materials
Residual impacts:	None
Cumulative impact post mitigation:	Dust generated during construction, mitigation successful.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Very-Low Negative
PLANNING, DESIGN AND DEVELOPMENT PHASE	
Potential Impact and risk	**5. NOISE**
Potential impact	Noise generated by vehicles and machinery during construction phase.
Nature of Impact:	Negative
Extent and Duration of impact	Local, short term
Consequence of impact or risk:	Noise disturbance to transient receptors, i.e. motorists, pedestrians, residents.
Probability of occurrence:	Likely
Degree to which the impact may cause irreplaceable loss of resources:	Will not impact on resources
Degree to which the impact can be reversed:	High
Indirect impacts:	None
Cumulative impact prior to mitigation:	Noise from construction works
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Medium - High
Degree to which the impact can be managed:	Medium - High
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Limit noise levels (e.g. install and maintain silencers on machinery). - Provide protective wear for workers i.e. ear plugs.

	- Ensure that construction vehicles and machinery are maintained regularly to reduce noise generation. - Restrict construction to normal work hours.
Residual impacts:	None
Cumulative impact post mitigation:	Typical noise impacts associated with a construction site.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative
POST-CONSTRUCTION PHASE	
Potential impact and risk	**1. SOCIO ECONOMIC**
Potential impact:	- Access to employment for the community during the operational phase. - Job creation; - Densification of residential erven in response to local demand. - Investment in the area.
Nature of impact:	Positive
Extent and duration of impact:	Local, long term
Consequence of impact or risk:	Improves livelihoods beneficiaries; influx of people into the area; investment in the area; spending in the area.
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	N/A
Indirect impacts:	N/A
Cumulative impact prior to mitigation:	Access to employment for the community during the operational phase; Job creation; Provision of residential erven in response to provincial demand; Investment in the area.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High positive
Degree to which the impact can be avoided:	N/A
Degree to which the impact can be managed:	High
Degree to which the impact can be mitigated:	N/A
Proposed mitigation:	-
Residual impacts:	Investment in the area; attraction to the area; spending in the area.
Cumulative impact post mitigation:	Investment in the area, attraction to the area, spending in the area Access to employment for the community during the operational phase, Job creation, Provision of residential erven in response to provincial demand, investment in the area.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High (+)

POST-CONSTRUCTION PHASE	
Potential impact and risk	**2. VISUAL**
Potential impact:	Typical visual impacts associated with the operational phase of a residential dwelling or group of residential dwellings that may lead to changes in sense of place of the individual from what was there and what has now changed.
Nature of impact:	Negative – changes in the visual aesthetics of the area during the operational phase. Positive- infill development within an urban area as opposed to the alienation of new land, contributing to more sustainable land use.
Extent and duration of impact:	Long term, local regional
Consequence of impact or risk:	Risk – visual impact of operation within landscape and suburb
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	N/A
Degree to which the impact can be reversed:	High
Indirect impacts:	Loss of sense of place due to the removal of the natural vegetation that is appealing to nature lovers
Cumulative impact prior to mitigation:	Short term impacts associated with changes of the built infrastructure.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	High negative
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Low
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Implement landscaping strategies to minimize the visual impact of construction and operational activities. - Incorporate green design principles into the development to enhance aesthetics and mitigate negative visual effects. - Communicate with the community to ensure understanding and acceptance of the changes in the visual character. Consider the use of native vegetation in landscaping to maintain a natural feel and reduce visual disruptions.
Residual impacts:	None
Cumulative impact post mitigation:	Typical visual impacts associated with operational phase.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low Negative

POST-CONSTRUCTION PHASE	
Potential impact and risk	**3. TERRESTRIAL BIODIVERSITY IMPACTS.**
Potential impact	Permanent loss any of the remaining natural vegetation of this degraded/transformed site due to residential development.
Nature of Impact	Negative
Extent and Duration of impact	Local, Regional, Permanent.
Consequence of impact or risk	- Vegetation loss, species loss, diversity loss, connectivity loss. - Exposure of soil and degradation thereof. Change in flow patterns due to increased hardened surfaces
Probability of occurrence:	Definite
Degree to which the impact may cause irreplaceable loss of resources:	Medium
Degree to which the impact can be reversed:	Low
Indirect impacts:	Reduction in area designated as Hangklip Sand Fynbos.
Cumulative impact prior to mitigation:	Loss of natural vegetation and faunal habitat and threatened species to ongoing agriculture, urban development and alien plant invasion.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Medium. The site has little remaining natural vegetation
Degree to which the impact can be avoided:	Low
Degree to which the impact can be managed:	Medium
Degree to which the impact can be mitigated:	Low
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Cumulative impact post mitigation:	Reduction of indigenous vegetation associated with the Hangklip Sand Fynbos
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

POST-CONSTRUCTION PHASE	
Potential impact and risk	**4. SOIL EROSION AND ASSOCIATED DEGRADATION**
Potential impact	The new developed houses will contribute to exposed bare soil surfaces, increasing the risk of erosion and sediment runoff during the high rainfall events.
Nature of Impact	Negative
Extent and Duration of impact	Local; short-term
Consequence of impact or risk	- Exposure and loss of topsoil; sedimentation of downstream drainage lines and wetland areas; degradation of soil structure and fertility; increased runoff due to hardened surfaces.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already highly degraded and transformed with limited soil ecological value.
Degree to which the impact can be reversed:	Medium. Erosion can be rehabilitated with appropriate intervention.
Indirect impacts:	Downstream sedimentation could impact the nearby Endangered wetland area (to the southeast).
Cumulative impact prior to mitigation:	Ongoing soil degradation in the area from existing development, alien plant clearing, and urban runoff.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already degraded, but proximity to sensitive hydrological features elevates the concern.
Degree to which the impact can be avoided:	Medium. Careful construction phasing and footprint minimisation can reduce exposure.
Degree to which the impact can be managed:	High. Standard erosion and sediment control measures are well-established and effective.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties - No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species. - Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further. All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.
Residual impacts:	Minor, localised soil disturbance during active construction phases.
Cumulative impact post mitigation:	Negligible contribution to broader catchment sediment loads if mitigation is applied.

Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)
POST-CONSTRUCTION PHASE	
Potential impact and risk	**5. Spread and/or establishment of alien and/or invasive species.**
Potential impact	Operational activities, soil disturbance, and movement of vehicles and people may facilitate the spread, introduction, or establishment of additional alien and invasive plant species on site and in surrounding areas. The site already hosts several NEM:BA A&IS Regulations Category 1b listed species, including *Acacia saligna, Acacia cyclops, Leptospermum laevigatum, Pinus radiata, and Schinus terebinthifolius.*
Nature of Impact	Negative
Extent and Duration of impact	Local; Permanent
Consequence of impact or risk	Increased density and spread of existing invasive species; introduction of new alien species via soil movement or machinery; further transformation and degradation of any residual natural habitat in the surrounding landscape; alteration of soil conditions (e.g. elevated nitrogen from *Acacia spp.)* perpetuating dominance of nitrophilic alien grasses.
Probability of occurrence:	Probable
Degree to which the impact may cause irreplaceable loss of resources:	Low. The site is already heavily invaded and transformed, with no SCC confirmed. Surrounding areas with higher biodiversity value face greater risk.
Degree to which the impact can be reversed:	Medium. Invasive species can be controlled with sustained management effort, though legacy soil effects (e.g. from *Acacia saligna* nitrogen enrichment) may persist for years.
Indirect impacts:	Spread of invasive species from the disturbed site into adjacent road corridor and remnant vegetation patches where *Thamnochortus insignis* and other native species are present.
Cumulative impact prior to mitigation:	The broader Vermont/Overberg coastal area experiences ongoing invasive alien plant pressure, particularly from *Acacia spp.,* which continue to expand into remnant Hangklip Sand Fynbos patches.
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low-Medium. The site is already invaded, but disturbance could worsen spread into adjacent areas.
Degree to which the impact can be avoided:	Low. Some level of disturbance and potential spread is inherent to clearing and construction.
Degree to which the impact can be managed:	High. A systematic invasive species management programme with follow-up treatments is feasible and legally required under NEM:BA.
Degree to which the impact can be mitigated:	High
Proposed mitigation:	- Minimize the number of disturbed areas. - Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur. - Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and

	problem areas should receive follow-up monitoring to assess remediation success. - Existing access routes and walking paths must be made use of wherever possible. - Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. - These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas Runoff water on exposed areas should be controlled.
Residual impacts:	Possible re-sprouting or re-seeding of cleared invasive species, particularly Acacia spp., from persistent soil seed banks.
Cumulative impact post mitigation:	Reduced invasive species pressure on the site and adjacent remnant vegetation if management is sustained over time.
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	Low (-)

DECOMMISSIONING AND CLOSURE PHASE

Potential impact and risk	Decommissioning is not applicable for a residential development
Potential impact:	-
Nature of impact:	-
Extent and duration of impact:	-
Consequence of impact or risk:	-
Probability of occurrence:	-
Degree to which the impact may cause irreplaceable loss of resources:	-
Degree to which the impact can be reversed:	-
Indirect impacts:	-
Cumulative impact prior to mitigation:	-
Significance rating of impact prior to mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-
Degree to which the impact can be avoided:	-
Degree to which the impact can be managed:	-
Degree to which the impact can be mitigated:	-
Proposed mitigation:	-
Residual impacts:	-
Cumulative impact post mitigation:	-
Significance rating of impact after mitigation (e.g. Low, Medium, Medium-High, High, or Very-High)	-

ALTERNATIVE 3 (NO-GO)

- → No scope of available job creation, skills transfer.
- → Permitted single residential land use could not be applied
- → Limit provision of housing opportunities
- → No densification which is recommended in the Overstrand SDP.
- → No infill development
- → No investment opportunities.
- → Rates and tax bases remain as existing
- → Access to residential area across UVB drainage line remains a private right of way.
- → Sewer and other service pipelines are located within the servitude and may have issues with maintenance and upgrading.
- → No job creation or skill transfer.

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.

Summary of Findings and Influences on the Proposed Development

Aquatic Biodiversity Impact Assessment

An Unchanneled Valley-Bottom Wetland (UVBW), which drains into the Vermont Salt Pan approximately 420 m southeast, was delineated outside the southern boundary of Remainder of Erf 1489 (RE/1489). The majority of the site exhibits terrestrial conditions. The existing access road across Erf 1490 and the wetland area on this residential erf, and directly adjacent to the proposed residential development area, is considered to be relic or historical. Although there was sparse wetland vegetation present (such as *Cyperus textilis*), it is the specialist's opinion that this area has lost all wetland functionality and there is no rehabilitation potential due to the level of disturbance. There is an artificial channel, roads, residential dwellings, excavation, and culverts within this relic wetland area, which has altered natural flow regime, vegetation, water quality and geomorphology.

There is no evidence of a drainage line (non-perennial watercourse) as indicated on the SANBI, 2018 and NGI, 2017.

The following potential impacts to the UVBW as a result of the proposed development of both the residential area and access road are listed below, and are taken from the attached Aquatic Biodiversity Screening Report and Aquatic Biodiversity Assessment:

Construction Phase

1. Areas of the onsite UVBW may potentially be disturbed or lost (i.e. complete loss in flow regime, water quality, vegetation, and geomorphic structure) as a result of the private access road upgrade and construction of adjacent residential dwellings.

2. Alteration of the flow regime of the UVBW during construction of the residential housing.

3. Water quality impairment due to increased sediment input, potential spillage, or release of potentially contaminated runoff into the UVBW during construction of the residential housing.

Operational Phase

4. Alteration of the flow regime of the UVBW once the housing development is complete, due to potential flow diversion or increase in storm flows.

5. Water quality impairment due to the release of potentially contaminated stormwater (hydrocarbons) into the UVBW.

The findings of the Aquatic Biodiversity Screening Report, specifically the delineation of a natural UVB wetland directly south, downslope of RE/1489 Vermont, and that the existing access road (Portion A of Erf 1490) overlays a relic UVB wetland necessitated further specialist investigation and the compilation of an Aquatic Biodiversity Impact Assessment.

Site Ecological state based on the EAP perspective

The residential property considered in this BAR and all the adjacent residential properties, most of which have been developed as either Residential or Resort, are included within the Hangklip Sand Fynbos vegetation type, which is gazetted as Critically Endangered on a national basis (Government of South Africa 2022), with less than 68% of its total original extent remaining intact, less than 18% conserved, and a national conservation target of 30% (Rouget et al 2004). This vegetation type requires periodic burning for optimal ecological functioning. All fire has been excluded from the residential and Resort areas for many years. This has resulted in transformation of the natural vegetation into residential gardens and / or transformation by the large number of alien invasive species which dominate the indigenous vegetation.

There may be small species, e.g Dwarf Chameleons, (*Bradypodium pumilum*) present on the site. This Red listed species has been recorded in similar habitat nearby (iNaturalist.org). There are unlikely to be SoCC birds on site, as there is no suitable nesting habitat.

The R43 National Road has created a barrier for the movement of fauna from the mountains north of the property.

There is minimal terrestrial biodiversity on the existing access road, apart from a few clumps of Arum lilies (*Zantedescia aetiopica*) and Cyperus, in the drainage ditches that have been dug parallel to the road.

Construction Phase (Direct) Ecological Impacts

It can safely be assumed that the primary construction phase ecological impact of the proposed residential development would be permanent loss of all or most of the existing degraded natural vegetation in the development footprint (gazetted as an Endangered vegetation type). No threatened fauna is likely to use the site, with the exception of the Cape Dwarf Chameleon (*Bradypodion pumilum*), which is listed as Vulnerable, and may occur on site.

The overall ecological significance of this direct vegetation and probable faunal habitat loss on site is Low Negative before mitigation. No clear mitigation seems possible, other than that proposed by the EAP for faunal Search and Rescue of the Cape Dwarf Chameleon (*Bradypodion pumilum).* If this is done the direct impacts could be very slightly reduced but would still best be assessed as Low Negative impact.

Operational Phase Ecological Impacts

Operational phase impacts will take effect as soon as any of the vegetation on the site is lost or disturbed and will persist in perpetuity.

Conclusions and Recommendations

- → The residential area supports degraded vegetation that is classified as Hangklip Sand Fynbos which is gazetted as a Critical Endangered vegetation type. The site has been degraded by a long history inclusion in a residential garden and the invasion of alien invasives grass and trees.

- → Overall, aquatic biodiversity on the subject property is considered low, as no wetland indicators were identified within the site boundary.

- → The Cape Dwarf Chameleon (*Bradypodion pumilum*) is listed as Vulnerable, and may occur on site, as it has been recorded nearby. This is likely the only faunal SoCC on site. However, Search and Rescue will be undertaken prior construction.

- → The formalisation and upgrade of the access road and service pipelines in the road reserve will have construction phase impacts. However, an appropriate design of the upgrade of the access road may benefit the hydrology of the wetland

→ The Risk Assessment Matrix was applied to the proposed project site, and all associated risks fall within the Low-risk category. As confirmed by the freshwater specialist findings, the project therefore qualifies for General Authorisation.

Plants Species and Terrestrial Biodiversity Compliance Statement

→ According to the South African Vegetation Map (2024) the site is mapped as Hangklip Sand Fynbos, which is Critically Endangered. But no indication of this vegetation type is present onsite since the site is already degraded and in a transformed state.
→ Most of the site is mapped as Critical Biodiversity Area (CBA1;Terrestrial). Since the site is degraded and in a transformed state, the botanist highlights that it should not be classified as a CBA1.
→ A total of 14 alien plants were found within the study area
→ The dominant vegetation type present onsite includes alien *Cenchrus clandestinus*, and native *Stenotaphrum secundatum* and *Carpobrotus edulis subsp. edulis.* Numerous other alien species are also present in varying abundances, such as *Acacia cyclops*, *A. saligna, Axonopus fissifolius, Briza maxima, Bromus diandrus, Erigeron bonariensis, Euphorbia terracina, Lactuca serriola, Lagurus ovatus, Leptospermum laevigatum, Pinus radiata, Schinus terebinthifolius, Yucca gloriosa, and Ulmus parvifolia*. While native species are also present, these are widespread and common and not threatened.
→ The degraded nature of the study area also means that there is a near complete absence of any species characteristic of Hangklip Sand Fynbos. These would include *Euclea racemosa subsp. racemosa, Leucadendron coniferum, Searsia laevigata,* numerous *Erica spp,* and other Proteaceae, *Rutaceae,* or *Restionaceae* (*Elegia filacea, E. nuda, Restio eleocharis*, and other *Thamnochortus spp.*). Only a single restio species was found on-site (*Thamnochortus insignis*) and only a few individuals were present. These occur in the northwestern corner of the study area, and is mostly associated with the road corridor, on the other side of the study area border, where this species dominates.
→ The only native species found on-site that are associated with Hangklip Sand Fynbos are *Passerina corymbosa, Metalasia muricata,* and *Carpobrotus edulis,* but these are very widespread species and are also associated with numerous other vegetation types. Thus, they cannot be considered indicator species.
→ Ground truthing confirmed that no SCC occur within the study area. Given the highly disturbed and transformed nature of the study area, it is unlikely that any plant SCC will occur in it.
→ The National Web-Based Screening Tool identifies the study area as having Medium sensitivity for the Relative Plant Species Theme due to the potential presence of sensitive species. However, field verification confirmed that no Species of Conservation Concern or sensitive plant species occur on site, and given the highly disturbed condition of the area, the actual sensitivity is considered to be Low in accordance with the criteria outlined in Government Notice 1150 (Government Gazette 43855, October 2020).
→ The National Web-Based Screening Tool identifies the study area as having Very High sensitivity for the Relative Biodiversity Theme due to its overlap with a Critical Biodiversity Area (CBA1), a Strategic Water Source Area (SWSA – Boland), and the Hangklip Sand Fynbos ecosystem. However, field verification confirmed that the site is degraded and transformed and does not resemble the mapped vegetation type. Accordingly, the actual sensitivity of the site is considered Low in terms of Government Notice 320 (Government Gazette 43110, March 2020), although the Site Ecological Importance (SEI) score provides a more nuanced assessment of ecological sensitivity.
→ Field observations, together with the Site Ecological Importance (SEI) assessment, indicate that the study area can be classified as having a Very Low SEI. This is primarily due to the site being long transformed and degraded, with vegetation dominated by alien and weedy native species, the absence of Species of Conservation Concern, and the high resilience of the remaining disturbance-adapted plant species, which are common and likely to persist under current site conditions.

2.	List the impact management measures that were identified by all Specialist that will be included in the EMPr

The Environmental Management Plan (EMPr) incorporates a comprehensive set of impact management measures identified by the specialist to address various aspects associated with the proposed upgrade and formalisation of the access road and service pipelines. These measures aim to mitigate negative impacts and promote sustainable practices.

Here is an overview of the impact management measures included in the EMPr:

Aquatic Biodiversity Impact Assessment:

Disturbance of Wetland Habitat

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).
- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer / water pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go area. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp.
- → Demarcation of the construction footprint/working servitude must be signed off by an ECO (or similar). Demarcation should not be removed until construction is complete, and rehabilitation (if applicable) has taken place.
- → Prohibit the dumping of excavated material, building materials or removed vegetation within the No Go area. Building material must be stored at the designated storage area located outside of the no-go area. Spoil material must be appropriately disposed of at a registered waste disposal facility.
- → Undisturbed topsoil and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation.
- → Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible.
- → Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities (as applicable).
- → Clear and remove any rubble or litter that may have been accidentally deposited into the no-go area because of construction activities and dispose of at an appropriate registered facility.
- → An ECO must inspect the construction footprint of the road upgrade on a weekly basis and must take immediate measures to address unforeseen disturbances to the wetland. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor.
- → Once construction has been completed, orange hazard fences as well as all construction waste, rubble, and equipment must be removed from the construction footprint.
- → In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent.
- → Vegetation which needs to be re-planted (if applicable) should be planted with appropriate indigenous vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Altered flow regime

- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer/water pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → Should flow need to be impeded or diverted temporarily within the watercourse while works are being undertaken, it is recommended that the diversion be undertaken during the dry season and that the flow be piped past the works and discharged into the watercourse immediately downstream of the works. The diversion should be kept to a minimum period and should be mitigated to ensure that no sedimentation or erosion is resulting downstream.
- → Natural water flow within the UVBW must be maintained. Multiple culverts or open-bottom structures to maintain sheet flow is recommended as well as permeable shoulders or subgrades to allow natural infiltration of water into wetland soils where and as applicable.
- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.
- → Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems.
- → Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately.
- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → Implement erosion control measures where required. Examples of erosion control measures include:
    - Covering steep/unstable/erosion prone areas with geotextiles.
    - Covering areas prone to erosion with brush packing, straw bales, mulch.
    - Stabilizing cleared/disturbed areas susceptible to erosion with sandbags.
    - Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the ECO / site manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand.
- → Rainwater harvesting schemes (for the residential development) may reduce runoff intensity and thereby mitigate the impact of catchment hardening.
- → The alien invasive vegetation present within the wetland area must be removed and replanted with indigenous wetland vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Water Quality Impairment

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).

- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer/water pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.
- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → The site manager / ECO must check the No Go area for pollution/spills, erosion damage and sedimentation weekly and after every heavy rainfall event. Should pollution, erosion or sedimentation be noted, immediate corrective measures must be undertaken.
- → Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.
- → Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.
- → Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces.
- → Drip trays must be utilised at all fuel dispensing areas; and during the maintenance of existing sewer flow as possible.
- → Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the No Go area and should only occur on bunded areas with a water/oil/grease separator.
- → Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site.
- → Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction to reduce the risk of leachate from imported materials contaminating the wetland area.
- → Concrete should preferably be imported as “ready-mix” concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it.
- → Construct temporary bunds around areas where cement is to be cast in situ.
- → Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go area is strictly prohibited.
- → Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.
- → Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility.

- → Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.
- → Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.
- → Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.
- → Design a SWMP which will allow for the infiltration and treatment of stormwater. All stormwaters must receive basic filtering and treatment prior to its release.
- → Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.
- → Stormwater generated from areas with a higher risk of contamination such as parking areas and roads (as applicable) must receive basic filtering and treatment prior to its release into surrounding areas.
- → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets.
- → Operational phase mitigation implemented during the design/construction phase:
    - Construct sewage pipelines in accordance with the relevant SANS / SABS specifications.
    - Design the pipelines to accommodate the operating and surge pressures.
    - Provide surge protection e.g. air valves.
    - Allow for scour valves along pipelines to ensure sewage pipelines can be emptied in a controlled manner if required.
    - Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the wetland. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter.
- → The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles.
- → These measures should be addressed, implemented and monitored in terms of the Environmental Management Plan for the construction phase.

Plants Species and Terrestrial Biodiversity Compliance Statement

General Terrestrial Biodiversity impacts

- → Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties
- → No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species.
- → Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further.
- → All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.

Soil erosion and associated degradation of ecosystems.

- → Minimize the number of disturbed areas.
- → Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur.

- → Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success.
- → Existing access routes and walking paths must be made use of wherever possible.
- → Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas
- → Runoff water on exposed areas should be controlled.

Spread and/or establishment of alien and/or invasive species.

- → Invasive alien plant species must be removed from the site as per NEM:BA requirements.
- → Regular monitoring for alien plants at the site should occur and could be conducted simultaneously with erosion monitoring.
- → When alien plants are detected, these should be controlled and cleared using the recommended control measures for each species to ensure that the problem is not exacerbated or does not re-occur and increase to problematic levels.
- → Any area that is cleared of invasive alien plant species must receive regular follow-up treatments (preferably at least three follow-ups) to ensure that populations do not re-establish after such initial clearing efforts.
- → Any chemicals/herbicides used during clearing efforts must strictly be used only in accordance with the manufactures guidelines, especially when occurring in or close to hydrological features.
- → No planting or importing of any alien species to the site for landscaping, rehabilitation, or any other purpose should be allowed.

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.

Cape Nature requested that a Hydropedological Impact Assessment be undertaken for the proposed development. Discussions were held between the EAP and the freshwater specialists appointed on the project and it was concluded that this assessment will not be undertaken. Below is a outline why:

1. Soils and Hydrology Are Already Highly Disturbed

Within an established urban area, the natural soil profile has almost certainly already been extensively disturbed by prior construction, services installation (stormwater drains, water mains, sewer lines), compaction, and importation of fill material. The original Hydropedological character of the land, no longer meaningfully exists. A study would therefore describe an artificial, already-altered system rather than a natural one, yielding little useful or defensible information.

2. Urban Stormwater Infrastructure Already Manages Water Flows

Urban areas are served by engineered stormwater infrastructure (kerbed roads, stormwater drains, culverts, retention ponds) specifically designed to intercept, convey, and manage surface and subsurface runoff. The natural subsurface flow pathways that a Hydropedological study is designed to protect and characterise have already been superseded by this infrastructure in particular the R43 road and adjacent existing roads and development. Understanding how water moves through undisturbed soil to sustain downstream ecosystems, is therefore redundant in this context.

3. No Sensitive Receptors Are Likely Present

Hydropedological studies are primarily justified where subsurface flows sustain sensitive downstream features such as wetlands, streams, springs, or groundwater-dependent ecosystems. Within a built-up urban area, such features are

unlikely to be present in an unmodified, functional state. Without a sensitive receptor to protect, the primary driver for commissioning the study falls away. This is confirmed by the specialist team.

4. Scale and Impact Are Negligible

A small residential development will add an insignificant incremental change to a catchment that is already overwhelmingly impervious and urbanised. The marginal additional impervious area will not materially alter catchment hydrology beyond what the existing stormwater system is already designed to accommodate. The potential impact is disproportionately small relative to the cost and time of a specialist study.

5. The Cost-Benefit Does Not Support It

Specialist Hydropedological assessments are time-consuming and costly relative to the scale of a small residential project. Imposing this requirement on a small development within an already urbanised area would impose a disproportionate financial and administrative burden on the applicant, with no commensurate environmental benefit. This runs counter to the principle of proportionality that should guide scoping decisions in environmental assessment practice.

6. Equivalent Information Is Available Through Desk-Top Assessment

For a small urban development, any residual hydrology questions, such as whether a mapped watercourse or wetland is in proximity, have been resolved through existing Freshwater Impact assessment.

In summary: a Hydropedological study is a specialist tool designed for landscapes where natural soil-water systems are intact, sensitive, and at risk from proposed development. None of those conditions are typically met within the built-up urban edge, making the study an unnecessary, disproportionate, and scientifically unproductive requirement in that context.

4.	Explain how the proposed development will impact the surrounding communities.

The proposed development is expected to have several positive impacts on the surrounding communities:

- The creation of 18 housing units on a property currently zoned as single residential will address the housing needs within the community, potentially reducing housing shortages and improving overall living conditions.

- The development is likely to generate new job opportunities, both directly and indirectly. Construction activities, maintenance, and services related to the development will contribute to employment within the local community.

- The presence of the development can stimulate economic growth within the community. Local businesses, including retail and services, may experience increased demand, leading to potential expansion and economic benefits and increase the Municipal rates base

- The proposed development has the potential to enhance local infrastructure, including roads, utilities, and public services. These improvements are anticipated to bring benefits not only to the new residents but also to the existing community. Additionally, the existing access right of way road will become a public road connecting the existing municipal road system to the existing residences neighbouring on the proposed residential development.

5.	Explain how the risk of climate change may influence the proposed activity or development and how has the potential impacts of climate change been considered and addressed.

N/A

6.	Explain whether there are any conflicting recommendations between the specialists. If so, explain how these have been addressed and resolved.

None that the EAP is aware of.

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.

Two specialists' studies were commissioned, namely, the Aquatic Biodiversity Assessment and the Terrestrial Biodiversity Compliance Statement. This was subsequent to the Aquatic Screening as a result of the SSV report and ground truthing. The property proposed for residential development is RE/1489 Vermont.

Aquatic Biodiversity Impact Assessment

The Aquatic Screening, and subsequent Aquatic Biodiversity Assessment confirmed that this property is terrestrial, transformed by AIP and past use a part of a residential garden. There are no drainage lines on the property and no water is discharged onto the property from the upslope adjacent R43 and the mountain beyond. The property is within 100m of a UVB wetland but is almost entirely cut off from the wetland by an adjacent residential property, Erf 2570, which is surrounded by a high wall and fences and developed with a residential home and sheds.

However, access to the proposed residential site, and the neighbouring properties, is via an existing road with a 'right of way' agreement with the owner of Erf 1490, which is hardened with shells, and has sewer and water pipelines within the road reserve. The freshwater specialist determined that Erf 1490, and adjacent properties are located within an Unchanneled Valley Bottom (UVB) wetland that extends from west of Lynx Road to the Vermont salt pan. The access road crosses this wetland in a north / south direction. The necessity to manage impacts primarily addresses the sensitivity of the UVB Wetland with particular emphasis on the design of the upgrades to the access road and service pipelines and construction activities.

Mitigation measures recommended by the freshwater specialist:

Disturbance of Wetland Habitat

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).
- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go area. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp.
- → Demarcation of the construction footprint/working servitude must be signed off by an ECO (or similar). Demarcation should not be removed until construction is complete, and rehabilitation (if applicable) has taken place.
- → Prohibit the dumping of excavated material, building materials or removed vegetation within the No Go area. Building material must be stored at the designated storage area located outside of the no-go area. Spoil material must be appropriately disposed of at a registered waste disposal facility.

- → Undisturbed topsoil and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation.
- → Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible.
- → Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities (as applicable).
- → Clear and remove any rubble or litter that may have been accidentally deposited into the no-go area because of construction activities and dispose of at an appropriate registered facility.
- → An ECO must inspect the construction footprint of the road upgrade on a weekly basis and must take immediate measures to address unforeseen disturbances to the wetland. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor.
- → Once construction has been completed, orange hazard fences as well as all construction waste, rubble, and equipment must be removed from the construction footprint.
- → In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent.
- → Vegetation which needs to be re-planted (if applicable) within each Erf should be planted with indigenous vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Altered flow regime

- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → Should flow need to be impeded or diverted temporarily within the watercourse while works are being undertaken, it is recommended that the diversion be undertaken during the dry season and that the flow be piped past the works and discharged into the watercourse immediately downstream of the works. The diversion should be kept to a minimum period and should be mitigated to ensure that no sedimentation or erosion is resulting downstream.
- → Natural water flow within the UVBW must be maintained. Multiple culverts or open-bottom structures to maintain sheet flow is recommended as well as permeable shoulders or subgrades to allow natural infiltration of water into wetland soils where and as applicable.
- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.
- → Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems.

- → Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately.
- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → Implement erosion control measures where required. Examples of erosion control measures include:
    - Covering steep/unstable/erosion prone areas with geotextiles.
    - Covering areas prone to erosion with brush packing, straw bales, mulch.
    - Stabilizing cleared/disturbed areas susceptible to erosion with sandbags.
    - Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the ECO / site manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand.
- → Rainwater harvesting schemes (for the residential development) may reduce runoff intensity and thereby mitigate the impact of catchment hardening.
- → The alien invasive vegetation present within the wetland area must be removed and replanted with indigenous wetland vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Water Quality Impairment

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).
- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.
- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → The site manager / ECO must check the No Go area for pollution/spills, erosion damage and sedimentation weekly and after every heavy rainfall event. Should pollution, erosion or sedimentation be noted, immediate corrective measures must be undertaken.
- → Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.
- → Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.
- → Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces.

- → Drip trays must be utilised at all fuel dispensing areas; and during the maintenance of existing sewer flow as possible.
- → Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the No Go area and should only occur on bunded areas with a water/oil/grease separator.
- → Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site.
- → Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction to reduce the risk of leachate from imported materials contaminating the wetland area.
- → Concrete should preferably be imported as "ready-mix" concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it.
- → Construct temporary bunds around areas where cement is to be cast in situ.
- → Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go area is strictly prohibited.
- → Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.
- → Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility.
- → Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.
- → Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.
- → Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.
- → Design a SWMP which will allow for the infiltration and treatment of stormwater. All stormwaters must receive basic filtering and treatment prior to its release.
- → Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.
- → Stormwater generated from areas with a higher risk of contamination such as parking areas and roads (as applicable) must receive basic filtering and treatment prior to its release into surrounding areas.
- → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets.
- → Operational phase mitigation implemented during the design/construction phase:
    - Construct sewage pipelines in accordance with the relevant SANS / SABS specifications.
    - Design the pipelines to accommodate the operating and surge pressures.
    - Provide surge protection e.g. air valves.
    - Allow for scour valves along pipelines to ensure sewage pipelines can be emptied in a controlled manner if required.
    - Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the wetland. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter.
- → The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles.

→ These measures should be addressed, implemented and monitored in terms of the Environmental Management Plan for the construction phase.

Plant Species and Terrestrial Biodiversity Compliance Statement

A Plant Species and Terrestrial Biodiversity Compliance Statement conformed that the site is in a degraded and transformed state with only native species found on-site that are associated with Hangklip Sand Fynbos are *Passerina corymbosa, Metalasia muricata, and Carpobrotus edulis.* However, based on the specialist site investigation, most of the dominant vegetation species onsite is alien plants species such as *Acacia cyclops, A. saligna, Axonopus fissifolius, Briza maxima, Bromus diandrus, Erigeron bonariensis, Euphorbia terracina, Lactuca serriola, Lagurus ovatus, Leptospermum laevigatum, Pinus radiata, Schinus terebinthifolius, Yucca gloriosa, and Ulmus parvifolia.* No plants species of conservation concern have been confirmed onsite, and therefore, the Site Ecological Importance was assessed as Very-Low.

Plants Species and Terrestrial Biodiversity Compliance Statement

General Terrestrial Biodiversity impacts

→ Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties
→ No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species.
→ Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further.
→ All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.

Soil erosion and associated degradation of ecosystems.

→ Minimize the number of disturbed areas.
→ Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur.
→ Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success.
→ Existing access routes and walking paths must be made use of wherever possible.
→ Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas
→ Runoff water on exposed areas should be controlled.

Spread and/or establishment of alien and/or invasive species.

→ Invasive alien plant species must be removed from the site as per NEM:BA requirements.
→ Regular monitoring for alien plants at the site should occur and could be conducted simultaneously with erosion monitoring.
→ When alien plants are detected, these should be controlled and cleared using the recommended control measures for each species to ensure that the problem is not exacerbated or does not re-occur and increase to problematic levels.
→ Any area that is cleared of invasive alien plant species must receive regular follow-up treatments (preferably at least three follow-ups) to ensure that populations do not re-establish after such initial clearing efforts.

→ Any chemicals/herbicides used during clearing efforts must strictly be used only in accordance with the manufactures guidelines, especially when occurring in or close to hydrological features.
→ No planting or importing of any alien species to the site for landscaping, rehabilitation, or any other purpose should be allowed.

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

According to the Environmental Impact Assessment and Management Strategy for South Africa (2014), Impact Mitigation Hierarchy is a tool used throughout a project lifecycle to limit negative environmental impacts. The first tier considers how to avoid the impact entirely and is considered early in the project to allow for alternatives to be considered.

The impacts that cannot be avoided, should be minimised. Effective minimisation can eliminate some impacts and reduce others, allowing sustainability targets to be met. Where the targets cannot be met, other mechanisms should be explored. The next consideration is restoration, where minimisation efforts have failed to reach the required target.

The first aspect on this development was to include the specialist input into the report. The screening of the development site indicated the presence of a UVB wetland over RE/Erf 1490. The property considered for the residential development (RE/Erf 1489) is entirely terrestrial. The site was visited on 10 December 2024 by the aquatic specialist, and by the EAP in March 2025.

Preferred layout Alternative 2 had evolved primarily in line with good town planning requirements. Given the proposed development and location within the existing suburb of Vermont there are not many layout alternatives available for the residential area of the proposed development. The existing right of way access over RE/Erf 1489 should be formalised and become a public road, extension of Kolgans Close, and will need to be upgraded in line with engineering best practice. Similarly, the existing sewer pipeline in the road reserve needs to be upsized. This sewer pipe services a number of existing and proposed residential properties in the area. Service pipelines will need maintenance over time.

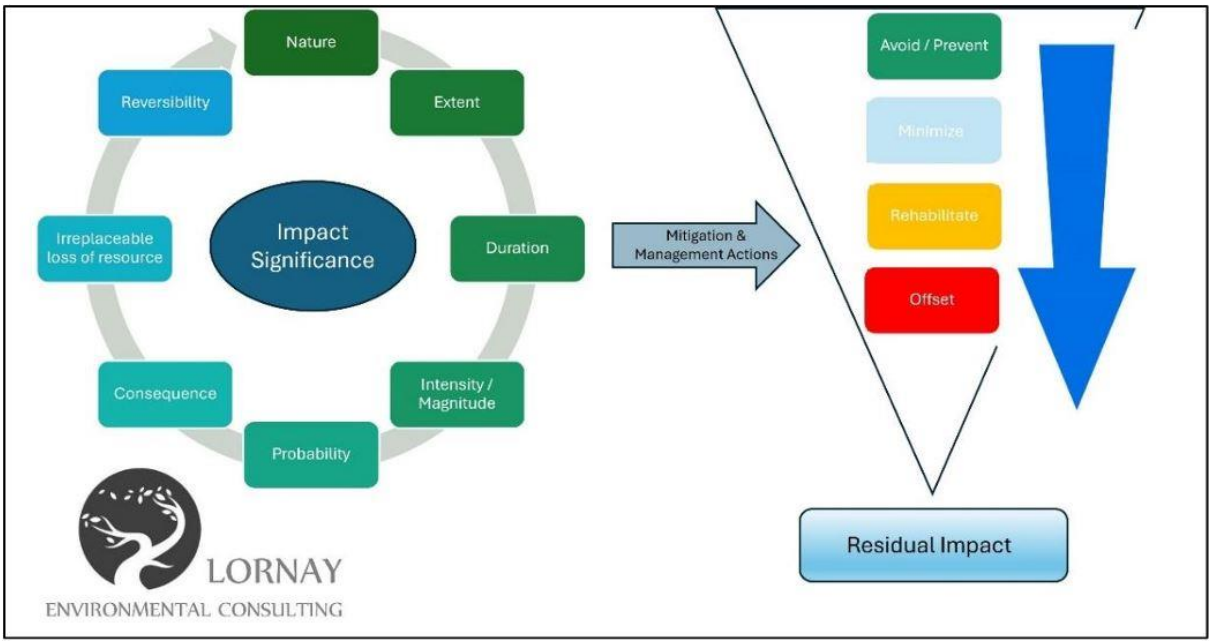

Figure 22: Mitigation Hierarchy.

Avoidance

Both alternatives one and two avoid direct development within the delineated Unchanneled Valley-Bottom Wetland (UVBW), as confirmed by the Aquatic Specialist. RE/1489 is entirely terrestrial, and no drainage lines occur within the

residential development footprint. Ground truthing by Delta Ecology delineated a wetland which is located south of the RE/Erf 1489 property and describe it as a natural UVB wetland, and confirmed that RE/Erf 1489, although within 100m of a wetland, is entirely terrestrial, with not drainage lines. This proposed residential development site is upslope from Erf 2570, which has a residential home, shed and a high wall and fences. Additionally, the botanical specialist confirmed through site visit that the mapped Critical Biodiversity Area (CBA1; terrestrial) on RE/Erf 1489 is no longer representative of intact vegetation, since the site has long been degraded and transformed, being dominated by alien invasive plants.

The unavoidable impact arises from the required upgrade of the existing access road over Erf 1490, which traverses a relic wetland. Based on the freshwater specialist input, this system is already actually quite disturbed, most of the water from the wetland seems to go through one culvert at the moment (under the current existing road on Erf 1490). Although this road has been hardened with shells, it cannot be relocated as it provides access not only to RE/1490 but to Erf 2570 and adjacent properties. This impact cannot be fully avoided as the road provides access to multiple properties. Based on the freshwater specialist report, the recommendation is to upgrade the road, "Given that the wetland's hydrological status quo is seriously modified, should multiple culverts, etc. be constructed during the road upgrade, there will more likely be positive impacts associated with the road upgrade in this respect (increased hydrological connectivity)."

The botanical specialist also confirmed that the indigenous vegetation onsite which is associated with Hangklip Sand Fynbos are *Passerina corymbosa, Metalasia muricata, and Carpobrotus edulis*, but these are very widespread species and are also associated with numerous other vegetation types. Thus, they cannot be considered indicator species. The property mostly invaded with AIP, including *kikuyu* lawn grass and various *Acacia* species, and has a vegetable garden. Additionally, no plant species of conservation concern have been identified onsite during site investigation.

For both Alternative options (Alternative 1 and 2), the development onsite will only result to clearance of significantly low vegetation associated with the Hangklip Sand Fynbos. However, most of the vegetation that will be cleared onsite is alien vegetation which occurs in abundance onsite. Additionally, since the site is mapped as Critical Biodiversity Area (CBA1; terrestrial) the site as confirmed by the specialist should be not mapped as a CBA due to degradation and transformed nature of the site. Therefore, since the site in a degraded and a transformed state with no plant species of conservation concern being identified, as well as abundance of alien vegetation, the preferred alternative (Alternative 2) avoids clearance of indigenous vegetation that would have been assessed as being highly sensitive.

Minimisation

The residential property is 1,048 Ha in extent. Alternative 1 considered a site development plan with 22 erven. Alternative 2 supports minimisation by reducing the development footprint (18 erven) and allocating more usable open space, thereby lowering the extent of hardened surfaces and reducing stormwater runoff. The number of units is a reduction from that permitted but the Preferred Alternative 2 minimises the development to only 18 units with a more accessible and larger Open Space with better road access within this property. The application of infill development within an already built-up suburb as well as the use of an existing roads assists in the minimisation of impacts.

Rehabilitation

Although the wetland area has low rehabilitation potential, upgrading the road to municipal specifications provides an opportunity to improve water movement through the wetland through specific engineering designs which are now currently absent. Alien invasive plants along drainage ditches will be removed, and disturbed areas stabilised. The Freshwater specialist has recommended that a Rehabilitation Maintenance Management Plan should be drafted as a condition of approval.

Offset

In terms of the National Biodiversity Offset Guidelines (2023), a formal Biodiversity Offset is not required for this development since there are no remaining medium impacts.

The subject property (RE/1489) is in a degraded and transformed state. Very little indigenous vegetation remains on site, and although mapped as a Critical Biodiversity Area (CBA), botanical specialist ground-truthing confirmed that no SCC occur within the study area. Given the highly disturbed and transformed nature of the study area, it is unlikely that any plant SCC will occur in it. Furthermore, ecological connectivity between the property and surrounding natural areas is severely constrained by adjacent residential and resort developments, as well as the R43 national road. Consequently, the site holds low ecological value, SEI of the site is confirmed to be Very-low, and therefore, no offset is warranted.

A Wetland Offset is also not applicable since there will not be any wetland loss.

SECTION J: GENERAL

1. Environmental Impact Statement

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

→ The proposed development incudes an existing residential erf (RE/1489), undeveloped, originally the garden of a single residential house on Erf 2570, and the subdivision of the existing 'right of way' access road, to RE/ 1489 and adjacent properties, from Erf 1490, and the subsequent inclusion of this road in the municipal road network.

→ The development is located in an existing urban area in Vermont, Hermanus, with a total area of 11998 m^2 (±1,2 ha). The proposed development's footprint encompasses various zones, including residential erven, public open space erven, and road and parking erven.

→ RE/1489 is mapped as Critical Biodiversity Area: Terrestrial (CBA) under WCBSP (2023), this extends into the original portion with a house and various outbuildings. The natural vegetation is considered to be Hangklip Sand Fynbos which is critically endangered, however this has been completely lost to disturbance and transformation.

→ Most of Erf 1490 falls within Critical Biodiversity Area 2 Degraded, excluding the existing access road to be subdivided from the property. This property falls within an Unchanneled Valley Bottom drainage line (UVB), indicated as artificial on the NFEPA. The wetland delineation in Aquatic Biodiversity Assessment by Delta Ecology shows that the property (RE/1489) is outside the natural UVB Wetland, whereas the area of the road proposed for upgrades is within the delineated wetland. No wetland loss will be incurred.

→ Hangklip Sand Fynbos has been mapped for the site and this vegetation type requires regular burning to maintain biodiversity. This urban area has been excluded from burning for many years. The proposed residential development involves the clearance of natural vegetation on this disturbed and previously gardened RE/1489 which is covered in alien vegetation, including kikuyu grass and *Acacia* species.

→ The transition from vegetation to urban infrastructure raises concerns about vegetation loss and potential land degradation during the construction phase of the proposed development. In this case, the vegetation is impacted by invasive alien plants, a vegetable garden and past land use as a residential garden.

→ The proposed development is within an existing municipality spatial development framework (SDP) and requires consideration of water supply and wastewater treatment infrastructure capacity. GLS Consulting Engineers confirmed that there is sufficient capacity in the existing water reticulation system to accommodate the proposed development. There is sufficient capacity in the existing sewer reticulation system to accommodate the proposed development at the Wastewater Treatment Plant. Network upgrades are required to the sewer pipeline located within the access road reserve. Pipelines serve not only the proposed development and neighbouring properties but other properties in the area as well.

→ The need for the development is justified based on the demand for residential housing in the area. The desirability is aligned with zoning regulations and the existing urban context.

→ The residential development area is adjacent to the R43 National Road. This, and adjacent properties, cannot be accessed from the national road. As a result, a right of way access has been constructed across private property, Erf 1490, by the residents, which is hardened with shells.

→ The development has the potential to alter the hydrology of the UVB wetland although the functionality is assessed as low. Mitigation measures are explored to minimize and remedy these impacts. The design of the upgraded road could benefit the hydrology of the UVB wetland.

→ The development is expected to generate waste during the construction and operational phase. Measures to avoid, minimize, and safely treat or dispose of waste are considered.

→ The site is not identified as having cultural or historical significance. Western Cape Heritage do not require any further studies.

- → The development is expected to contribute to economic growth, job creation, and housing needs. It aligns with the socio-economic objectives of the area and local economic development initiatives.
- → Potential impacts on public health and well-being, such as noise, dust, and visual changes, are considered as the general impacts to the associated development. Mitigation measures are explored to address these concerns.
- → The site is mapped as Hangklip Sand Fynbos, which is Critically Endangered. But no indication of this vegetation type is present onsite since the site is already degraded and in a transformed state.
- → Most of the site is mapped as Critical Biodiversity Area (CBA1;Terrestrial). Since the site is degraded and in a transformed state, the botanist highlights that it should not be classified as a CBA1.
- → A total of 14 alien plants were found within the study area
- → The dominant vegetation type present onsite includes alien *Cenchrus clandestinus*, and native *Stenotaphrum secundatum* and *Carpobrotus edulis subsp. edulis*. Numerous other alien species are also present in varying abundances, such as *Acacia cyclops, A. saligna, Axonopus fissifolius, Briza maxima, Bromus diandrus, Erigeron bonariensis, Euphorbia terracina, Lactuca serriola, Lagurus ovatus, Leptospermum laevigatum, Pinus radiata, Schinus terebinthifolius, Yucca gloriosa, and Ulmus parvifolia*. While native species are also present, these are widespread and common and not threatened.
- → The degraded nature of the study area also means that there is a near complete absence of any species characteristic of Hangklip Sand Fynbos. These would include Eu*clea racemosa subsp. racemosa, Leucadendron coniferum, Searsia laevigata,* numerous *Erica spp,* and other *Proteaceae, Rutaceae,* or Restionaceae (*Elegia filacea, E. nuda, Restio eleocharis, and other Thamnochortus spp*.). Only a single restio species was found on-site (*Thamnochortus insignis*) and only a few individuals were present. These occur in the northwestern corner of the study area, and is mostly associated with the road corridor, on the other side of the study area border, where this species dominates.
- → The only native species found on-site that are associated with Hangklip Sand Fynbos are *Passerina corymbosa, Metalasia muricata, and Carpobrotus edulis*, but these are very widespread species and are also associated with numerous other vegetation types. Thus, they cannot be considered indicator species.
- → Ground truthing confirmed that no SCC occur within the study area. Given the highly disturbed and transformed nature of the study area, it is unlikely that any plant SCC will occur in it.
- → The National Web-Based Screening Tool identifies the study area as having Medium sensitivity for the Relative Plant Species Theme due to the potential presence of sensitive species. However, field verification confirmed that no Species of Conservation Concern or sensitive plant species occur on site, and given the highly disturbed condition of the area, the actual sensitivity is considered to be Low in accordance with the criteria outlined in Government Notice 1150 (Government Gazette 43855, October 2020).
- → The National Web-Based Screening Tool identifies the study area as having Very High sensitivity for the Relative Biodiversity Theme due to its overlap with a Critical Biodiversity Area (CBA1), a Strategic Water Source Area (SWSA – Boland), and the Hangklip Sand Fynbos ecosystem. However, field verification confirmed that the site is degraded and transformed and does not resemble the mapped vegetation type. Accordingly, the actual sensitivity of the site is considered Low in terms of Government Notice 320 (Government Gazette 43110, March 2020), although the Site Ecological Importance (SEI) score provides a more nuanced assessment of ecological sensitivity.
- → Field observations, together with the Site Ecological Importance (SEI) assessment, indicate that the study area can be classified as having a Very Low SEI. This is primarily due to the site being long transformed and degraded, with vegetation dominated by alien and weedy native species, the absence of Species of Conservation Concern, and the high resilience of the remaining disturbance-adapted plant species, which are common and likely to persist under current site conditions.
- → The study area is located within a SWSA (Overberg Region), occurs close to an Endangered wetland area (to the southeast), and is also located in a river FEPA. However, given the small, proposed development footprint, it is highly unlikely that the Project will have any major impacts on any of these areas.

Conclusions and Recommendation by the Aquatic specialist:

- → RE/1489 is terrestrial with no indication of the non-perennial drainage line as indicated on the maps of the area. The UVBW is located south and south-east of RE/1489. The proposed residential development is therefore not included in the Aquatic Assessment. In line with the results of the Risk Matrix, a General Authorisation (NEMWA) for 21c&I will be required.
- → The existing right of way access road crosses the UVB wetland which has a west to east flow, in a north to south direction and is located on Erf 1490 and adjacent properties. It is a natural UVBW and is relic or historical.
- → The specialist is of the opinion that the wetland in the area has lost wetland functionality and there is no rehabilitation potential due to the level of disturbance caused by the access road over this portion of the wetland
- → The Vermont Salt Pan is not deemed to be 'At-Risk' of the proposed development due to the proximity from the development, if mitigation measures are implemented.
- → The SSV assessed the functioning UVBW over Erf 1490 has a "Very High" Aquatic sensitivity which may be disturbed or lost (i.e. complete loss in flow regime, water quality, vegetation and geomorphic structure) as a result of the upgrade of the existing private access road to public road (Kolgans Close). This was confirmed by Aquatic Screening. An Aquatic Biodiversity Impact Assessment was undertaken by Delta Ecology recommending mitigation measures and refuting the "very high" rating.
- → The assessment utilised WET-Health tools to determine the Present Ecological State (PES) of the wetland. This established that it is Category D, indicating that it is in a largely modified state, with a combined score of 45%. Past excavation, vegetation clearing and urban runoff have altered its flow, geomorphology, and water quality.
- → The Wetland Ecological Importance and Sensitivity (EIS) scored a moderate 2, reflecting its limited contribution in the Critically Endangered Hangklip Sand Fynbos system.
- → The Wetland Ecosystem Services (WES) assessment showed a moderate score for trapping sediment and assimilation of toxins and carbon and contribution to biodiversity. All other assessed functions, including flood attenuation, are low or very low.
- → Construction will result in alteration of the flow regime during upgrade to the road and associated service pipelines.
- → Appropriate design of the upgrade to the access road could benefit the UVBW.
- → Stormwater runoff from the residential area could alter the volume and velocity of water in the UVBW
- → Water quality may be impaired by contaminated stormwater and hydrocarbons from vehicles into the UVBW.

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)

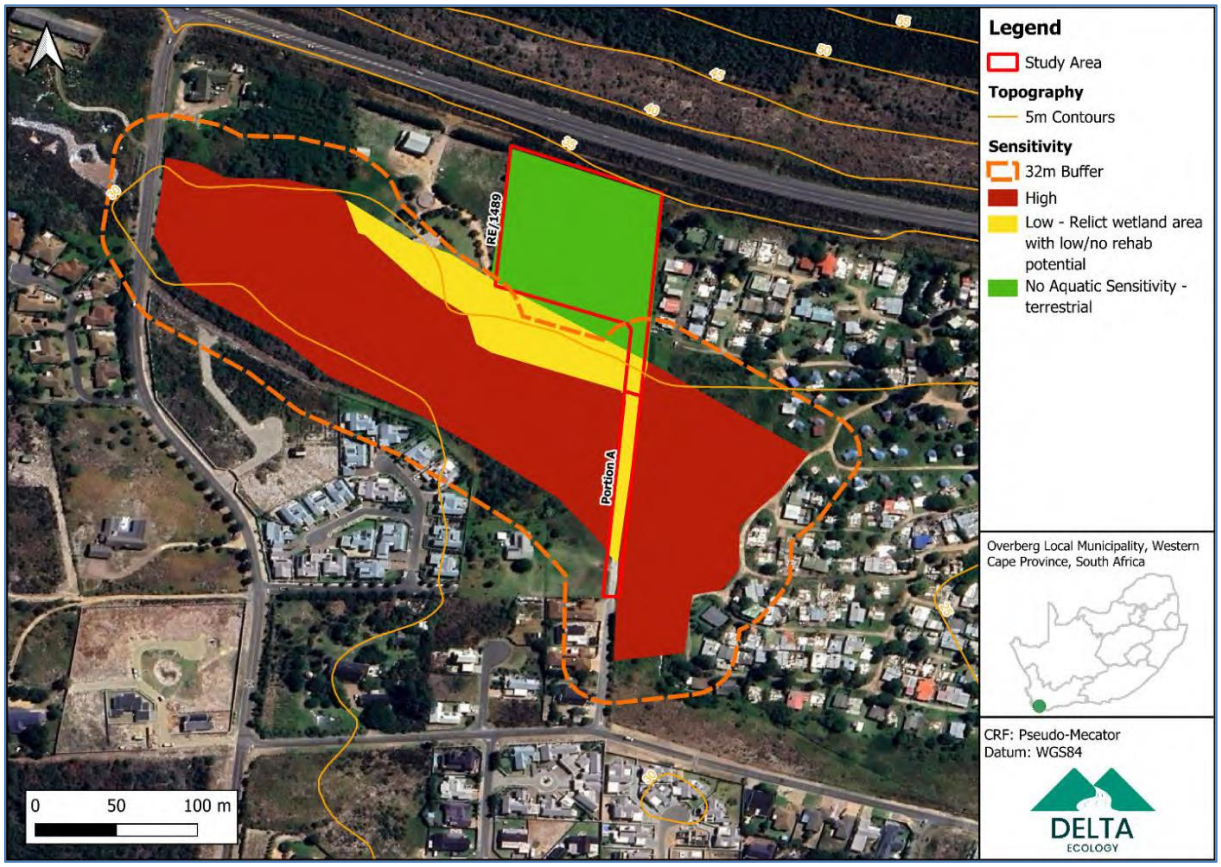

Figure 23. Aquatic Sensitivity as per Aquatic Impact Assessment.

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 Impacts

- → The proposed development will contribute to addressing the demand for residential housing in Vermont, providing 18 single residential units for families.
- → Job creation and short-term employment opportunities are anticipated during the construction phase, along with secondary economic benefits for local suppliers and services.
- → The site is located within the existing urban edge and municipal planning framework, making it an appropriate infill development and limiting further urban sprawl into natural areas.
- → The formalisation and upgrading of the existing right-of-way access road (Erf 1490) and the sewer pipeline will improve municipal service provision and benefit neighbouring properties.
- → Alternative 2 includes a larger, more accessible public open space that enhances community well-being, reduces the extent of hardened surfaces, and assists with stormwater management.
- → The development is aligned with the Overstrand Municipality's densification strategy, promoting efficient land use in an already urbanised environment.

Negative Impacts and Risks

- → Approximately 1 ha of transformed and partly natural vegetation, mapped as Critically Endangered Hangklip Sand Fynbos, will be cleared.
- → Permanent loss of habitat for common species and possible displacement of the Cape Dwarf Chameleon (*Bradypodion pumilum*), a Vulnerable species that may occur on site.

- → The upgrade of the existing access road across Erf 1490 will disturb relic wetland habitat and may alter hydrology, flow regime, and connectivity, however, the specialist found that this wetland has very low ecological functionality and limited rehabilitation potential.
- → Noise, dust, and disturbance during construction may affect adjacent residents. Soil erosion, sedimentation, and contamination risks (e.g., hydrocarbons, cement runoff) may affect the wetland if not properly managed.
- → Increased hardened surfaces may result in greater runoff volumes and velocities into the adjacent wetland, with associated risks of erosion or water quality impairment if not mitigated.
- → The site will transition from a partially vegetated lot to built infrastructure, changing the sense of place; however, this is in keeping with the existing surrounding residential context.

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

Recommendations by the EAP:

- → The residential development of Remainder of Erf 1489 (RE/1489) Vermont should be limited to Alternative 2 (Preferred) for 18 residential homes, Open Space and roads on this property, which is 10 479m^2 in extent.
- → The existing right of way access over Erf 1490, should be subdivided from Erf 1490.
- → The road and service infrastructure in the road reserve should be upgraded to municipal specifications.
- → Measures proposed in the Aquatic Biodiversity Assessment must by implemented during both Planning and Operation.
- → An Environmental Control Officer (ECO) to be appointed during the construction phase of the proposed development.
- → A Homeowners Association (HOA) or similar must be responsible for maintenance and operation of measures to manage stormwater from the residential development area into the wetland.
- → Should any heritage resources, including evidence of graves and human burials, archaeological material and Palaeontological material be discovered during the execution of the activities above, all works must be stopped immediately and HWC must be notified without delay.
- → Search and rescue for flora and fauna prior to groundbreaking.
- → Prior to the commencement of any construction activities on Kolgans Close Road , the prescribed construction footprint shall be clearly demarcated on the ground by means of physical markers or temporary fencing, in order to prevent any encroachment into adjacent sensitive areas, including the identified wetland. This demarcation shall be maintained for the full duration of the construction period.
- → All construction activities associated with the upgrading of the access road and the installation or upgrading of associated sewer and water pipelines shall be undertaken strictly within a prescribed construction footprint, which shall be limited to the existing road and road reserve.

Aquatic Biodiversity Impact Assessment:

Disturbance of Wetland Habitat

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).
- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working

servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).

- → Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas located outside of the No Go area. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp.
- → Demarcation of the construction footprint/working servitude must be signed off by an ECO (or similar). Demarcation should not be removed until construction is complete, and rehabilitation (if applicable) has taken place.
- → Prohibit the dumping of excavated material, building materials or removed vegetation within the No Go area. Building material must be stored at the designated storage area located outside of the no-go area. Spoil material must be appropriately disposed of at a registered waste disposal facility.
- → Undisturbed topsoil and subsoils removed from the construction footprint must be stored separately at the designated stockpile area for future rehabilitation.
- → Vegetation clearance should be restricted to the relevant development components and indigenous vegetation cover should be maintained as far as practically possible.
- → Vegetation which is considered suitable for rehabilitation activities after construction (such as indigenous grasses and other herbaceous species) should be carefully removed from the construction footprint and stored at an appropriate facility for use in later rehabilitation activities (as applicable).
- → Clear and remove any rubble or litter that may have been accidentally deposited into the no-go area because of construction activities and dispose of at an appropriate registered facility.
- → An ECO must inspect the construction footprint of the road upgrade on a weekly basis and must take immediate measures to address unforeseen disturbances to the wetland. Any disturbed / compacted areas falling outside of the demarcated construction footprint must be immediately rehabilitated. Depending on the extent of damage the method of rehabilitation may require input from an aquatic specialist / suitably qualified contractor.
- → Once construction has been completed, orange hazard fences as well as all construction waste, rubble, and equipment must be removed from the construction footprint.
- → In line with the NEMBA, all AIPS listed under the amended AIPS Lists (DEFF: GN1003, 2020) must either be removed or controlled on land under the management of the proponent.
- → Vegetation which needs to be re-planted (if applicable) should be planted with appropriate indigenous vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Altered flow regime

- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → Should flow need to be impeded or diverted temporarily within the watercourse while works are being undertaken, it is recommended that the diversion be undertaken during the dry season and that the flow be piped past the works and discharged into the watercourse immediately downstream of the works. The diversion should be kept to a minimum period and should be mitigated to ensure that no sedimentation or erosion is resulting downstream.
- → Natural water flow within the UVBW must be maintained. Multiple culverts or open-bottom structures to maintain sheet flow is recommended as well as permeable shoulders or subgrades to allow natural infiltration of water into wetland soils where and as applicable.

- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.
- → Stormwater systems will require ongoing maintenance. Any build-up of silt or debris within stormwater drains or swales will need to be cleared to ensure the continued functioning of the systems.
- → Any damage to stormwater infrastructure, and any flaws identified in the functionality of stormwater infrastructure, must be rectified immediately.
- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → Implement erosion control measures where required. Examples of erosion control measures include:
    - Covering steep/unstable/erosion prone areas with geotextiles.
    - Covering areas prone to erosion with brush packing, straw bales, mulch.
    - Stabilizing cleared/disturbed areas susceptible to erosion with sandbags.
    - Constructing silt fences / traps in areas prone to erosion, to retain sediment-laden runoff. Silt fences must be adequately maintained. Furthermore, the ECO / site manager must monitor sediment fences / traps after every heavy rainfall event and any sediment that has accumulated must be removed by hand.
- → Rainwater harvesting schemes (for the residential development) may reduce runoff intensity and thereby mitigate the impact of catchment hardening.
- → The alien invasive vegetation present within the wetland area must be removed and replanted with indigenous wetland vegetation.
- → A Rehabilitation, Maintenance and Management Plan must be drafted by a suitably qualified specialist.

Water Quality Impairment

- → The extent of works within the UVBW should be limited as far as possible (both in terms of extent and duration and should be within the road reserve area).
- → Designate the high sensitivity / functional UVB wetland area as a No Go for construction activities (for both the residential development and the replacement / upgrade of the sewer pipeline) as far as possible. Clearly demarcate the construction footprint (including construction camp, access roads, stockpile areas and working servitudes) with orange hazard tape, fencing or similar prior to the commencement of any activity, and strictly prohibit the movement of construction vehicles and personnel outside of the demarcated areas (as applicable).
- → The works within the UVBW should (where possible) take place during the drier months of the year (October to May) when there would be minimised impact in terms of flow and water quality. Where construction during the wet period cannot be avoided, it is recommended that the proposed method statement be compiled for undertaking the works during higher flows that specifically address limiting contamination and sediment at the site from impacting downstream aquatic habitat.
- → Ensure that effective stormwater management measures are implemented during construction, particularly associated with runoff from the road. Stormwater management must ensure that no runoff, which will impair the water quality and lead to increased sedimentation, may enter the downstream wetland area. Additionally, clean SW which does enter the downstream wetland system should do so in a manner that ensures no erosion occurs specifically during storm events, such as through vegetated swales.

- → Silt fencing and/or sediment basins should be installed prior to construction activities, in areas prone to sedimentation/erosion, to trap sediments and prevent runoff into wetlands.
- → The site manager / ECO must check the No Go area for pollution/spills, erosion damage and sedimentation weekly and after every heavy rainfall event. Should pollution, erosion or sedimentation be noted, immediate corrective measures must be undertaken.
- → Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.
- → Inspect all storage facilities, vehicles, and machinery daily for the early detection of deterioration or leaks and strictly prohibit the use of any vehicles or machinery from which leakage has been detected.
- → Mixing and transferring of chemicals or hazardous substances must take place outside of the No Go area, and must take place on drip trays, shutter boards or other impermeable surfaces.
- → Drip trays must be utilised at all fuel dispensing areas; and during the maintenance of existing sewer flow as possible.
- → Vehicles and machinery should preferably be cleaned off site. Should cleaning be required on site it must only take place within designated areas outside of the No Go area and should only occur on bunded areas with a water/oil/grease separator.
- → Dispose of used oils, wash water from cement and other pollutants at an appropriate licensed landfill site.
- → Avoid the use of infill material or construction material with pollution / leaching potential. Where possible, in situ earthen materials must be used during construction to reduce the risk of leachate from imported materials contaminating the wetland area.
- → Concrete should preferably be imported as “ready-mix” concrete from a local supplier. Should onsite concrete mixing be required it must not be done on exposed soils. Concrete must be mixed on an impermeable surface in an area of low environmental sensitivity identified by the ECO outside of the no-go area. Surplus or waste concrete must be sent back to the supplier who will dispose of it.
- → Construct temporary bunds around areas where cement is to be cast in situ.
- → Dispose of concrete and cement-related mortars in an environmental sensitive manner (can be toxic to aquatic life). Disposal of any of these waste materials into the No Go area is strictly prohibited.
- → Washout must not be discharged into the no-go area. A washout area should be designated, and wash water should be treated on-site.
- → Clean up any spillages immediately with the use of a chemical spill kit and dispose of contaminated material at an appropriately registered facility.
- → Provide portable toilets where work is being undertaken (1 toilet per 10 workers). These toilets must be located within an area designated by the ECO outside of the no-go area and should preferably be located on level ground. Portable toilets must be regularly serviced and maintained.
- → Provide an adequate number of bins on site and encourage construction personnel to dispose of their waste responsibly.
- → Waste generated by construction personnel must be removed from the site and disposed of at a registered waste disposal facility on a weekly basis.
- → Design a SWMP which will allow for the infiltration and treatment of stormwater. All stormwaters must receive basic filtering and treatment prior to its release.
- → Incorporate measures into the stormwater design to trap solid waste, debris and sediment carried by stormwater. Measures may include the use of curb inlet drain grates and debris baskets/bags.
- → Stormwater generated from areas with a higher risk of contamination such as parking areas and roads (as applicable) must receive basic filtering and treatment prior to its release into surrounding areas.
- → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets.
- → Operational phase mitigation implemented during the design/construction phase:

- Construct sewage pipelines in accordance with the relevant SANS / SABS specifications.
- Design the pipelines to accommodate the operating and surge pressures.
- Provide surge protection e.g. air valves.
- Allow for scour valves along pipelines to ensure sewage pipelines can be emptied in a controlled manner if required.
- Allow for surcharge containment and emergency storage of 2 hours of peak flow at manholes located within areas upslope of the wetland. Containment/emergency storage may include a concrete box or earthen bund surrounding the manholes. The backup storage capacity of manholes may also be improved by raising the manholes by one meter.

→ The sewage system must be monitored and maintained into perpetuity. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles.

→ These measures should be addressed, implemented and monitored in terms of the Environmental Management Plan for the construction phase.

Plants Species and Terrestrial Biodiversity Compliance Statement

General Terrestrial Biodiversity impacts

→ Any landowners must adhere to their legal obligations to actively eradicate and manage alien vegetation infestations present on the applicable and surrounding properties

→ No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species.

→ Areas of indigenous vegetation communities outside of the direct project footprint, if present, should under no circumstances be fragmented or disturbed further.

→ All vehicles, if present on site, must remain on demarcated roads and no unnecessary driving in the veld outside these areas are allowed.

Soil erosion and associated degradation of ecosystems.

→ Minimize the number of disturbed areas.

→ Any signs of erosion resulting from the project activities must be rectified immediately and monitored thereafter to ensure that they do not re-occur.

→ Roads and other disturbed areas within the study area should be regularly monitored for erosion problems, and problem areas should receive follow-up monitoring to assess remediation success.

→ Existing access routes and walking paths must be made use of wherever possible.

→ Silt/sediment traps/barriers should be used where there is a danger of topsoil or material stockpiles eroding and entering downstream drainage lines and/or other sensitive areas. These sediment/silt barriers should be regularly maintained and cleared so as to ensure effective drainage of the areas

→ Runoff water on exposed areas should be controlled.

Spread and/or establishment of alien and/or invasive species.

→ Invasive alien plant species must be removed from the site as per NEM:BA requirements.

→ Regular monitoring for alien plants at the site should occur and could be conducted simultaneously with erosion monitoring.

→ When alien plants are detected, these should be controlled and cleared using the recommended control measures for each species to ensure that the problem is not exacerbated or does not re-occur and increase to problematic levels.

- → Any area that is cleared of invasive alien plant species must receive regular follow-up treatments (preferably at least three follow-ups) to ensure that populations do not re-establish after such initial clearing efforts.
- → Any chemicals/herbicides used during clearing efforts must strictly be used only in accordance with the manufactures guidelines, especially when occurring in or close to hydrological features.
- → No planting or importing of any alien species to the site for landscaping, rehabilitation, or any other purpose should be allowed.

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.

The result of the Risk Assessment Matrix was an overall "Low Risk" rating for the proposed development, assuming that all mitigation measures will be implemented. Therefore, the project should be registered under the GN4167 (2023) General Authorisation (GA).

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.

RE/1489 Vermont is one of very few remaining residential properties suitable for densification. The predicated population growth in Overstrand confirms the Municipal SDF requirement that existing urban area must be densified in order to provide housing. The layout proposed for 18 residential homes and an Open Space does not densify the property to the full extent of that permitted in the Town Planning Scheme. This compromise does result in a better sense of place for residents and does not increase the demand for services beyond the municipality's ability to service the homes.

The proposed residential development, specifically of Alternative 2, for 18 Residential erven, Open Space, Roads and Parking on RE/1489 Vermont, should be authorised.

The existing 'right of way' road should be formalised by the subdivision of 10m x ±150m from the eastern boundary of Erf 1490. The upgrading of the road and services within the road reserve, to a design appropriate for its location within a wetland, should be a condition of the authorisation.

The existing right of way access over private property (Erf 1490) is not appropriate. This must be formalised and the road upgraded from the existing road, which is hardened with shells. The sewer pipeline must be upgraded to municipal specifications, as recommended by the engineer. This is especially important as sewage spills, as a result of blockages, will contaminate the UVB Wetland. Similarly, any other services (water pipes) located within the road reserve must be appropriately monitored and maintained.

Conditions of Authorisation

- The EMP must be strictly followed during all phases of the project (construction, operation and post-construction). Regular monitoring and reporting should be maintained to ensure compliance with environmental safeguards.
- Upgrades to existing service pipelines (sewer, water and any future services) must be designed and constructed to accommodate the hydrology of the wetland and be to specifications of the Engineer, Overstrand Municipality and as recommended by Delta Ecology.
- Prior to the commencement of any construction activities on Kolgans Close Road , the prescribed construction footprint shall be clearly demarcated on the ground by means of physical markers or temporary fencing, in order to prevent any encroachment into adjacent sensitive areas, including the identified wetland. This demarcation shall be maintained for the full duration of the construction period.

- All construction activities associated with the upgrading of the access road and the installation or upgrading of associated sewer and water pipelines shall be undertaken strictly within a prescribed construction footprint, which shall be limited to the existing road and road reserve.
- The project must be registered for General Authorisation (GA) in terms of GN4167 (2023) of the National Water Act with the Department of Water and Sanitation.
- Search and Rescue for possible fauna and floral species of conservation concern (SOCC) especially but not limited to Dwarf Chameleons. Professional advice and assistance should be sort from Whale Coast Conservation Chameleon Project (Sheraine van Wyk; Email: sheraine.wcc@gmail.com Cell: 0834840202). Please note that the Whale Coast Conservation may charge a search and rescue and relocation fee for the Chameleon transfer, if applicable. The aim should be to encourage the rehabilitation of the open spaces and gardens to maintain chameleon habitat on site over relocation.
- All mitigation measures included in the EMPr by the freshwater specialist and the botanical specialist must be fully implemented prior/during construction and operational phases.
- No plant species, whether native or exotic, should be brought into, or removed from, the study area, to prevent the spread of exotic or invasive species.
- Invasive alien plant species must be removed from the site as per NEM:BA requirements.
- Any chemicals/herbicides used during clearing efforts must strictly be used only in accordance with the manufacture's guidelines, especially when occurring in or close to hydrological features.
- Fuel, chemicals, and other hazardous substances should preferably be stored offsite, or as far away as possible from the no-go area. These substances must be stored in suitable secure weather-proof containers with impermeable and bunded floors to limit pilferage, spillage into the environment, flooding, or storm damage.

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

N/A

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.

This Environmental Authorisation is granted for a period of five years from the date of issue, during which period the holder must commence with the authorised listed activities. A period of ten (10) years, from the date the holder commenced with the authorised listed activities, during which period the authorised listed activities must be concluded.

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.

The proposed residential development of RE/1489 Vermont will be connected to the water networks provided by the Overstrand Municipality.

There is no possibility of using water from any other source during the construction or operational phase of this residential development. Water will be reused and recycled where possible. Collecting rain water runoff in rainwater tanks, for garden use, is recommended. This will help to attenuate the volume of water entering the wetland in storm events

4. Waste

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

Waste is collected weekly by the municipality. At the source waste separation and recycling is encouraged. The separated waste will be collected as per the municipal recycling and sorting scheme.

5. Energy Efficiency

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

Methods for exploring alternative methods for energy efficiency must be explored and included at the design phase Including, but not limited to

- Gas geysers,
- Geysers on smart timers,
- Solar panels for water heating,
- Solar panels for alternative energy supply
- Low wattage lighting, on / off timers etc.
- The position and extent of solar panels, whether for water heating or energy generation, must comply with regulations, be indicated on drawings approved by the HOA, and be maintained for the lifetime of the development.

SECTION K: DECLARATIONS

SECTION K: DECLARATIONS

DECLARATION OF THE APPLICANT

Note: Duplicate this section where there is more than one Applicant.

I **HUW BRYN OWEN JONES** ID number **7209015028087** in my personal 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:

- I am 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:
  - 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.

01 June 2026

Signature of the Applicant: Date:

WESTAND INV 1015 PTY LTD

Name of company (if applicable):

BASIC ASSESSMENT REPORT: APRIL 2024 Page 20 of 24

DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")

I **MICHELLE NAYLOR** EAP Registration number **2019/698** 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:
  - 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;

29/05/2026

Signature of the EAP: Date:

Lornay Environmental Consulting Pty Ltd

Name of company (if applicable):

DECLARATION OF THE REVIEW EAP

I……, EAP Registration number …….. as the appointed Review EAP hereby declare/affirm that:

- I have reviewed all the work produced by the EAP;
- I have reviewed the correctness of the information provided as part of this Report;
- I meet all of the general requirements of EAPs as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the specialist (if any), the review specialist (if any), 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 as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I Kimberley van Zyl , as the appointed 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:
  - 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
  - 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.

KvanZyl — 18 September 2025

Signature of the EAP: Date:

Delta Ecology

Name of company (if applicable):

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I Dr. Jan-Hendrik Keet ....., as the appointed 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:
  - 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
  - ~~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.

13 March 2026

Signature of the ~~E~~AP: Specialist — Date:

Acuity JRK Pty Ltd (trading as EcoFloristix Specialist Botanical Surveys)

Name of company (if applicable):

DECLARATION OF THE REVIEW SPECIALIST

I ……., as the appointed Review Specialist hereby declare/affirm that:

- I have reviewed all the work produced by the Specialist(s):
- I have reviewed the correctness of the specialist information provided as part of this Report;
- I meet all of the general requirements of specialists as set out in Regulation 13 of the NEMA EIA Regulations;
- I have disclosed to the applicant, the EAP, the review EAP (if applicable), the Specialist(s), 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 as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the NEMA EIA Regulations.

Signature of the EAP: Date:

Name of company (if applicable):