LORNAY
ENVIRONMENTAL CONSULTING

REQUEST FOR THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN

PROPOSED RESIDENTIAL DEVELOPMENT ON ERF 1486, VERMONT, HERMANUS

JUNE 2025

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 en Aarde Wine Village, Hermanus, 7200
Lornay Environmental Consulting Pty Ltd**|** Reg 2015/445417/07

Western Cape Government

ADOPTION OF A MAINTENANCE MANAGEMENT PLAN

Request for the adoption of a Maintenance Management Plan in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014.

APRIL 2024

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

IMPORTANT INFORMATION TO BE READ PRIOR TO COMPLETING THE ATTACHED FORM:

1. Purpose

The purpose of this form is to provide baseline information for the adoption of a Maintenance Management Plan ("MMP) by the competent authority.

2. Administrative requirements

This form must be used to request the competent authority to adopt a Maintenance Management Plan in terms of the NEMA EIA Regulations, 2014.

3. Maintenance Management Plan information

3.1 This form is for the adoption of a MMP and only relates to the Listed Activities as contained in Listing Notice 1, 2 and 3 of the EIA Regulations, 2014 that make provision for the adoption of a MMP.

3.2 Please note that an MMP can only be considered for activities pertaining to maintenance related work. Construction work related to new or expanded structures or infrastructure beyond the existing footprint cannot be considered as part of the request for the adoption a MMP by the competent authority.

3.3 Construction work related to new or expanded structures or infrastructure beyond the existing footprint may trigger a listed activity in terms of the EIA Regulations, 2014 and environmental authorisation may be required. If this is the case an application for environmental authorisation must be submitted to the competent authority.

3.4 Notwithstanding the MMP possibly being defined or adopted by the Competent Authority, any other applicable statutory requirements must still be complied with (e.g. any obligations under the National Water Act, 1998 (Act 36 of 1998) or the Conservation of Agricultural Resources Act, 1983 (Act 43 of 1983)).

3.5 The proponent must note that a MMP for a watercourse must be undertaken through consultation with the Department of Water and Sanitation and/or the relevant Catchment Management Agency (responsible water authority). This is to ensure compliance in terms of a Permissible Water Use as set out in the National Water Act, 1998 (Act No. 36 of 1998). It is recommended that this process for authorisation in terms of the National Water Act be clarified prior to the drafting and submission of the MMP.

3.6 The adoption of a MMP does not absolve the proponent from complying with any applicable legislation or the general "duty of care" set out in Section 28(1) of the NEMA that states, "*Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment.*" (Note: When interpreting this "duty of care" responsibility, cognisance must be taken of the national environmental management principles contained in Section 2 of the NEMA.

3.7 Please note that the content of a MMP must include *inter alia*, the following:

- A description of the objectives of the MMP;
- A description of the relevant legislation and polices within which the MMP is prepared;
- A description of the site and a locality map;
- A description of the proposed maintenance activities;
- A description of the tasks that will be performed (method statement);
- A description of the potential impacts on the receiving environment and any management and/or mitigation measures to minimise the potential impacts associated with the maintenance activity;
- Any specialist inputs that were obtained; and
- The roles and the responsibilities of the role players who will be involved in the maintenance activity.

3.8. A public participation process must be undertaken as part of the request for the competent authority to adopt a MMP. As a minimum you will be required to:

- inform the surrounding neighbours, your local authority and the relevant water authority of your intentions (these interested and affected parties will be regarded as registered interested and affected parties);
- allow a minimum of 30 days as a commenting period for these interested and affected parties;
- obtain written comment from all relevant Organs of State and the Local Authority; and
- respond to comments received and the proof of the public participation including all comments received and responses provided thereto must be submitted to the competent authority.

4. General

4.1 *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.

4.2 The required information must be typed within the spaces provided in the form. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. The tables may be expanded where necessary. Please make use contrasting colours in the answer blocks to improve the visibility and highlight information.

4.3 The quality, correctness and detail of information submitted by you is extremely important and it remains your responsibility to interrogate the specifics of your proposed development in order to report on the potential listed activities in this form.

4.4 This form is a guide to the information that must be submitted. Any additional information, pictorial evidence or explanations prompted by the form must be submitted along with this form in order to ensure that the competent authority does not need to request additional information from you. Incomplete forms will result in a request for additional information.

4.5 Unless protected by law all information contained in, and attached to this form, will become public information on receipt by the Department. Upon request, the Applicant/EAP must provide any interested and affected party with the information contained in or submitted with this Form.

Protection of Personal Information Act, 2013 (Act No. 4 of 2013) ("POPIA"):
Your attention is drawn to POPIA which is a comprehensive data protection legislation enacted in South Africa and came into effect on 1 July 2020. POPIA aims to give effect to the constitutional right to privacy, whilst balancing this against competing rights and interests, particularly the right of access to information. Please note that your personal information will only be used as far as it relates to the EIA process. By including your personal details in the Form and any subsequent reports and documents it will be deemed as giving consent to use this information as far as it relates to the EIA process.

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

4.7 This form must be **duly dated and signed** by the Proponent and/or EAP (wherever applicable) and must be submitted to the Department at the details provided below.

4.8 Please note that it is an offence for a person to provide incorrect or misleading information in any form, including any document submitted in terms of the EIA Regulations to a competent authority or omits information that may have an influence on the outcome of a decision of a competent authority.

5. Circulars, Guidelines and Tools

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

ADOPTION OF A MAINTENANCE MANAGEMENT PLAN FORM

REQUEST FOR THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998) ("NEMA") AND THE ENVIRONMENTAL IMPACT ASSESSMENT ("EIA") REGULATIONS, 2014.

APRIL 2024

GENERAL PROJECT DESCRIPTION

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

PROPOSED RESIDENTIAL DEVELOPMENT ON ERF 1486 VERMONT

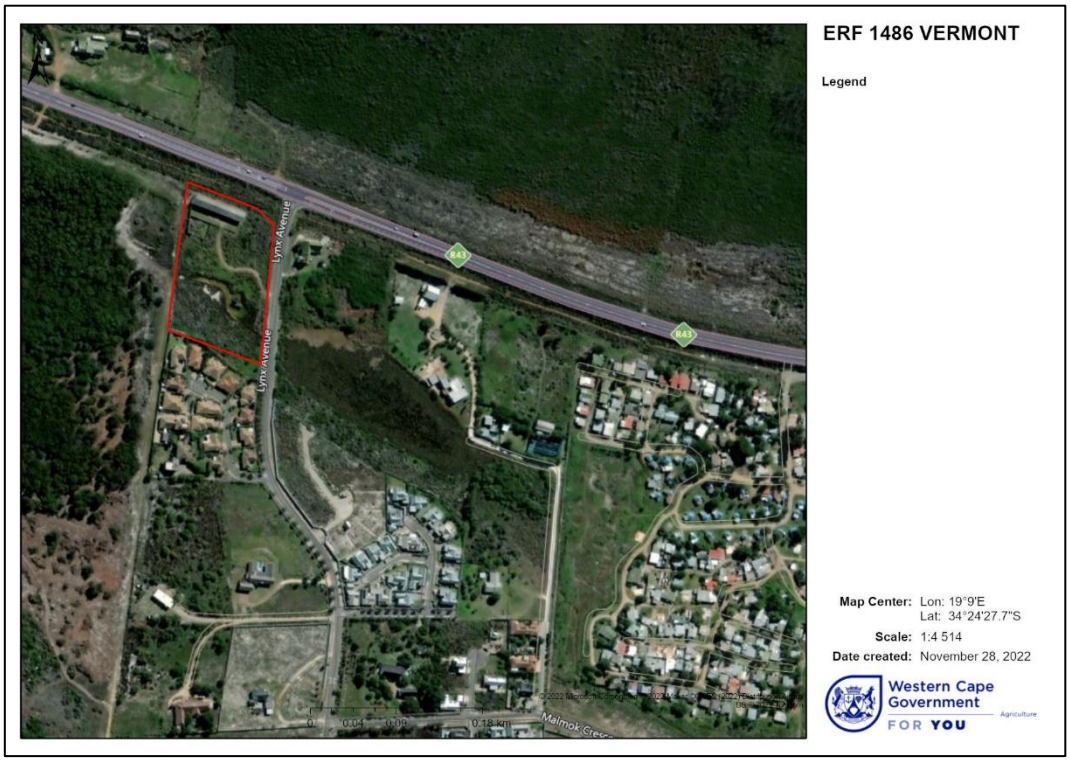
The subdivision of parent erf 1486 Vermont to 9 single residential erven, 2 road infrastructure and open space, within 32 m of a watercourse

GENERAL REQUIREMENTS

1.1. Locality Map

A locality map must be attached to the Form, as Appendix A. The scale of the locality map must be at least 1:50 000. For linear activities 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 include the following:

- an accurate indication of the project site position;
- 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;
- the prevailing wind direction; and
- GPS co-ordinates (Indicate the position of the proposed maintenance activities on the site). The co-ordinates should be in degrees, minutes and seconds. The minutes and seconds should be to at least three decimal places. The projection that must be used in all cases is the Hartebeesthoek94 WGS84 co-ordinate system**. If maintenance activities will be undertaken along a stretch of a watercourse, the start, middle and end co-ordinates must be provided.**



PART 1: ADMINISTRATIVE DETAILS

SECTION A: DETAILS OF PROPONENT | EAP| LANDOWNER| MUNICIPALITY

Highlight the Departmental Region and District in which the intended application will fall		CAPE TOWN OFFICE (REGION 1)		GEORGE REGIONAL OFFICE (REGION 3)
		City of Cape Town	Cape Winelands District	Central Karoo District
		West Coast District	**Overberg District x**	Garden Route District

Duplicate this section where there is more than one Proponent						
1.	Name of Proponent:	Elephant Ventures Africa cc				
	Contact person name (if other):	Craig Saunders				
	Company/ Trading name State Department/Organ of State:	Elephant Ventures Africa cc				
	Company Registration Number:	1999/013536/23				
	Postal address & Postal code:	224 Cherrywood Street, Arabella, Kleinmond			Code	7195
	Contact numbers:	Tel.	+27(0)	Cell:	083 306 3770	
	E-mail:	babyjumbo@mweb.co.za				
2.	Company of EAP/Specialists:	Lornay Environmental Consulting				
	EAP / Candidate EAP / Specialist name:	Michelle Naylor				
	EAP / Specialists registration no:	EAPASA. 2019/698, SACNASP., IAIASA				
	Postal address & Postal code:	Unit 5/1 F, Hemel and Aarde Wine Village, Hermanus			Code	7200
	Contact numbers:	Tel.	+27(0)	Cell:	+27(0)	
	E-mail:	michelle@lornay.co.za				
Duplicate this section where there is more than one Landowner						
3.	Name of landowner:	As above				
	Name of contact person for landowner (if other):					
	Postal address & Postal code:				Code	
	Contact numbers:	Tel.	+27(0)	Cell:	+27(0)	
	E-mail:					
Duplicate this section where the is more that one person in control of the land						
4.	Name of Person in control of the land:	As above				
	Contact person for 'person in control of the land' (if other):					
	Postal address & Postal code:				Code:	
	Contact numbers:	Tel.	+27(0)	Cell:	+27(0)	
	E-mail:					
Duplicate this section where there is more than one Municipal Jurisdiction						
5.	Municipality in whose area of jurisdiction the proposed activity will be undertaken:	Overstrand Municipality				
	Name of contact person:	Penelope Aplon				
	Postal address & Postal code:	PO Box 20, Hermanus			Code	7200
	Contact numbers:	Tel.	+27(0) 28 316 5619	Cell:	+27(0)	
	E-mail:	paplon@overstrand.gov.za				

PART 2: ADOPTION OF A MAINTENANCE MANAGEMENT PLAN

SECTION B: DETAILS OF THE PROPOSED MAINTENANCE ACTIVITY(IES)

1.	Provide a detailed description of the proposed maintenance activity(ies). (Please ensure that a method statement is included for each maintenance activity.)

The Method Statement for the maintenance activities described above are outlined as follows:

- → **What** – needs to be done. A description of the work to be undertaken.
- → **How** – a description of the methods and materials.
- → **Where** – the locality of the work
- → **When** – the commencement and completion program for the work
- → **Who** – the person responsible
- → **Why** – The reason for the activity

The following Method statements are included in the MMP:

Method Statement 1: Clearance of alien vegetation and encroaching vegetation within the wetland area.

Impact, mitigation and Recommendations:

- → Damage to beds and banks of the watercourse and wetland during vegetation removal ().
- → Erosion from the bank as a result of above damage and deposition / sedimentation downstream.
- → Flow obstructed by branches/ leaves falling or being placed in the watercourse.
- → Flow obstruction by encroachment of reeds and bulrushes.
- → Limited open water
- → Change to exposure to sun and therefore increased temperature of the soil with no shade.
- → Change in flow regime with reduced abstraction due to transpiration of large trees

a. *Cenchrus clandestinus* (Kikuyu grass)

What?

- → It is recommended that the Kikuyu within the UVB wetland, and the immediate surrounds, should be removed from the property.

How?

- → The most effective method for Kikuyu removal is by the application of herbicide.
- → The plants should be removed by digging out all rhizomes / stolons.
- → Care should be taken to remove all rhizomes / stolons to prevent the kikuyu from re-sprouting.

Where?

- → The selective herbicide Focus Ultra, can be used to target the Kikuyu vegetation which is immediately surrounding the wetland and around the whole property without significantly affecting non-target indigenous plant species.

When?

- → All large trees must be removed prior to the development of the property. The inclusion in the Operation EMP is relevant as invasive plants are an issue that will continue into the future.
- → Herbicide should not be applied in wet conditions / during winter. Herbicide should only be conducted during summer months under dry conditions.

Who?

- → Implemented by the appointed maintenance by the Applicant, property owner or Homeowners Association (HoA).

Why?

- → To prevent obstruction of flow within the wetland and stormwater system.
- → To reduce erosion and sedimentation risk caused by dense or invasive vegetation.
- → To enhance the ecological functioning of the wetland and facilitate hydrological connectivity.
- → To maintain open water areas, improve wetland biodiversity, and prevent excessive transpiration and shading from large alien trees.

b. *Cortaderia selloan* (Pampas grass)

What?

- → *Cortaderia selloana* (Pampas grass) poses a significant threat to aquatic ecosystems due to its classification as a NEMBA Category 1b invasive species. This classification mandates that pampas grass must be controlled and, wherever possible, removed and destroyed.

How?

- → Effective methods for the removal of pampas grass include manual removal or a combination of chemical and manual methods. When removing pampas grass manually, protective gear should be worn because the flowers may cause respiratory tract irritation, and the sharp leaves can cut the skin and cause irritation. The flower heads should be cut first and placed into a bag to prevent seed dispersal. The plant should then be cut down as close to the ground as possible, and the entire root system must be dug up to prevent resprouting.

Where?

- → It is recommended that the Pampas Grass within the UVB wetland and the immediate surroundings be removed, and appropriate management must be in place to prevent reestablishment.

When?

- → All large trees must be removed prior to the development of the property. The inclusion in the Operation EMP is relevant as invasive plants are an issue that will continue into the future.

Who?

- → Implemented by the appointed maintenance by the Applicant, property owner or Homeowners Association (HoA)

Why?

- → *Cortaderia selloana* (Pampas grass) poses a significant threat to aquatic ecosystems due to its classification as a NEMBA Category 1b invasive species. Pampas grass is a prolific seed producer and an aggressive colonizer that can outcompete indigenous wetland plant species.

c. *Acacia saligna* (Port Jackson) and *A. cyclops* (rooikrans)

What?

- → Port Jackson Willow (*Acacia saligna*) appears similar to a Eucalyptus tree when young. Removal of this invasive species is not sufficient to ensure that an area is cleared of the plant. Restoration, replacing the removed plant with an appropriate indigenous plant, is more likely to be successful. *Acacia saligna* and A. cyclops both grow as small, dense, spreading trees which colonize disturbed soils. *Acacia saligna* has the ability to grow in soil with low levels of nutrients, has an early reproductive maturity and large quantity of seeds are produced. The seeds survive fire and have the ability to germinate after cutting or burning.

How?

- → Hand pulling should be implemented as the preferred clearing technique as far as possible. When implemented correctly, this method is extremely effective, yet its application is limited to seedlings. Thus, regular monitoring and follow-up treatments are important to ensure successful and economical eradication using this technique. The procedure to be implemented is as follows:
  - Wearing gloves, grip the plant firmly at the base of the stem and pull hard to remove the entire plant, including the rootstocks.
  - If the roots of the plant break off during removal, use a spade to dig them out.
  - Shake the plant to remove excess soils and dispose of the plant material at an appropriate waste disposal site.

Tree Popping

Use: Seedlings/Saplings with a stem diameter of approximately 5 cm

This technique is used for medium tree specimens and involves the use of an implement referred to as a "Tree-Popper". This tool consists of a base plate and a leaver that are joined to form a small pair of jaws (Figure A1). The tree is placed in the jaws of the tool and the leaver is used to pull the entire tree, including the roots, out. This tool is extremely useful for trees that are too large to be effectively removed by hand pulling yet are not yet large enough to require felling. The method to be used is similar as outlined for hand pulling, however the Tree-Popper is used instead of pulling.

Felling

Use: Trees with a stem diameter of >5 cm

Once the stems of trees reach a diameter of greater than 5 cm felling will need to be implemented to remove the individual. Felling can be undertaken using chain saws and bow saws. It is important that trees are cut with a neat straight cut to reduce the chance of resprouting and improve the effectiveness of stump herbicide treatment. Trees must be cut down as close to the ground as possible (between 5cm and 30cm above the ground). Felling must be undertaken by appropriately trained individuals that possess and make use of the required Personal Protective Equipment (PPE) for the task at hand.

Herbicide Stump Treatment

Use: Resprouting species that have undergone felling treatment

Port Jackson requires the use of poisan, whilst the Rooikrans usually dies when cut below the lowest branch. To prevent resprouting of Port Jackson, a herbicide treatment needs to be applied post felling. Once the tree has been cut down to create a smooth surface that exposes the outer rings of the stem where the trunk grows (the cambium) a 3% Tryclopyr herbicide solution must be applied to the freshly cut surface. All side branches should also be removed and treated with herbicide. The herbicide treatment should be applied as soon as possible after felling (preferably within 3 minutes) to ensure effective treatment. Where trees with a diameter of greater than 10cm are felled, only the outer rings need to be treated with herbicide. Due to the potentially hazardous nature of herbicides, the precautions outlined in the Foliar Treatment section above should also be applied during herbicide stump treatment.

Herbicides can kill indigenous plant species, and some are toxic to people and animals. It is therefore important to prevent environmental contamination with herbicide. The following measures are therefore recommended:

- Do not apply herbicide while it is raining and take care to prevent it from spilling, spraying, or spreading onto the ground or onto non-target species.
- Rain may wash herbicide into watercourses and spread it downstream, or across banks that need to be revegetated.
- Never wash herbicide equipment or dispose of waste spray mixture in or near watercourses where contamination can occur.

The introduction of the acacia gall rust fungus *(Uromycladium tepperianum)* can be introduced onsite if the Port Jackson trees persist to be a problem. Consultation with a Botanist and/or Entomologist prior to introduction is recommended.

Where?

→ In the Private Open Space and Undevelopable areas, 32 m buffer including the wetland area.

When

Every 6 months until the significance of the infestation is reduced and at the beginning of summer and the beginning of winter if water levels are not too high. These actions will need to continue into perpetuity.

Who?

Homeowners Association (HOA), landscaping team, management. Appropriately trained labour with the correct equipment and suitably supervised

Why?

This plant is a transformer species because it changes the functioning of the ecosystem it invades. It is also highly flammable and must be removed from proximity to buildings and infrastructure. It is responsible for the transformation of large areas of fynbos as it changes the nutrient levels in the soil.

Method Statement 2: Rehabilitation and restoration activities onsite

Recommendations:

- → Use a spade to dig a square hole that is 1.5 times the depth and 2 times the width of the bag containing the plant.
- → Remove the plant from its container and carefully loosen the soil by hand, being careful to not damage the roots and maintain as much of the soil as possible.
- → Place the plant and associated soil in the hole.
- → Replace the soil originally removed and ensure that it forms a slight depression (1-3 cm below the level of the surrounding soil) with the plant in the centre of the depression.
- → Compress the soil firmly by hand.
- → For plants placed in the temporary zone watering should be done approximately once every three days for the first six months after planting unless rain has fallen within the preceding 24 hours. Rainfall during the winter months (June – August for the proposed site) can substantially reduce the required watering effort. However, given that revegetation within the onsite offset wetland needs to be undertaken as rapidly as possible planting should be initiated as soon as the infill has been removed from the wetland area, and the remnant wetland has been appropriately shaped along with sufficient watering efforts.
- → The best time for planting is autumn (March-May). This allows for the plants to establish roots before being subjected to heavy rains. Planting in autumn therefore reduces the risk of erosion / sedimentation, having plants wash away and will reduce watering requirements.

What?

Removal of fill material

Wetland infilling poses a direct threat to wetland habitat and function. Wetland infilling and the dumping of rubble and fill material buries hydric soils and causes aquatic habitat loss. Sections of the proposed development site has been historically impacted by infilling and currently contains foreign fill material.

To adequately restore wetland habitat and function, and to achieve PES targets, all foreign fill material (building rubble, fil material from dirt road etc.) must be removed from the onsite wetland prior to additional wetland rehabilitation interventions. The removal of infill must occur at the start of Summer, and not during the Winter rain season to prevent downstream sedimentation or erosion in this area. The substrate in the remnant wetland area should consist only of natural soils.

It is recommended that care must be taken to avoid disturbance of intact natural wetland habitat during the removal of rubble and infill and that removal should be overseen by a suitably qualified contractor. After the removal it is recommended that an aquatic biodiversity specialist should inspect the site to ensure all fill material has been removed.

All foreign fill material must be appropriately disposed of at a designated waste facility offsite. No building rubble/cleared plant material may be dumped within a natural area or within 200 m of any onsite watercourse. Once the fill material is removed from the wetland, reshaping and reprofiling should be done in the disturbed areas to ensure the wetland profile is stable and well-integrated. Once completed all cleared areas must be revegetated with appropriate indigenous species.

Revegetation

Revegetation must be undertaken under the guidance of a suitably qualified landscaper / professional. Vegetation is a key component of the functioning of wetland systems and affects not only habitat quality but also geomorphology, hydrology, and water quality. Revegetation is thus essential for successful wetland rehabilitation.

Procurement

Successful rehabilitation requires the use of healthy, genetically sound, and locally appropriate plant material. Seed and plants for rehabilitation purposes must be procured from nurseries with due regard for the source of the genetic stock. Specialists from nurseries should be able to advise on this.

Bagged plants of appropriate genetic stock of the required species can be purchased in limited quantities either from the Kraaibosch Nursery (+27 44 889 0092), Fynbos Life Nursery (082 378 9445) or from the Kirstenbosch Botanical Gardens nursery (021 797 1305). Intaba, a company specialising in rehabilitation and indigenously landscaped gardens, also has a healthy indigenous plant nursery from which plants could potentially be obtained (087 943 4524).

The nurseries will require sufficient notice to secure the required plant material. Sufficient quantities of the required species should ideally be ordered at least 12 months (6 months minimum) prior to when planting is scheduled to commence.

Residential landscaping

Indigenous plant species must be used for residential landscaping; this promotes local biodiversity and protects the wetlands ecosystem. Residents are prohibited from utilising alien grasses, such as Kikuyu. Instead, indigenous grasses like Buffalo grass (*Bouteloua dactyloides*) should be used. Native species are better adapted to local climate conditions, require less water and maintenance, and support local wildlife.

Species for revegetation

A list of indigenous wetland plant species which should be used for revegetation of the onsite offset wetland has subsequently been compiled (**Table 5**). This species list was developed based on the wetland plant species identified within the Vermont salt pan which share the same wetland vegetation type as the onsite wetland, along with specialist knowledge of the wetland vegetation type (**Table 5**). Additional plant species can be obtained from the appointed landscaper.

A minimum of six species from this species list must be introduced to the wetland. Species selection can be guided by availability provided that species from all hydrological zones are represented. It should further be noted that although Typha Capensis occurs naturally in the region, this species can become problematic and should not be used for revegetation purposes.

Wetland species should be planted in the correct hydrological zones (temporary, seasonal, permanent). The remnant UVB wetland within Erf 1486 exhibits permanent zonation in the central depression onsite and seasonal / temporary zonation around the central depression. Rapidly growing species that tend to stabilise soil are best for areas vulnerable to erosion.

Table 5: List of indigenous plant species that can be introduced to the offset wetland

Family	Species	Status	General information	Wetland Plant Type	Hydrological zone
Asteraceae	*Senecio halimifolius*	LC	Indigenous	Facultative wetland	Temporary
Cyperaceae	*Bolboschoenus maritimus*	LC	Indigenous	Obligate wetland	Permanent
Cyperaceae	*Cyperus textilis*	LC	Endemic	Obligate wetland	Permanent/seasonal
Cyperaceae	*Cyperus thunbergii*	LC	Endemic	Obligate wetland	Seasonal/Temporary

Cyperaceae	*Hellmuthia membranaceae*	LC	Endemic	Facultative wetland	Permanent/seasonal
Cyperaceae	*Ficinia nodosa*	LC	Indigenous	Obligate wetland	Permanent/seasonal
Poaceae	*Pennisetum macrourum*	LC	Indigenous	Obligate wetland	Permanent/seasonal
Restionaceae	*Elegia capensis*	LC	Endemic	Obligate wetland	Permanent
Rosaceae	*Cliffortia strobilifera*	LC	Indigenous	Obligate wetland	Permanent/seasonal
Dennstaedtiaceae	**Pteridium aquilinum*	LC	Indigenous	Facultative wetland	Seasonal/temporary

How?

Planting and seeding techniques

To ensure adequate rehabilitation, planting must be done at a reasonable density of approximately 4 plants per square meter. Vegetation that has recently been planted is generally susceptible to being washed away until it has become well established. Transplanting of whole plants with well-established roots in a growing medium is one of the most reliable revegetation techniques. While several species suggested for revegetation can be grown from seeds and propagules, it is recommended that the majority of revegetation activities are focused on the introduction of whole plants, particularly into areas that are vulnerable to erosion.

The recommended general planting procedures are as follows:

- → Use a spade to dig a square hole that is 1.5 times the depth and 2 times the width of the bag containing the plant.
- → Remove the plant from its container and carefully loosen the soil by hand, being careful to not damage the roots and maintain as much of the soil as possible.
- → Place the plant and associated soil in the hole.
- → Replace the soil originally removed and ensure that it forms a slight depression (1-3 cm below the level of the surrounding soil) with the plant in the centre of the depression.
- → Compress the soil firmly by hand.
- → For plants placed in the temporary zone watering should be done approximately once every three days for the first six months after planting unless rain has fallen within the preceding 24 hours. Rainfall during the winter months (June – August for the proposed site) can substantially reduce the required watering effort. However, given that revegetation within the onsite offset wetland needs to be undertaken as rapidly as possible planting should be initiated as soon as the infill has been removed from the wetland area, and the remnant wetland has been appropriately shaped along with sufficient watering efforts.
- → The best time for planting is autumn (March-May). This allows for the plants to establish roots before being subjected to heavy rains. Planting in autumn therefore reduces the risk of erosion / sedimentation, having plants wash away and will reduce watering requirements.

Procedure for sowing seeds:

- → Use a rake to lightly disturb areas of bare soil.
- → Spread seeds from indigenous wetland plant species evenly across prepared soil.
- → The best time to sow the seeds is in autumn.
- → Conduct maintenance on the areas where the seeds were sown, carefully remove any weeds.

Procedure for planting propagules:

- → Obtain healthy adult plants with sufficient plant material to generate propagules.
- → Neatly cut the stem based on individual species requirements using pruning shears.
- → Plant propagules as per the general planting protocol. A 20 cm wide by 20 cm deep hole should be sufficient for the cutting. Ensure that approximately half of the cutting is below ground while the other half is above ground.

Where?

- → Wetland species should be planted in the correct hydrological zones (temporary, seasonal, permanent). The remnant UVB wetland within Erf 1486 exhibits permanent zonation in the central depression onsite and seasonal / temporary zonation around the central depression. Rapidly growing species that tend to stabilise soil are best for areas vulnerable to erosion.

When?

Inspection and Follow-up:

Prior to revegetation, the onsite offset wetland and UVB wetland must be inspected and photographed to serve as a record for the pre-planting condition of the area. Following the implementation of revegetation interventions, monitoring must be undertaken to determine the relative success of revegetation:

- → The wetland area must be inspected by a freshwater specialist after planting has been conducted and thereafter every 6 months until the required cover (80%) has been achieved. Photographs must be taken of the planted areas to document the revegetation process.
- → The site must be inspected by a SACNASP registered freshwater specialist 12 months after the revegetation plan has been completed to determine whether the required degree of cover (80%) has been achieved.
- → If the required 80% total cover has not been achieved, recommendations from the SACNASP registered freshwater specialist to improve cover must be provided.

Who?

Wetland rehabilitation has significant labour and specialist requirements, and the implementation of the wetland rehabilitation plan will require the collaboration of several role players. The responsibility of each entity is outlined in the table below.

The practical and financial aspects pertaining to the required offset activities are the responsibility of the Water Use Licence (WUL) holder, in this case, the owner of Erf 1486. Given the scale of the proposed offset, several commercial entities are potentially available to conduct the required rehabilitation activities. It is the WUL holders' responsibility to ensure that they appoint appropriate implementing agents based on the size and level of project complexity for the site in question. The project must be managed by a suitably qualified freshwater specialist / landscaper with experience in wetland rehabilitation.

Responsibilities of key role players in wetland rehabilitation:

Role player	Responsibility
WUL Holder/ Applicant	Implementation of the wetland offset plan. Appoint appropriate implementing agents.
Construction Implementing Agent	Remove foreign fill material from the proposed offset wetland (where applicable).
Rehabilitation Implementing Agent (Suitably qualified freshwater specialist and landscaper with experience in wetland rehabilitation)	Plant, seed, and propagule procurement. Implement propagation, seeding and planting at appropriate plant densities.

Why?

The aim in terms of onsite offset wetland revegetation is to reach 80% total natural wetland vegetation cover within 8-12 months after revegetation interventions have been completed. The species and general techniques to be used for revegetation are outlined in the subsections below.

Method Statement 3: Sediment removal from the stormwater infrastructure within the wetland area.

Recommendations

- → Discharge stormwater from rooftops into rain harvesting tanks. This will limit the volumes of stormwater runoff that will reach the wetland. Where possible, water collected in rain harvesting tanks can be utilised for flushing of toilets, washing etc.
- → Vegetated swales must be utilised rather than concrete drains or underground stormwater pipes in order to encourage infiltration, particularly next to roadways.
- → Energy dissipaters / erosion protection measures (such as lining with stones, grass, reno-mattresses, or gabions) must be constructed where stormwater is released in order to reduce the runoff velocity and therefore erosion.
- → Sheet runoff from hardened surfaces must be intercepted and the treatment and infiltration of runoff must be promoted.
- → Sediment traps should be incorporated into stormwater drains / swales upstream of all discharge points into the wetland.
- → All stormwater draining into the wetland 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 must receive basic filtering and treatment prior to its release into surrounding areas. Treatment methods may include sand filter traps and oil-water separators which will require maintenance.
- → The extent of hardened surfaces must be minimised. E.g. where required permeable paving must be used.
- → Homeowners must be encouraged to landscape their gardens with the use of indigenous species to decrease the area of hardened surface and increase infiltration.
- → Homeowners should store any potential pollutants in such a way that pollution will not occur to the wetland (such as any fuel, etc.). Potential pollutants should be stored in an adequately bunded area.
- → The use of herbicides, pesticides and any other poisons within private gardens must be strictly prohibited. The home owner's association must be responsible for ensuring that residents are compliant with this.
- → Backwashing of swimming pools directly into the wetland must be strictly prohibited. Backwash water can be collected in settling tanks where dirt and debris settle to the bottom. The cleaner water can then be reused for non-potable purposes or even filtered back into the pool system. Backwash water can be diverted to greywater tanks.
- → Monitor the proposed development and adjacent wetland for erosion and sedimentation after heavy rainfall events. Any erosion noted must be immediately addressed. Rehabilitation measures may include the removal of accumulated sediment by hand, filling of erosion gullies and rills, the stabilisation of gullies with silt fences, riprap, and the revegetation of stabilised areas.
- → 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.
- → Stormwater systems must be monitored and maintained into perpetuity and collections of debris and solid waste removed from grates and baskets. The developer must confirm who will be responsible for this monitoring and maintenance as well as their roles.
- → The stormwater system must be designed by a suitably qualified engineer with input from an aquatic specialist.

What?

Appropriate management of the stormwater management

This activity involves the regular inspection and removal of accumulated sediment from stormwater infrastructure, including the permeable paving system, enhanced vegetated swales, and stormwater drains within and adjacent to the delineated wetland area on Erf 1486. These interventions aim to ensure that the hydrological and ecological functionality of the wetland is maintained, and that stormwater is appropriately filtered before entering the sensitive UVB wetland system.

The proposed development may increase the extent of hardened surfaces, which in turn can elevate runoff volumes, erosion, and peak flow intensities. If not properly managed, this may result in sedimentation, water quality degradation, and habitat alteration within the wetland. Therefore, all stormwater control measures recommended in the aquatic specialist report and stormwater management plan must be strictly implemented.

Sedimentation as a result of erosion from within and from outside the property.

How?

Monitoring and Inspection

Permeable paving System

Inspection and Maintenance for Permeable Paving System:

Activity	Schedule
Ensure that the porous paver and outlet structures are free of sediment.	Monthly
Check that the system dewaters between storms	As needed, based on inspection
Ensure that contributing are and porous paver surface are clear of debris	As needed, based on inspection
Ensure that the contributing and adjacent area is stabilized and mowed with clippings removed	As needed, based on inspection
Vacuum sweep porous paver surface to keep free of sediment	Typically, three to four times a year
Inspect the surface for debris or spalling	Annually
Totally rehabilitate the porous paver system, including the top and base course as needed	Upon failure

Enhanced Swale System:

Schedule	Components	Action
After Storms	Inflow points	Check for scouring channeling and erosion – Repair as necessary
	Side slopes	Check for scouring channeling and erosion – Repair by adding soil and replanting as necessary
	Channel base	Check for scouring channeling and erosion – Repair by adding soil and replanting as necessary
	Plants & soil	Check stormwater is filtering through soil following storm events – Remove weeds
Monthly	Outlet	Check outlet for scouring or erosion – Repair as necessary
	Inflow points	Remove rubble and debris
	Channel base	If grassed – mow channel to shorter than 150mm Use catcher and remove clippings Re-seed bare patches of grass and water in dry conditions If planted – check plants are healthy, and growth is dense Remove weeds Replant gaps and water new plants in dry conditions
	Plants and soil	Check plants are healthy, and growth is dense. Remove weeds Replant gaps and water new plants until established
Two Yearly	Outlet	Remove rubble and debris from outlet grate or catchpit
	Channel base	Check for boggy patches and ponding of water Check soil is not compacted and aerated surface or top up dips to repair
	Grass, plants and soil	Remove weeds, rubble and debris Replant gaps and re-seed bare patches and water if required to establish

		Aerate soil to prevent natural compaction, similar to coring sports field and bowling greens Check stormwater is filtering through soil by either monitoring after storm runoff or by running water across swale

Monitor areas which may exacerbate erosion, especially during a storm events. Monitor how sedimentation affects the functioning of the ecosystem i.e reduced water flow, pooling, standing and stagnant water etc. Ensure that good cover of indigenous vegetation is maintained in wetland and Open Space.

Use appropriately sized machinery to remove sediment from the stream system after the storm.

- Small amount of sediment can be removed by hand with a shovel.
- Large amounts of sediment must be removed by a backhoe or bulldozer but use the smallest available plant for the work.

Do not dig out below the bed of the wetland into soil and clayey material below the sediment. Do not dig out below the thalweg (the lowest point of a cross section across the wetland). Do not create a pond or dam. Dump removed sediment where it will not wash back into the stream. It can be used as fill or to manage erosion. It may not be used to build berms. Do not drive heavy machinery through the wetland, or if this is the only option do not use multiple access routes and make good afterwards.

Where?

Within stormwater infrastructure zones, including:

- → Permeable paving areas
- → Enhanced vegetated swales
- → Drainage outlets and inlets
- → Identified areas with accumulated sediment or erosion, as confirmed and approved by the Environmental Control Officer (ECO).

When?

- → Late summer (February–April**)** is the optimal time for sediment removal to reduce ecological disturbance.
- → Inspections to occur:
    - Monthly (for sediment build-up, erosion, functionality)
    - Immediately after major storm events

Who?

Appropriately trained specialists, HOA / landscaping team, Plant must be operated by person experienced with working in a stream or wetland.

Why?

Sediment accumulation alters the hydrological regime of the wetland, reduces open water habitat, and negatively impacts faunal and floral biodiversity. It may also block stormwater infrastructure, leading to backflow, flooding, and habitat degradation.

Furthermore, the development's proximity to the UVB wetland and downstream ecological receptors (such as the Vermont Salt Pan) necessitates robust stormwater and sediment management to prevent long-term impacts.

Method Statement 4: Flood damage

What?

Due to the increasing frequency and intensity of extreme weather events as a result of climate change, flooding within the Unchanneled Valley-Bottom (UVB) wetland and adjacent infrastructure on Erf 1486, Vermont is likely. Flooding can result in a number of impacts within the regulated zone, requiring prompt intervention to maintain ecological functionality and infrastructure safety:

- → Accumulation of debris (e.g., branches, tree trunks) at culverts or stormwater inlets
- → Damage to stormwater infrastructure, including vegetated swales, permeable paving, and polishing ponds
- → Debris and sediment build-up in roads, access points, and stormwater outlets
- → Flooding or mechanical failure of sewer pipelines, pumps, scour valves, and air valves
- → Impacts to private infrastructure such as boardwalks, gardens, and internal access roads
- → Changes in watercourse direction or erosion of wetland banks and swale channels

The Overstrand Municipality must be notified immediately if damage occurs to any municipal infrastructure (e.g., culverts or outfall structures), or if water flow is obstructed.

Repairs to stormwater attenuation features and flow paths should be prioritised, particularly if additional rainfall is forecasted.

How?

- → Flood damage inspection must be undertaken as soon as practically possible after the storm event.
- → Use appropriately sized lightweight machinery to remove debris, tree trunks, or damaged vegetation. Larger items (e.g., trunks) may need to be cut up on-site before removal.
- → Follow the approved sediment removal protocol when clearing sediment from swales, stormwater drains, or within the 32 m wetland buffer.
- → Inspect and secure all sewer-related infrastructure, especially containment areas, for structural damage or leaks.
- → Avoid driving heavy equipment directly through the wetland. Where access is essential, use the smallest possible plant and restore all disturbed areas post-repair.
- → Document all damage and actions taken for compliance and post-storm audit purposes.

Where?

- → Within the delineated wetland and its associated 32 m buffer zone
- → Along the stormwater swale network, permeable paving systems, and stormwater outfalls
- → Around sewer pipelines and associated service infrastructure on Erf 1486

When?

As soon as possible after the storm event

Who?

The HOA will be able to identify that damage has been done, however this type of repair must only be undertaken under direction of suitably qualified professionals, especially if municipal infrastructure is damaged. The local authorities must be informed as soon as possible. Repair must be undertaken by suitably experienced contractor.

Why?

Flood events can alter hydrological flow patterns, damage stormwater and sewer systems, and degrade wetland functionality. Immediate action is essential to:

- → Prevent downstream flooding
- → Avoid long-term ecological degradation
- → Maintain water quality and hydrological balance
- → Protect infrastructure and reduce costs of future repair

Timely maintenance and rehabilitation after flood events is key to preserving the ecological integrity of the UVB wetland and ensuring long-term sustainability of the development on Erf 1486, Vermont.

Method Statement 5: Erosion Control

What?

Erosion may occur within the onsite Unchanneled Valley-Bottom (UVB) wetland on Erf 1486 due to increased stormwater runoff and peak flows. This method statement outlines the monitoring and corrective actions to address erosion impacts in a way that protects wetland functionality and ensures compliance with environmental best practices.

When?

- → Monthly inspections must be undertaken to detect signs of erosion.
- → Immediately after significant storm events, additional checks must be conducted.
- → Erosion repair actions must be implemented as soon as erosion is detected.

Where?

Along stormwater inflow points, swales, and outflow zones.

Within the delineated wetland area and its 32 m buffer zone, especially in areas with visible soil exposure or concentrated flow paths.

How?

Conduct a visual inspection to assess the extent and type of erosion (e.g., sheet erosion, rills, gullies, bank collapse). Photographic records should be maintained.

Stabilisation Measures:

- → Soft engineering techniques are preferred over hard structural methods. These include:
- → Geotextiles, coir fibre mats, erosion blankets
- → Brush mattresses, sandbags, live staking using rooted indigenous cuttings
- → Fascine bundles (woody cuttings) placed along erosion gullies

Vegetative Rehabilitation:

- → Place geotextile fabric over exposed areas, secure with stakes
- → Cut planting holes in the fabric
- → Use a mixture of recommended indigenous species (see Section 8.6)
- → Gradually remove fabric as vegetation establishes

Repair of Erosion Rills and Gullies:

- → Fill with rocks sized between 5 cm and 20 cm
- → Establish silt fences or fascines along the flow path for reinforcement
- → Monitor regularly to ensure stability during vegetation regrowth

Addressing Soil Compaction:

- → Loosen compacted areas to a depth of approximately 30 cm
- → This improves infiltration and reduces runoff concentration
- → Replant or reseed disturbed areas immediately

Who?

The Homeowners' Association (HOA) or its appointed maintenance team must carry out inspections and notify the Environmental Control Officer (ECO).

All erosion control work must be supervised or conducted under guidance from a freshwater specialist or rehabilitation ecologist.

Qualified contractors with experience in wetland rehabilitation must be appointed for moderate to severe erosion control works.

Why?

Unchecked erosion leads to:

- → Loss of topsoil and wetland structure
- → Sedimentation of wetland pools, degrading water quality and habitat
- → Disruption of the wetland's natural hydrology
- → Reduced biodiversity and ecological function

Implementing prompt and appropriate erosion control measures is essential to maintain the integrity of the wetland ecosystem and ensure that the stormwater management and rehabilitation goals for Erf 1486 are achieved.

2.	Clearly describe the current state of the area where the maintenance activities will take place. (This must be supported by recent colour photographs)

The site is characterised by the presence of an Unchanneled Velly Bottom wetland which has been delineated on site by the Freshwater Specialist. This wetland area is part of the 1.4 km long wetland system that originates within the study area and ends at the Vermont Pan to the southeast. A depression has been excavated towards the centre of the erf, with an overflow pipe that crosses beneath Lynx Road and flows into the wetland on the far side thereby creating a hydrological link between the wetlands within the site and the greater wetland to the southeast. An additional stormwater outlet is found in the southeast corner of the erf, which discharges runoff from the neighbouring housing development into the wetland. The remainder of the 1.5 ha erf is extensively disturbed and characterised by a mixture of alien and indigenous vegetation.

Vegetation on site

The vegetation within the erf has been extensively disturbed and is characterized by a mosaic of indigenous and alien invasive species. Among the indigenous flora identified were *Senecio halimifolius* and the wetland obligate *Juncus kraussii*. Notably, these species occurred alongside alien invasive species such as Kikuyu grass (*Cenchrus clandestinus*, and pampas grass (*Cortaderia selloana*). Although *C. selloana* is not classified as a wetland obligate, it is often associated with wetland habitats due to its tendency to proliferate in these environments (van Oudtshoorn, 2014). Additional observations during the site visit recorded the presence of Typha capensis, another wetland obligate species, found in scattered patches.

Hydrological processes were evident on the site, particularly through surface runoff originating from the adjacent housing estate's stormwater drainage system, which discharges into a shallow depression. This inflow has created conditions that support seasonal wetland characteristics. Terrestrial soils in the broader study area were identified as dark grey and sandy,

exhibiting good drainage characteristics. In contrast, soil samples collected from wetter areas surrounding the depression revealed slightly darker soils with a higher organic matter content, although they did not significantly differ from the surrounding terrestrial soils. Classic wetland indicators such as mottling and gleying were generally absent. However, mottling was observed in limited patches along the southern margin of the depression, occurring in brown soils likely influenced by past disturbance or historical infilling activities.

Wetland delineation was conducted by identifying the outer boundary of the temporary zone based on vegetation and soil indicators. The criteria used included the presence of saturated soils with high carbon content and isolated instances of mottling within the top 500 mm of the soil profile. These soil indicators were coupled with the presence of hydrophytic vegetation to confirm the wetland boundary. The central excavated depression was classified as representing the permanent zone of the wetland, which may retain water for extended periods following rainfall events or stormwater inflows.

The wetland was in a largely modified condition at the time of the assessment. The key factors that influenced the scoring are summarised below.

Hydrology

- The natural flow regime of the UVB Wetland (UVBW) has been altered as a result of disturbances such as the excavation to create the centre depressional area on the erf itself, historical vegetation clearing and infilling, and catchment hardening associated with the roads, dirt tracks, residential areas.

- Although there is an overflow pipe that crosses beneath Lynx Road and flows into the wetland on the far side, the construction of Lynx Road, and excavation within the centre of the site, has created a dam within the centre of the UVBW.

- The presence of nutrient rich laterite, in soils that are naturally nutrient poor, such as those on the proposed development area, are associated with the dominance of invasive species such as the dense clumps of Kikuyu grass (*Pennisetum clandestinum*) seen onsite, which leads to altered surface roughness and therefore altered flow regimes in the wetland.

- The hydrology of the UVBW has been impacted by the presence of urban residential land use within the wetland itself, and in the wetland's immediate catchment area. Urban land use such as residential areas and tarred roads has resulted in flow diversion and catchment hardening which is associated with increased runoff and storm peak flows.

- The wetland has been canalized, leading to concentration of flow, and likely the drying out of the wetland in various locations.

- Additionally, a stormwater outlet is in the southeast corner of the erf, which discharges runoff from the neighbouring housing development into the wetland. Additional stormwater outlets into the wetland are observed downstream of the erf.

Vegetation

- While several communities of indigenous hydrophytic species were noted, there was moderate vegetation disturbance within the wetland area as a result of:

    - The excavation of the dam on the erf;

    - Large areas of the UVBW on the erf were brush cut during 2004, and downstream of the erf large areas were cleared during 2022;

    - Construction activities associated with the derelict houses on the erf, and downstream residential areas;

    - Dumping of rubble within the wetland area.

- The vegetation present within the wetland is characterised by a mixture of alien and indigenous vegetation. Alien invasive species noted onsite include dense clumps of Kikuyu grass (*Cenchrus clandestinum*) and pampas grass (*Cortaderia selloana*).

- No species of conservation concern were noted. According to the Botanist appointed for the proposed project, at least one plant SoCC (*Disa hallackii*) may be present in low numbers (Nick Helme Botanical Surveys, 2023).

Geomorphology

- The geomorphology of the UVBW wetland was largely modified by the excavation of the depressional / dam area in the centre of the erf.

- Additionally, historical vegetation clearing, infilling, and hardening across large areas of the wetland has resulted in extensive disturbance to its natural geomorphic state.

- The wetland system extends from the study area in a south-easterly direction and ultimately augments the Vermont Salt Pan. The construction of Lynx Road, Kolgans Close Road, and numerous other roads, has seriously altered this portion of the UVBW's geomorphology.

Water Quality

- The water quality within the UVB wetland has been disturbed because of the adjacent infilling and compaction of the southern portion of the Erf; along with large portions which have been infilled downstream within the wetland due to residential development, which has resulted in:

- Leaching of toxicants and nutrients from the infilling materials such as hydroxyl ions from cement particles and nitrates from laterite.

- The water quality within the wetland is likely to be impacted by the residential nature of the catchment.

- It is likely that runoff entering the wetland through the stormwater outlets is likely polluted by the surrounding catchment area for example, runoff from roads is likely to contain contaminants such as laterite, oil, fuel, rubber from car tires and other pollutants.

Figure 1: Delineated UVB wetland within Erf 1486.

Photo 1. Wetland obligate *Juncus kraussi* indicated by the arrow. This species, along with *Senecio halimifolius*, were used as primary indicators of the outer boundary of the wetland within the study area**.**

Photo 2. Dense clumps of alien invasive *Pennisetum clandestinum* along the edges of the depression within the study area, particularly where sediment dredged from the depression was dumped.

Photo 3. Additional wetland species *Typha capensis*, located in front of the derelict buildings onsite.

3.	Property location		Vermont, Hermanus	
4.	Erf/Farm name(s), number(s) and portion(s)		Erf 1486	
5.	Property size(s) (m^2) of all proposed sites:		15079.9 m^2	
6.	SG Digit code(s) of the all the proposed property(ies)			
(description of cadastral unit)	C 0 1 3 0 0 2 3 0 0 0 0 1 4 8 6 0 0 0 0 0			
7.	Coordinates of the proposed site(s) where the maintenance activity/ies will be conducted:			
	Latitude (S)	34º	24′	23.42″
	Longitude (E)	19º	8′	52.57″

Note: If the maintenance activities will be undertaken along a linear stretch such as a watercourse, the start, middle and end co-ordinates must be provided.

SECTION C: POTENTIAL LISTED ACTIVITIES THAT YOU REGARD TO BE APPLICABLE TO THE PROPOSED MAINTENANCE ACTIVITY(IES)

All activities listed in terms of the EIA Regulations, 2014 that may be associated with the proposed maintenance activities must be provided below.

Activity No(s):	Provide the relevant **Activities** as set out in **Listing Notice 1**	Describe the portion of the proposed development to which the applicable listed activity relates.
12	The development of dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse	The Low Impact Development (LID) infrastructure, including the Permeable Paving System and Enhanced Swale System, will be constructed within 32 metres of a permanent wetland (both north and south), for stormwater runoff. Additionally, internal access roads will encroach on a seasonal wetland, resulting in the loss of approximately 240 m² of seasonal wetland area.
19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from (i) a watercourse;	The access roads will cross or encroach upon seasonal/temporal wetlands, requiring movement of material exceeding 10 m³. Furthermore, the rehabilitation of the wetland will involve removal of infill material.
~~Activity No(s):~~	~~Provide the relevant **Activities** as set out in **Listing Notice 2**~~	~~Describe the portion of the proposed development to which the applicable listed activity relates.~~
Activity No(s):	Provide the relevant **Activities** as set out in **Listing Notice 2**	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	More than 300 m² of indigenous vegetation (Hangklip Sandstone Fynbos) will be removed to accommodate the development

PART 3 DECLARATIONS

SECTION A: DECLARATION OF THE PROPONENT

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

I, _____ ID Number: | | | | | | | | | | | | | |

in my personal capacity or duly authorised thereto hereby declare/affirm that:

- the information provided or to be provided as part of this form, is true and correct;
- 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, as defined in Chapter 5 of NEMA (as amended) and any relevant Specific Environmental Management Acts and that failure to comply with these requirements may constitute an offence in terms of relevant environmental legislation;
- I am aware that 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 am aware of my general duty of care in terms of Section 28 of the NEMA;
- I will provide the EAP and 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 EIA Regulations, 2014 and other environmental legislation including but not limited to –
  - costs incurred for the appointment of the EAP or any person contracted by the EAP; and
  - costs in respect of any specialists, if any.

Note: If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

19 June 2025

Signature of the Proponent: Date:

Elephant Ventures Africa cc

Name of company (if applicable):

SECTION B: DECLARATION OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER ("EAP")/SPECIALIST

I, MICHELLE NAYLOR	EAP / Specialist Registration Number:	2	0	1	9	/	6	9	8	

as the appointed EAP / Specialist hereby declare/affirm that:

- my EAP / Specialist Registration is current and up to date, and will inform the proponent and Department if the registration should lapse;
- the information provided or to be provided as part of this form, is true and correct;
- I have disclosed/will disclose, to the Proponent, 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 the request for the adoption of a Maintenance Management Plan;
- I have ensured/will ensure that information containing all relevant facts in respect of the request for the adoption of a Maintenance Management Plan was/will be distributed or was/will be 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/will be provided with a reasonable opportunity to participate and to provide comments;
- I have ensured/will ensure that the comments of all interested and affected parties were/will be considered, recorded and submitted to the competent authority;
- I have ensured/will ensure the inclusion of inputs and recommendations from any specialists in respect of the request for the adoption of a Maintenance Management Plan, where relevant;
- I have kept/will keep 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 EIA Regulations, 2014.

19 JUNE 2025

Signature of the EAP/Specialist: Date:

LORNAY ENVIRONMENTAL CONSULTING PTY LTD

Name of company (if applicable):