

Maintenance Management Plan

Erf 438 Stanford

November 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 & Aarde Wine Village, Hermanus Lornay Environmental Consulting Pty Ltd | Reg 2015/445417/07



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: <u>DEADPEIAAdmin@westerncape.gov.za</u>	The completed Form must be sent via electronic mail to: <u>DEADPEIAAdmin.George@westerncape.gov.za</u>								
Queries should be directed to the Directorate: Development Management (Region 1) at: E-mail: <u>DEADPEIAAdmin@westerncape.gov.za</u> Tel: (021) 483-5829	Queries should be directed to the Directorate: Development Management (Region 3) at: E-mail: <u>DEADPEIAAdmin.George@westerncape.gov.za</u> Tel: (044) 814-2006								
Western Cape Government Department of Environmental Affairs and Development Planning Attention: Directorate: Development Management (Region 1) Private Bag X 9086 Cape Town, 8000	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)

The proposed development of Erf 438 Stanford is proposed, as follows:

28 Residential Properties:

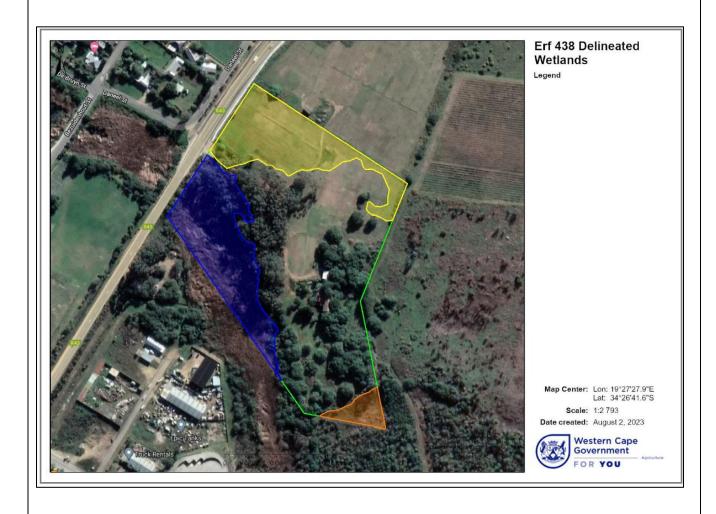
- → 27 x Residential Zone 1: Single Residential
- → 1 x Business Zone: Local Business (The Lodge)

Private Open Spaces; and

Private and Public Roads

A Unchanneled Valley Bottom Wetland (UVBW) and a highly transformed Hillslope Seep wetland have been identified on the site. The Hillslope Seep wetland has been transformed by the cultivation of roll-on lawn and will form part of the development. A 32 m buffer has been included in the design of the development of the remainder of the site.

The layout of the development endeavours to ensure that there is as little disturbance as possible on the wetland and the indigenous flora. The layout proposes to optimise access to the stream and associated Private Open Space while also optimising the northern aspect, providing erven with views of the Klein River mountains. The layout was designed to ensure that the Mill Stream is incorporated into the development as a rehabilitated and functional green open space, and that each property can house a free-standing dwelling unit, with a front and back garden.

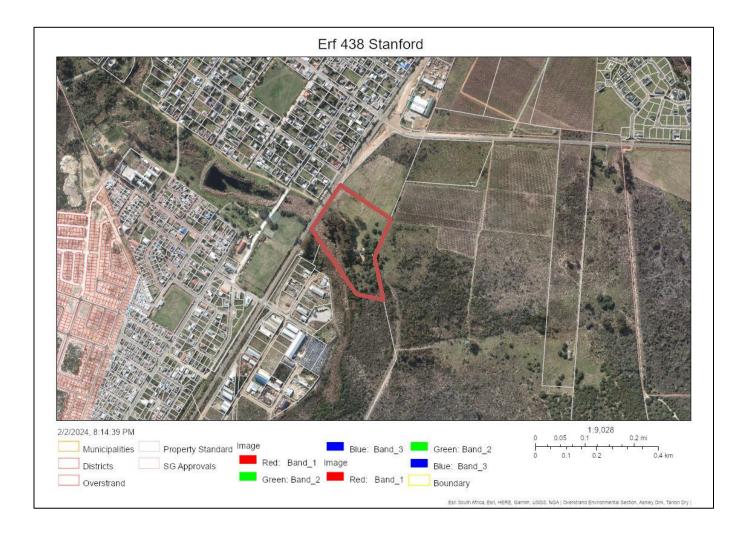


GENERAL REQUIREMENTS

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

	ighlight the Departmental Region		WN OFFICE FION 1)	GEORGE REGIONAL OFFICE (REGION 3)									
C	and District in which the intended application will fall	City of Cape Town	Cape Winelands District	Central Karoo District									
	- Park	West Coast District	West Coast District Overberg District Garden Rou										
		Duplicate this section where there is more than one Proponent											
	Name of Proponent:	OMNI KING INVESTMENT	TS PTY LTD										
1.	Contact person name (if other):	KEVIN KING											
	Company/Trading name State Department/Organ of State:	AS ABOVE	S ABOVE										
	Company Registration Number:	1990/004421/07											
	Postal address & Postal code:	24 SILLERY STREET, STAI	NFORD	Code 7210									
	Contact numbers:	Tel. +27(0)	Cell:	+27(0) 82 245 6556									
	E-mail:	kevin@rex.co.za											
	Company of EAP/Specialists:	LORNAY ENVIRONMENT	TAL CONSULTING PTY LTD										
2.	EAP / Candidate EAP / Specialist name:	MICHELLE NAYLOR											
	EAP / Specialists registration no:	2019/698											
	Postal address & Postal code:	UNIT 5/1F HEMEL & AAR	DE WINE VILLAGE, HERM	ANUS Code 7200									
	Contact numbers:	Tel. +27(0)	Cell:	+27(0) 83 24 6556									
	E-mail:	michelle@lornay.co.za											
	,	Duplicate this section wh	nere there is more than on	e Landowner									
3.	Name of landowner:	SERISO 324 CC											
	Name of contact person for landowner (if other):	CHRIS CARSTENS											
	Postal address & Postal code:	PO BOX 112, STANFORD)	Code									
	Contact numbers:	Tel. +27(0)	Cell:	+27(0)									
	E-mail:	altpools@mweb.co.za											
		Duplicate this section who	ere the is more than one p	erson in control of the land									
4.	Name of Person in control of the land:												
	Contact person for 'person in												
	control of the land' (if other):			Carlas									
	Postal address & Postal code:	Tel 107/0	Q. II	Code:									
	Contact numbers:	Tel. +27(0)	Cell:	+27(0)									
	E-mail:	Duplicate this section where there is more than one Municipal Jurisdiction											
	Municipality in whose area of	Duplicate this section wh	tere there is more than on	e municipai jurisaiction									
5.	jurisdiction the proposed activity	OVERSTRAND MUNICIPALITY											
	will be undertaken:												
		CHESTER ARENDSE											
	will be undertaken:	CHESTER ARENDSE STANFORD		Code									
	will be undertaken: Name of contact person:		Cell:	Code +27(0)									

PART 2: ADOPTION OF A MAINTENANCE MANAGEMENT PLAN

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

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

The subject property is located within and adjacent to 3 wetland systems and along the Millstream. The Hillslope seep, which has been transformed by the current roll-on lawn business, will be lost, but the UVB wetlands will be avoided. As such, the development and / or associated service infrastructure will fall within the regulated zone of a watercourse and as such will require a Maintenance Management Plan for the long-term maintenance actions which may be required.

Method statements

The Method Statement for the maintenance activities described 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 this MMP:

Method Statement 1: Clearance of alien vegetation and encroaching vegetation within and alongside watercourses

What?

The activity involves the removal and control of invasive alien plant species (such as Acacia saligna, Acacia cyclops, Eucalyptus) that have established within and alongside identified watercourses and associated wetland buffer zones. The purpose is to restore the ecological integrity of the watercourse, promote indigenous vegetation recovery, and maintain hydraulic and ecological functioning.

How?

The activity will be executed through manual and mechanical methods, following environmentally sensitive procedures:

Site Access and Preparation:

- ightarrow Access to the site will be along designated routes outside the watercourse to prevent unnecessary disturbance.
- → Sensitive zones and no-go areas will be clearly demarcated with visible fencing or barrier tape before any work begins.
- ightarrow All personnel will be briefed on environmental sensitivities and safety protocols by the ECO/HOA.

Clearing Methods:

Hand Pulling

Use: Seedlings with a stem diameter of <5cm

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.
- o 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 of the Wetland Offset Rehabilitation Management Plan). 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.

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 of the Wetland Offset Rehabilitation Management Plan). 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. Vegetation should be removed before seed is set and released.

Herbicide Stump Treatment

<u>Use:</u> Resprouting species that have undergone felling treatment

Some alien tree species are known to resprout from the stump after felling. To prevent this an 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) the appropriate 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 section below should also be applied during herbicide stump treatment.

Where?

The activity will take place within and alongside the identified Mill Stream Wetland, within the Regulated Area and associated buffer zones on the project site. All works will remain within the demarcated maintenance footprint and avoid any direct entry into the active channel or wetland core areas.

When?

- → The activity will be undertaken during the dry season, to minimise soil compaction and erosion risks.
- → Work will commence once the ECO has approved the site demarcation and method plan.
- → The initial clearing phase is expected to take approximately 2–3 weeks, depending on site conditions and infestation density.
- → Follow-up control and monitoring will occur every 3–6 months to prevent regrowth.

Who?

The Contractor under the direction of the Home Owners Association will be responsible for implementation and monitoring.

All personnel involved will receive induction on alien plant identification, safe removal techniques, and environmental best practices.

The HOA will oversee compliance with the Environmental Management Programme (EMPr) and relevant legislation (NEMBA, CARA).

Why?

- → The clearance of alien and encroaching vegetation is required to:
- ightarrow Restore the ecological and hydrological functioning of the wetland and associated watercourse.
- → Prevent the spread of invasive species that threaten indigenous biodiversity.
- ightarrow Enhance erosion control and water quality by allowing indigenous vegetation to re-establish

The Mill stream area is \sim 0.6 Ha in extent and the wetland \sim 0,1 Ha in extent on the is property. They have a Combined Ecological Category of C with Sediment Trapping and Toxicant Assimilation rated as Moderate to High. This is the onsite extent of a much larger system that is ecologically closely linked to the system both upstream and downstream outside the property and Stanford.

This wetland and Mill Stream are not in a natural condition. The R 43 bridge over the Millstream has constrained the width of the stream and the flow of water. Water was also abstracted for agriculture irrigation in the past. The dense growth of these plants is probably limiting the growth of other indigenous aquatic and wetland species. The property's Private Open Space is an important feature and must be properly maintained to the benefit to landowners, visitors and the local fauna and flora.

Method Statement 2: Rehabilitation and restoration activities to maintain ecological infrastructure

Impact, Mitigation and Recommendations

- → Stormwater polishing via stormwater structures, will be required before the water enters the natural watercourses and wetlands on site. This will be done by using appropriate attenuation structures, swales, polishing ponds, Sustainable Urban Drainage Systems (SUDS)
- → Cleaning, repair and maintenance of these structures withing the watercourses, will be required. Removal of built-up sediment and removal of debris will be required to ensure optimal functioning of these systems.

What?

Attenuation structures including the detention ponds and swales are designed to slow the velocity of water entering the stream and wetland area. They must be located close to the stream and may be located within the wetland and will definitely be located within the 32 m buffer zone. Polishing ponds are intended to trap pollutants in water runoff that is contaminated in any way, and thereby prevent the contaminants from entering the riverine system. They must be designed by a professional with experience in water management. Structures can be designed that reduce the velocity of large volumes of water entering the stream system, instead of exacerbating stormwater runoff and improve the water quality, or they may be two different structures. As recommended by the Aquatic specialist during the NEMA process, allowance must be made for stormwater to be treated in a vegetated detention pond and/or a substantial vegetated swale before release into any wetland. Grassed swales and detention / retention ponds to attenuate the runoff from the proposed development rather than conventional stormwater drains that exacerbate stormwater runoff.

These structures will require general maintenance, cleaning, repair or reinstallation from time to time in perpetuity as well as after flood events.

How?

Site access and preparation

Access to stormwater structures will be via existing service roads or designated access routes outside of sensitive wetland or riparian areas wherever possible. All no-go areas and buffer zones (32 m from the watercourse) will be clearly demarcated prior to works.

Construction sequence

- Excavate to design depths following the approved stormwater layout plan.
- Install geotextile linings where required to stabilise soil and prevent erosion.
- Construct inlet and outlet structures, flow control weirs, and vegetated channels.
- Install silt and debris traps, oil and grease interceptors, and energy dissipation structures (such as reno mattresses or riprap) at discharge points.
- Establish vegetation using indigenous, water-tolerant species within swales and ponds to enhance filtration.
- Backfill and shape side slopes to achieve stable gradients and prevent erosion.

Construction and maintenance should preferably occur during dry periods to minimise sediment mobilisation.

Machinery and materials

- Use light machinery for small-scale clearing or desilting; heavy equipment only when unavoidable and under supervision of an environmental control officer (ECO).
- Refuelling and maintenance of vehicles must occur on impermeable surfaces at least 50 m from any watercourse
- Concrete batching and washdown areas must be located outside the regulated zone with runoff contained and disposed of at approved facilities.
- All material stockpiles must be covered or contained to prevent sediment runoff.

Wetland Reshaping and Reprofiling

- → Conduct reshaping during the dry season to avoid sedimentation and erosion.
- ightarrow Re-profile the wetland to reflect natural UVB wetland morphology:
 - o Central basin slope: 0–1% (flat zone for water ponding).
 - o Transitional zone: 1–3% (wetland fringe).
 - Outer buffer zone: >3% (upland transition).
- → Reinstated slopes must promote gentle hydrological gradients and avoid steep banks.
- → Apply topsoil from cleared or stockpiled natural areas to stabilise wetland banks.

Revegetation and Planting

- → Planting to occur immediately after reshaping and alien vegetation removal.
- → Focus on transplanting whole indigenous wetland plants with well-established root systems to prevent erosion.
- \rightarrow Use a planting density of approximately 4 plants/ m^2 , following these steps:
 - o Dig a hole 1.5× deeper and 2× wider than the plant bag.
 - o Place plant and soil in the hole, form a 1–3 cm depression around it, and compact gently by hand.
 - o Water every three days for the first six months, unless sufficient rainfall occurs
- → Best planting season: Autumn (March–May) for root establishment before winter rains.
- → Seed and propagule planting: Use local indigenous species (e.g. Typha capensis, Ficinia elatior, Carex clavata, Orphium frutescens, Stenotaphrum secundatum).
- → Procurement: Plant material to be sourced from local nurseries (e.g., Grootbos, Fernkloof, Harold Porter) to ensure local genetic integrity.

Erosion, Sediment, and Pollution Control

- → Install silt fences, fibre mats, geotextiles, brush mattresses, and sandbags on disturbed slopes.
- → Fill erosion gullies with rocks (5–20 cm diameter) and replant vegetation through geotextile fabric.
- → Implement soft engineering over hard structures wherever possible.
- → Maintain drip trays and spill kits for machinery; refuelling at least 50 m away from the wetland.

Ongoing Maintenance and Monitoring

- → Conduct monthly inspections during rehabilitation, then quarterly for 5–10 years post-rehabilitation.
- → Continue alien and reed management (Phragmites australis) every 6–12 months until vegetation stabilises.
- → Undertake fixed-point photography and vegetation cover assessments annually to measure PES improvements.
- ightarrow Remove any accumulated sediment by hand after heavy rainfall events.

Removal of accumulated matter and debris from these areas to allow for optimal functioning of these systems. Periodic repairs to stormwater systems may be required from time-to-time particularly after periods of high rainfall. The clearing of accumulated matter can be done by hand as far as possible using handheld tool. In scenarios where there has been significant rainfall, machinery might be required and should be used as a last resort.

Parking areas must be porous. Either gravel or grass blocks as appropriate for traffic loads to improve infiltration. Cobbles on sidewalks to slow water run off. Rainwater tanks must be included in the design to reduce runoff water. Waste traps to capture waste, debris and sediment in debris baskets at stream end of leiwater channel, before the water enters the swale or pond. Sand filter traps trap hydrocarbons (oil) before it enters the vegetated polishing pond.

Must be designed by suitably qualified person. Contaminated sand must be removed and disposed of at approved dump. Vegetation is ponds can include arum lilies and other indigenous plants that provide habitat and remove toxicants. Ensure that sediment is removed as required.

Where?

Rehabilitation will occur within and adjacent to the Mill Stream UVB and Tributary UVB wetland offset areas, as delineated in the approved layout and sensitivity maps.

- o Activities will focus on degraded sections impacted by historic infilling, alien invasion, or erosion.
- o Work will avoid intact wetland cores and be confined to designated offset boundaries.

When?

- → Reshaping and planting: Dry season (January–May).
- → Initial revegetation: Immediately following alien vegetation clearance and reprofiling.
- → Watering regime: Every 3 days for the first 6 months post-planting, reduced in winter.
- → Follow-up monitoring:
 - o Monthly during active rehabilitation.
 - Quarterly for 5–10 years post-rehabilitation.
 - o Five-year audits by an independent freshwater specialist thereafter.

Who?

- → Responsible Authority: Water Use Licence (WUL) Holder (Developer / Landowner).
- → Implementing Agents:
 - o Construction Team for removal of fill and reshaping (under Wetland Ecologist supervision).
 - o Rehabilitation Team (Qualified Landscaper) for seeding, planting, and maintenance.
 - o ECO/HOA for compliance monitoring, reporting, and documentation.
 - o Freshwater Specialist / Ecologist for PES assessments, adaptive management, and technical guidance.
- → Supporting Roles: Estate Manager for long-term monitoring and maintenance.

Why?

The rehabilitation and restoration activities are essential to:

- ightarrow Restore natural hydrology, vegetation cover, and wetland ecosystem services.
- → Reduce erosion, sedimentation, and water quality degradation.
- → Enhance biodiversity and resilience of the wetland ecosystem.
- ightarrow Offset the loss of degraded wetland areas from the development footprint.
- ightarrow Ensure the long-term maintenance of ecological infrastructure that supports water purification, flood attenuation, and habitat for sensitive fauna and flora.

Method Statement 3: Sediment removal

What?

The activity entails the removal of accumulated sediment and silt from within the wetland offset areas (Mill Stream UVB and Tributary UVB wetlands) and adjacent stormwater infrastructure (e.g., vegetated swales and inlets).

This maintenance activity aims to restore and maintain hydraulic function, water quality, and ecological balance within the rehabilitated wetlands, ensuring that sediment build-up does not alter natural flow patterns or smother wetland vegetation.

How?

Site Access and Preparation

- → Access to the sediment removal areas will be via designated maintenance routes, avoiding unnecessary disturbance to the wetland bed and buffer areas.
- → No-go areas and sensitive vegetation zones will be clearly demarcated prior to commencement using barrier tape or orange mesh fencing.
- \rightarrow All machinery and personnel will remain outside the wetland core area where possible.
- → Refuelling and maintenance of machinery will occur at least 50 m away from the wetland, on impermeable ground with drip trays and spill kits on standby.

Sediment Removal Methodology

- → Sediment removal will be undertaken manually or using light mechanical methods (e.g., small excavator or vacuum pump) where feasible, under supervision of the ECO.
- → The preferred method is hand removal using spades and shovels, particularly in vegetated or sensitive areas.

Steps to follow:

- → Identify sediment accumulation zones (e.g., stormwater entry points, low-velocity depositional areas).
- → Carefully remove sediment and debris without damaging surrounding vegetation or disturbing the natural substrate.
- → Place removed sediment on impermeable sheeting in a designated stockpile area outside the 32 m buffer zone.
- → Allow sediment to dewater naturally, after which it will be transported to a licensed disposal or reuse site (e.g., for landscaping in upland areas).
- → No sediment or debris shall be dumped, spread, or reintroduced into the wetland system.

Machinery and Materials

Equipment: Spades, shovels, wheelbarrows, and small-scale excavators (if required).

- \rightarrow Pollution Prevention:
 - Drip trays under all stationary machinery.
 - o Use of biodegradable hydraulic oils where mechanical work is necessary.
 - o Spill kits on-site at all times.
- \rightarrow Waste Handling:
 - Sediment and organic debris will be considered general waste and must not be mixed with hazardous materials.
 - Temporary sediment stockpiles must be protected with silt fencing or straw bales to prevent runoff during rainfall.

Erosion and Pollution Control

→ Areas disturbed during sediment removal will be immediately stabilised using geotextiles, mulch, or wetland vegetation replanting.

- → Install silt fences or coir logs along downgradient slopes to prevent fine sediment from washing into adjacent wetland areas.
- → Maintain natural microtopography and hydrological gradients.
- \rightarrow No work shall occur during or immediately after heavy rainfall events.

Where?

Sediment removal will be conducted within the rehabilitated Mill Stream UVB and Tributary UVB wetland offset areas, focusing on:

- → Inflow and outflow zones where sediment tends to accumulate.
- → Stormwater swales and channels leading into the wetland; and
- → Low-lying depositional areas where fine sediment buildup impedes water flow or vegetation growth.

All removal activities will be confined to approved maintenance footprints indicated in the Wetland Offset Management Plan and verified by the ECO.

When?

Timing:

- → Work will be undertaken during the dry season (January–May) to minimise erosion and disturbance.
- → Sediment removal should be scheduled after major rainfall events or as part of routine biannual maintenance inspections.

Duration:

→ Each sediment removal operation is expected to last 2–5 days, depending on sediment volume.

Follow-up:

→ Replanting or reseeding of disturbed areas must occur immediately after sediment removal to prevent bare patches.

Who?

Responsible Party:

→ Developer / Landowner (WUL Holder) for authorisation and funding of the activity.

Implementing Personnel:

- → Rehabilitation Contractor / Site Maintenance Team for sediment removal under the supervision of the ECO.
- → Environmental Control Officer (ECO) for environmental compliance monitoring, photographic documentation, and reporting.
- → Freshwater Specialist / Ecologist for oversight of sediment removal methods and long-term monitoring of ecological response.

Why?

The sediment removal activity is required to:

- → Maintain hydrological flow and wetland storage capacity.
- → Prevent smothering of wetland vegetation and deterioration of water quality.

- → Reduce the risk of blockages in stormwater and drainage channels.
- → Support the sustainability of wetland offset gains achieved through rehabilitation.
- → Contribute to the long-term maintenance of ecological infrastructure, ensuring that the rehabilitated wetland continues to provide flood attenuation, sediment trapping, nutrient cycling, and biodiversity support.

Method Statement 4: Flood damage

What?

This method statement outlines the procedures for inspection, repair, and rehabilitation of flood-damaged areas within and adjacent to the wetland offset zones (Mill Stream UVB and Tributary UVB wetlands) following high rainfall or flood events.

The activity aims to restore natural hydrology, prevent further erosion, stabilise wetland banks, and protect ecological infrastructure that supports the rehabilitated wetland ecosystem.

Flooding events are expected to occur periodically due to climate change and the associated increase in intensity and frequency of extreme rainfall events. Such events can cause damage to infrastructure and natural systems within the regulated area and Mill Stream corridor, requiring emergency interventions and subsequent repairs. Climate change and the increase in both frequency and intensity of extreme weather, means that flood events are likely. This can result in a number of impacts which will require intervention in the regulate zone:

- Debris piled up against the bridge
- Damage to attenuation structures, vegetated swales, polishing ponds stormwater infrastructure
- Damage to entrance areas and service rooms
- Debris and sediment build up after a storm
- Damage to sewer pipelines, pumps, scour valves, air valves, emergency containments structures.
- Damage to landscaping, boardwalks / access routes, depths, change in course of stream etc.

If flooding results in damage to municipal infrastructure, the Overstrand Municipality must be notified immediately. Any necessary repairs to attenuation structures and stormwater control systems must be undertaken as soon as possible, particularly if further rainfall is expected.

How?

Site Access and Preparation

- → Access to the site will be along designated maintenance routes, avoiding entry through sensitive wetland zones or no-go areas.
- → Damage assessment will be conducted first by the Environmental Control Officer (ECO) and Freshwater Specialist to identify the extent and type of flood impacts (e.g., erosion, bank failure, vegetation loss, sediment deposition).
- ightarrow All damaged areas will be mapped and marked prior to repair activities.
- ightarrow Temporary fencing or signage will demarcate hazardous or unstable areas to prevent further disturbance.

Repair and Rehabilitation Measures

Flood damage repair will focus on soft engineering solutions that restore stability and ecological function rather than hard infrastructure.

(a) Erosion Control and Bank Stabilisation

→ Minor erosion:

- o Regrade and compact slumped areas by hand.
- o Apply mulch, brush packing, or biodegradable geotextile to protect exposed soils.
- o Replant with indigenous sedges and grasses (e.g., *Ficinia nodosa, Carex clavata, Phragmites australis*).

\rightarrow Severe erosion or bank collapse:

- Use coir logs, rock packing (gabion baskets or riprap), and live staking with indigenous plants for reinforcement.
- o Recreate gentle, stable slopes (1:3 ratio preferred).
- o Fill eroded gullies with clean topsoil or sediment from stable donor areas and compact lightly.

(b) Removal of Flood Debris

- → Manually remove flood-deposited debris (rubble, plastics, branches) from wetland channels and buffers.
- → Debris will be collected and stockpiled on impermeable sheeting outside the 32 m buffer before being disposed of at a licensed waste site.
- → Large woody debris may be repositioned strategically to act as natural flow deflectors or habitat features.

(c) Sediment Redistribution

- → Remove or redistribute excessive sediment that obstructs flow or smothers vegetation.
- → Where appropriate, redistribute clean sediment to fill eroded areas or reprofile banks.

(d) Vegetation Recovery

- ightarrow Replace damaged or uprooted indigenous plants immediately.
- \rightarrow Apply a planting density of 3–4 plants/m² to stabilise exposed soils.
- → Use mulch, brush packing, or jute mesh to reduce raindrop impact and retain soil moisture.
- → Conduct follow-up watering for 2–3 months post-planting until vegetation re-establishes.

(e) Infrastructure Protection

- → Inspect and clear stormwater inlets, swales, and outlets to ensure unimpeded flow.
- ightarrow Reinforce vulnerable inlets and outlets with rock aprons, coir logs, or vegetation.
- → If access roads or paths were damaged, repair using permeable materials and install side drains or berms to redirect stormwater safely.

Erosion, Sediment, and Pollution Control

- → Install silt fences, coir logs, or sandbags downstream of repair sites to prevent sediment loss.
- → Refuelling and machinery maintenance to take place at least 50 m from watercourses, with drip trays and spill kits available.
- ightarrow All disturbed areas to be stabilised immediately following completion of works to prevent secondary erosion.

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. 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?

- → Flood damage repair will occur within and adjacent to the rehabilitated Mill Stream UVB and Tributary UVB wetland offset areas and associated stormwater management features (e.g., vegetated swales and outlet structures).
- → Activities will focus on:
 - Eroded banks and scoured channels:
 - Flood-damaged stormwater inlets or outlets;
 - Sediment deposition zones and areas of vegetation loss;
 - Areas where floodwater diverted from its natural path.

When?

Timing:

- ightarrow Immediately after flood or high-rainfall events, once the area is safe and accessible.
- ightarrow Preferably during the dry months (January–May) for major reshaping or stabilisation.

Inspection frequency:

→ Routine inspections after every major rainfall (>25 mm/day) and biannually during the rainy season.

Duration:

- → Minor flood damage repairs typically require 2–3 days.
- \rightarrow Major bank stabilisation may take up to 2 weeks.

Follow-up:

→ Vegetation establishment to be monitored quarterly for the first year.

Who?

Responsible Party: Developer / Landowner (WUL holder).

Supervision:

- $\,\rightarrow\,\,$ Environmental Control Officer (ECO) overall oversight and compliance.
- → Freshwater Specialist assess damage extent and approve repair methodology.

Implementation:

- → Rehabilitation Contractor or Site Maintenance Team to conduct repair and planting work.
- → Landscape Contractor to source and install indigenous plants.

Monitoring:

ightarrow ECO to maintain photographic and written records of flood damage and repair actions.

Why?

Sediment gradually transforms a stream and reduces the amount of open water. This then reduces the biodiversity of both fauna and flora. The construction of the road bridge over the R43 has likely altered how water flows down the river. If water velocity is abruptly slowed this causes the sand to settle out. Attenuation structures are designed to do this. However, it also happens if the stream is suddenly confined with concrete bridge piers and base.

Method Statement 5: Shaping of bed and banks

What?

This method statement describes the procedures for reshaping and stabilising the wetland bed and banks within the rehabilitated Mill Stream UVB and Tributary UVB wetland offset areas.

The objective is to restore natural wetland topography, flow pathways, and bank stability that support ecological functioning, flood attenuation, and sediment retention, while preventing erosion and promoting re-establishment of indigenous vegetation.

How?

Site Access and Preparation:

- → Access to shaping areas will be limited to designated tracks outside the wetland and buffer zones.
- → Sensitive and no-go areas (including intact wetland zones and established indigenous vegetation) will be demarcated with high-visibility barrier tape or temporary fencing prior to any earthworks.
- → The ECO and Freshwater Specialist will mark out reshaping boundaries and slopes on-site before commencement.
- → All machinery will be restricted to upland or previously disturbed areas.
- → Refuelling and maintenance will take place at least 50 m from the wetland, with drip trays, spill kits, and impermeable ground protection.

Shaping Methodology

(a) Excavation and Re-Profiling

- → Shaping will be undertaken using hand tools or small-scale excavators to minimise soil disturbance.
- → The wetland bed and banks will be re-profiled to emulate natural gradients and flow characteristics, avoiding sharp or artificial contours.
- → Recommended slope gradients:
 - Wetland bed (channel): 0–1%
 - o Transition zone (bank toe to floodplain): 1–3%
 - Outer banks (buffer edge): ≤5%
- → Gently undulating microtopography will be created to enhance habitat diversity and surface water retention.
- → Excavated material will be stockpiled temporarily on impermeable sheeting outside the 32 m buffer and later reused for backfilling or shaping.

Compaction and Stabilisation

- → After shaping, surfaces will be lightly compacted by foot or hand tamper to ensure stability while maintaining natural permeability.
- → Over-compaction (which inhibits root penetration and infiltration) will be strictly avoided.

→ Where required, brush packing, geotextiles, coir mats, or mulch will be installed immediately to protect exposed soils.

Backfilling

- → Areas where erosion or scour have removed soil will be filled using clean, suitable topsoil or wetland substrate recovered from on-site stockpiles.
- → Backfill must be applied in thin layers (≤150 mm) and compacted lightly after each layer to match adjacent surface levels.
- → The natural flow alignment of the wetland will be maintained throughout.

Vegetation Reinstatement

- → Once shaping is complete, the banks and bed will be planted or seeded with locally indigenous wetland and riparian vegetation (e.g., Ficinia nodosa, Carex clavata, Typha capensis, Juncus kraussii).
- → Planting density: 3–4 plants/m² for bank areas, 4–6 plants/m² for wetter zones.
- → Mulching or brush packing will be applied around new plantings to suppress weeds and retain moisture.
- → Watering schedule: every 2–3 days for the first two months, reducing as vegetation establishes.

Erosion and Sediment Control

- → Install temporary silt fences, sandbags, or coir logs downstream of the reshaped areas to prevent sediment transport into adjacent wetland sections.
- → All stormwater inflows into reshaped zones will be temporarily diverted until vegetation is established.
- → The use of hard armouring (e.g., concrete or gabions) will only be permitted where absolutely necessary and approved by the ECO and Freshwater Specialist.

Where?

Shaping of bed and banks will occur within the Mill Stream UVB and Tributary UVB wetland offset areas on Erf 438, Stanford, specifically in:

- → Areas identified as historically disturbed or eroded;
- → Zones affected by previous infilling or channel incision; and
- → Marginal areas where flow re-direction and profile correction are required to restore wetland hydrology.

All works will remain within approved rehabilitation footprints and avoid intact wetland zones and established vegetation stands.

When?

Timing:

ightarrow Shaping activities will be conducted during the dry season (January–May) when water levels are lowest to minimise turbidity and erosion.

Duration:

- → Small-scale reshaping (localised erosion) 2–3 days per site.
- → Large-scale contour correction up to 2 weeks.

Sequence:

- \rightarrow Site demarcation and ECO approval.
- \rightarrow Shaping and profiling.
- \rightarrow Backfilling and compaction.
- $\rightarrow \ \ \mbox{Vegetation reinstatement and erosion control installation}.$

Follow-up

→ Monitoring of shaped areas will occur monthly for 6 months, then quarterly for 2 years post-completion.

Who?

Responsible Party:

ightarrow Developer / Landowner (WUL Holder) – ultimate responsibility for implementation.

Supervision and Oversight:

- → Environmental Control Officer (ECO) on-site environmental supervision and compliance.
- → Freshwater Specialist / Ecologist approve final shaping design, monitor hydrological and ecological outcomes.

Implementation:

- → Rehabilitation Contractor conduct physical shaping and planting.
- → Landscape Contractor responsible for vegetation reinstatement and watering.

Why?

Shaping of the wetland bed and banks is required to:

- → Re-establish natural wetland morphology and hydrological function disrupted by historical disturbances.
- → Prevent erosion, bank collapse, and sediment loss during storm events.
- → Restore habitat diversity and support the growth of indigenous vegetation.
- → Ensure that flow paths, infiltration zones, and storage capacity are reinstated to achieve the target Present Ecological State (Category C).
- → Maintain long-term stability and functioning of the wetland offset areas as part of the ecological infrastructure network.
- \rightarrow Ensure compliance with:
 - o The National Water Act (No. 36 of 1998);
 - o The Environmental Authorisation and EMPr; and
 - o The Wetland Offset Rehabilitation and Management Plan (Delta Ecology, 2024).

Method Statement 6: Maintenance and repair of infrastructure within the regulated zone

What?

Maintenance and repair of the floating deck, boardwalk, and other associated infrastructure located within the regulated area of the wetland and Mill Stream on site.

How?

Site Access and Preparation

- Access to the site will be via the existing boardwalk and designated footpaths as indicated on the Site Development Plan (SDP). No new access routes will be created within the regulated area.
- Materials and personnel will reach the site using existing tracks and walkways. Any transport of materials
 must avoid direct access through the wetland or watercourse.
- No-go areas and sensitive zones (such as undisturbed wetland vegetation and the stream edge) will be clearly demarcated using temporary fencing, hazard tape, or similar barriers.
- Where necessary, temporary working platforms (e.g., timber mats) will be placed to prevent trampling and disturbance of the soil surface.

Construction / Maintenance Sequence

- Conduct a site inspection with a suitably qualified freshwater specialist or environmental control officer (ECO) to identify the extent of the damage and confirm required works.
- Mark the working area and set up access controls.
- Remove damaged material (e.g., planks, supports) by hand where possible.
- Install or repair structures (deck, boardwalk, handrails) using pre-assembled or prefabricated components to minimise in situ work.
- Secure and stabilise repaired sections to prevent erosion or collapse.
- Clean up and remove all waste material from the regulated area.
- Rehabilitate any disturbed surfaces immediately after works.

Works should preferably be conducted during low-flow or dry periods to limit sedimentation and disturbance to the wetland.

Erosion, Sediment, and Pollution Control

- Silt fences, sandbags, or geotextile barriers will be installed downstream of the working area to trap sediments and prevent runoff into the wetland or stream.
- Drip trays will be placed beneath all stationary equipment to prevent hydrocarbon leaks.
- Spill kits will be available on-site, and all staff will be trained in spill response procedures.
- Stormwater runoff will be managed to prevent erosion or direct discharge into the watercourse during and after the works.
- No cement, oil, or waste materials will be allowed to enter the watercourse.

Reinstatement / Rehabilitation

- Once repairs are completed, the working area will be backfilled and compacted (where applicable) to original levels using material of similar composition.
- Temporary access structures and protective barriers will be removed after the works.
- Disturbed areas will be re-vegetated using locally indigenous wetland and riparian species to restore habitat integrity and reduce erosion risk.
- All construction waste, and foreign materials will be removed from the regulated zone and disposed of at a licensed waste facility.
- The ECO or freshwater specialist must inspect and sign off on the reinstated area to confirm compliance with environmental requirements.

Where?

Regulated area of the wetland and Mill Stream on site

When?

As required, preferably in low flow periods or drier months if works can be timed in such a manner

Who?

Developer/ Project Manager / HOA

Only as directed by a suitably qualified professional with experience in freshwater systems and engineering thereof. Must be undertaken by suitably experienced contractor.

Why?

On going maintenance required in the regulated area.

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

According to the national web-based environmental screening tool report generated for the proposed site, the Combined Aquatic Biodiversity Theme Sensitivity is classified as "Very High" (DFFE, 2023). Delta Ecology was initially appointed by Lornay Environmental Consulting to clarify aquatic biodiversity constraints on the property related to the Mill Stream and any other relevant watercourses. Following the aquatic biodiversity screening assessment of the proposed site by Joshua Gericke on the 25th of July 2023, a hillslope seep wetland and two natural Unchanneled Valley-Bottom (UVB) wetlands coinciding with the non-perennial drainage were confirmed and delineated onsite (Gericke, 2023). All three aquatic systems extend across the 500 m regulated proximity of the Erf, but no other watercourses were noted in this area.

In the Freshwater impact assessment, the delineated UVB and hillslope seep wetlands were assessed using current best practice assessment methodologies to determine the PES, EIS, WES, and REC metrics. The results of these assessments are as follows:

	PES	EIS	WES (Highest)	REC
Mill Stream UVB Wetland	С	High	High	В
Tributary UVB Wetland	С	High	Moderate	В
Hillslope Seep Wetland	E	Moderate	Moderately Low	D

Although the condition of the onsite UVB wetlands was moderately disturbed, the high to moderately high EIS and WES scores indicate that these wetlands are sensitive and important in terms of conservation planning or provision of ecosystem services. The hillslope seep wetland is seriously disturbed, and of moderate to low importance in terms of conservation planning or provision of ecosystem services.

Aquatic biodiversity impacts associated with the development were identified and assessed using both an impact assessment methodology compliant with NEMA requirements and the Risk Assessment Matrix prescribed by GN509 of 2016.

The results of the assessment of wetland loss along with four additional impacts during the construction and operational phases, given implementation of the listed mitigation measures, are summarised below:

	Rating	Risk Class	Applicable to	Mitigation Measures
Impact 1: Wetland Loss	Medium	Moderate	Hillslope Seep	Refer to Table 8-1 .
Impact 2: Altered flow	Low	Low	UVBWs	Refer to Table 8-2 .
Impact 3: Water Quality Impairment	Very Low	Low	UVBWs	Refer to Table 8-3 .
		Operatio	nal Phase	
Impact 4: Altered flow	Low	Low	UVBWs	Refer to Table 8-4 .
Impact 5: Water quality impairment	Very Low	Low	UVBWs	Refer to Table 8-5 .
"No Go" Scenario	Low	Not Assessed	Hillslope seep & UVBWs	Refer to Table 8-6 .

Four out of five of the post-mitigation scores fell within the within the "Low" to "Very Low" impact categories. Wetland loss received the highest impact significance score, which fell within the 'Medium' category. Ordinarily, wetland loss would fall within the 'high' category, but the limited area of wetland loss (0,87 Ha) and the degraded nature of the wetland has reduced the impact significance.

Although it is unknown whether the development area would be further developed in future, it is assumed that the site would remain as is. The No-Go option would result in the continuation of impact to the wetlands due to onsite and adjacent land uses – and would therefore still result in negative impact to the delineated wetlands.

The Moderate risk rating confirms that a Water Use Licence will be required for this project due to the encroachment into the onsite seep wetland.

The key recommendations therefore are:

- → Avoid encroachment into the delineated UVBWs during construction and operational phases.
- → Avoid encroachment into the 32 m buffer area around each wetland, apart from limited activities specifically indigenous gardens and pools (recommended to be non-chlorinated eco pools, please refer to Section 8.4.2.).
- → Tie into mainline sewage if possible or use fully contained conservancy tanks serviced by truck. No sewage treatment, irrigation or soak-aways should be contemplated.
- → Allowance must be made for stormwater to be treated in a vegetated detention pond and/or a substantial vegetated swale before release into the UVBWs.
- → Municipal water supply should be used if possible. If not, groundwater abstraction would be preferable to wetland abstraction.

It is therefore the opinion of the specialist that the proposed development should be approved subject to application of the mitigation measures listed in this report, as well as the implementation of a suitable Wetland Offset, Rehabilitation and Management Plan.





Compacted areas of the Hill Slope Seep Wetland.



Tributary wetland flowing left to right across the track. Note the brush pile to the right from recent invasive species clearing.



Mill Stream Wetland system



Classification of wetlands on site:

Factor	Wetland	Wetland	Wetland
System	Inland	Inland	Inland
Ecoregion	Southern Coastal Belt	Southern Coastal Belt	Southern Coastal Belt
Landscape Setting	Valley-Floor	Valley-Floor	Valley-Floor
Hydrogeomorphic type	Unchanneled valley bottom	Unchanneled valley bottom	Hillslope
Drainage	Rainfall and Interflow	Rainfall and Interflow	Rainfall and Interflow
Seasonality	Permanent - Seasonal/temporary	Seasonal/temporary	Seasonal/temporary
Anthropogenic influence	Excavation, vegetation clearing, alien invasive vegetation, and infilling	Vegetation clearing, and alien invasive vegetation	Excavation, vegetation clearing, alien invasive vegetation, and infilling
Vegetation	South Coast Limestone Fynbos (EN – PP)	South Coast Limestone Fynbos (EN – PP)	Southwest Ferricrete Fynbos (VU - WP)
Geology		and feldspathic sandston	,
Substrate	Terrestrial soils were a dan waterlogged and exhibited	np uniform brown sandy loa d gleying.	m, while wetland soils were
Salinity	Fresh		

3.	Property location					R43 between the Stanford and Gansbaai																		
4.	Erf/Farm name(s), no	Erf/Farm name(s), number(s) and portion(s)					Er 438 Stanford																	
5.	Property size(s) (m²) of all proposed sites:				5.2 ha																			
6.	SG Digit code(s) of t	igit code(s) of the all the proposed property(ies)																						
(descri	(description of cadastral unit) C 0 1		1	3	0	0	2	1	0	0	0	0	0	4	3	8	0	0	0	0	0			
7.	Coordinates of the proposed site(s) where the maintenance activity/ies will be conducted:																							
	Latitude (S)	34				0	26'								26'							41.75'		
	Longitude (E)				19	0								27	7'	28.								

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

SECTION C: POTENTIAL LISTED ACTIVITIES THAT YOU REGARD TO BE APPLICABLE TO THE PROPOSED MAINTENANCE ACTIVTY(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 <u>proposed development</u> to which the applicable listed activity relates.
12	The development of - (i)dams or weirs, where the dam or weir, including infrastructure and water surface area, exceeds 100 square metres; or (ii)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;	Some infrastructure may occur within 32 m of the watercourse (wetland)
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 – a watercourse	Some works may be undertaken within the watercourse as part of the rehabilitation of the site and / or installation of infrastructure
27	Removal of 1 ha or more of indigenous vegetation	More than 1 ha will be removed

28	Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares; or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes.	The proposal is approx. 5 ha and was historically part of the agricultural landscape and was recently brought into the municipal urban edge
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.
	NONE	
Activity No(s):	Provide the relevant Activities 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	Removal of vegetation
14	The development of infrastructure and water surface area exceeds 10 square metres; or (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs (a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse. i. Western Cape i. Outside urban areas: Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans;	The proposal incorporates the construction of a boardwalk and a deck and other associated infrastructure within the regulated area.

PART 3 DECLARATIONS

SECTION A: DECLARATION OF THE PROPONENT

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

I. KEUIN ALAN ICING ID Number: 5609145809185 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 –
 - o costs incurred for the appointment of the EAP or any person contracted by the EAP; and
 - o 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.

Signature of the Proponent:

ery) un

Name of company (if applicable):

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

I,	MICHELLE NAYLOR EAP / Specialist Registration	2	0	1	9	/	6	9	8			
Cs	Number: the appointed EAP / Specialist hereby declare/affirm that:											
us	as the appointed Extra operation hereby decided, animit man.											
•	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 an registered interested and affected parties, all material information that have or may have th potential to influence the decision of the competent authority or the objectivity of any report, pland 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 for the adoption of a Maintenance Management Plan was/will be available to registered interested and affected parties and that particle a manner that all interested and affected parties were/will be provided to participate and to provide comments;	distrib cipat	oute tion	d o will l	r wo	as/ aci	will l litate	be r ed ir	mad n sud	de ch		
•	I have ensured/will ensure that the comments of all interested are considered, recorded and submitted to the competent authority;	ıd af	fect	ed	par	ties	we	re/v	∕ill k	эе		
•	I have ensured/will ensure the inclusion of inputs and recommendation of the request for the adoption of a Maintenance Management Pla			•			ılists	in re	spe	ct		
•	I have kept/will keep a register of all interested and affected participation process; and	es tha	at po	artic	ipa	ted	I in t	he p	oub	lic		
•	I am aware that a false declaration is an offence in terms of Regu 2014.	ılatioı	n 48	of	the	ElA	A Re	gulc	noitr	ns,		
2	MN aulas.											
,,	UNaylor 17-00	S-202!	5									
Si	gnature of the EAP/Specialist:	, 2020		ate) :							
LO	RNAY ENVIRONMENTAL CONSULTING PTY LTD											

Name of company (if applicable):