



Hilland Environmental
Environmental Assessment Practitioners

166 Mount View, Victoria Heights
P.O. Box 590, GEORGE, 6530
Western Cape, South Africa

Tel: +27(0)44 889 0229
Fax: +27 (0) 86 542 5248
Mobile: + 27 (0) 82 5586 589
E-mail: info@hilland.co.za
www.hilland.co.za

ENVIRONMENTAL COMPLIANCE MONITORING REPORT NO.21

FOR

**OUTENIQUASBOSCH, FARMS OUTENIQUASBOSCH 149 AND HARTENBOSCH
217, HARTENBOS**

**CIVIL SERVICES INSTALLATION (PHASES 4 & 11 & 13) & HOUSE
CONSTRUCTION**



OUTENIQUASBOSCH
The Wildlife Village

Compiled by:

Hilland Environmental

Reference:

MOS22/455/75

Report Period:

November & December 2022

ISSUED BY:

HillLand Environmental

PO Box 590

George, 6530

Tel: 044 889 0229

Fax: 086 542 5248

E-mail: cathy@hilland.co.za / admin@hilland.co.za / environmental@hilland.co.za

Website: www.hilland.co.za

OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH 217, HARTENBOS

**ENVIRONMENTAL MONITORING REPORT NO 21
NOVEMBER & DECEMBER 2022**

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Submitted to:	DEADP (George) Dryer van Zyl – Owner / Developer ZEC4 (Pty) Ltd
Copies to:	Petrie van Zyl – Move It Civils (Contractor – phase 10) Charl Moller – Charl Moller Consulting Engineer Pieter van Zyl – Outeniquasbosch HOA

Environmental Monitoring Report No. 21

This report monitors compliance against the Environmental Management Plan (Ref.: MOS22/455/48). This monitoring report constitutes the 21st Environmental Monitoring Report and covers inspections done during **November & December 2022** for the **civil services installation of Phases 4, 11 & 13 and house construction**.

This ECO report covers compliance monitoring for all works to date in terms of the EMPr and the EA in relation to civil services installation.

Commencement of **all listed activities** for the development (including the Resort zone) has taken place in accordance with the EA. The main road to the resort area has been constructed and the decking at the first resort unit complies with the aesthetic requirements.

Weekly ECO monitoring takes place during civil services construction phase (**phases 4 & 11 & 13**) and monthly during individual **house** construction.

The **Operational phase has started** with some residents residing permanently within Outeniquasbosch. It is now important to ensure that all construction areas are demarcated appropriately to prevent any unauthorised entry or accidental injury (residents and animals). All effort should be made to ensure that the estate is always kept neat and tidy, this includes litter, construction rubble and management of invasive alien plants and weeds.

Garden and private rehabilitation areas of each erf must be approved by the ECO to ensure compliance with the EMPr and EA. This is to avoid property owners planting exotic or invasive plants in their garden or private rehabilitation area. The HOA established a Landscaping committee that will assist with and oversee the approval of individual home gardens as well as landscaping and rehabilitation of the development nodes internal green/open spaces. The next meeting is scheduled for mid-January 2023.

1. Environmental Induction

Environmental induction is done on a regular basis with individual erf contractors and their construction teams. No new environmental induction sessions were held during this reporting period. The ECO will conduct (refresher) environmental induction early 2023 with all building contractors.

2. NO-GO Demarcation

No-Go areas were discussed during the environmental inductions.

Demarcating open trenches have been disused and the owner requires the following:

- No go Demarcation (green shade netting) for each home building site **must** be in place and maintained.
- The temporary construction haul road to phases 3 and 10 (next to **Mafunyane Street**) is demarcated with small piles of painted stones next to the road – contractor to ensure that this is maintained.
- Singular temporary construction roads in phases 4 & 11 & 13 **must** be used. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.
- It is recommended that the construction routes are demarcated to prevent any unnecessary deviation from the routes – **sales staff and residence must be made aware of the construction site and restricted access.**
- The construction site camp (civil services) must be fully closed off during the December break to ensure no unauthorized entry.

3. Fauna and Flora

The civil and building contractors must ensure that no harm or damage is done to any fauna or flora during active construction periods. Harm or damage can be mitigated by surveying the area to be excavated or cleared to ensure that no animals or plants are affected.

Ongoing eradication of listed invasive alien plants receives ongoing attention.

- Alien invasive plant species as a result of construction (all phases) activity must be removed. The developer/management team must ensure ongoing alien plant eradication – Spear thistle (*Cirsium vulgare*) was noted between phases 10 and 11 – this was reported on during the site meeting and subsequently removed.



Spear thistle was removed

4. Soil & Site Management

The contractors should note that the topsoil must be kept separate from any other subsoil or construction material to prevent contamination.

- Topsoil stockpile next to the roads must be protected from disturbance during construction – green shade netting or similar visual barrier can be installed if required.
- Dust mitigation measures (keeping the roads wet) are implemented when dust becomes an issue – the civil contractor is using a water truck on dry and hot days to water the construction haul routes.
- Singular temporary construction roads in **phases 4 & 11 & 13** must be used to avoid damage to topsoil and vegetation. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.
- Erosion protection must be installed as part of the rehabilitation when the civil services installation is complete – special focus on the steep slopes next to Monte Christo (Phase 10), Main road (Mafunyane) (phase 4 and phase 11) – several erosion protection measures were discussed during the site meeting on 4 November 2022 (including silt fences, mulch filled sausages, geofabric, gum poles staked to the contours, etc.) – see section 7 below for more details.



Tractor with water spray – dust prevention

5. Heritage Requirements

Should any heritage remains be exposed during excavations or any actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape (in accordance with the applicable legislation). Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape. Heritage remains include archaeological remains (including fossil bones and fossil shells); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features; rock art and rock engravings; shipwrecks; and graves or unmarked human burials.

A qualified archaeologist must be contracted where necessary (at the expense of the applicant and in consultation with the relevant authority) to remove any human remains in accordance with the requirements of the relevant authority.

- No heritage remains have been discovered to date.

6. Construction Site Camp

Contractors (civil and house construction) must provide ablution facilities for all construction personnel working on the site. One facility for every 15 persons on site is required.

- Toilet facilities are available for the civil contractor's staff and at each home building site.
- Use of the toilet facility must be included as a toolbox talk topic.

A fenced-off area must be created within the site camp for refuse and waste management as indicated above. ECO to inspect for compliance.

- Littering should be covered in regular "toolbox" talks with all staff members.
- Litter issue was reported to the main civil contractor and actioned immediately.

Any concrete batching areas are to be approved by the ECO prior to utilization and must be equipped with suitable settling ponds and trapping mechanisms to ensure that contaminated water does not leave the restricted area.

- Civil construction – the cement mixing area for phases 4, 11 & 13 was discussed and agreed, no further encroachment of the mixing area is to occur.
- Home construction – cement mixing is to be contained within the disturbance footprint and on a non-permeable layer (wooden sheet/plastic etc) to prevent soil contamination.
- **Ready-mix trucks are not allowed to be washed on site.**
- The cement slab processing area must be demarcated to prevent further encroachment into natural areas – contractor was busy to install the required demarcation/fence



Main civil contractor – busy installing demarcation/fence around the cement mixing area.

There should be a secure access point to the construction site in order to ensure that no unauthorized entry is permitted which may lead to a safety or security risk.

- Access to Outeniquasbosch Eco Estate is controlled through access-controlled gates/booms.

Any temporary haul roads or access roads for construction need to be maintained at all times by the contractor.

- The contractor is maintaining the current construction haul road. **Please be reminded that driving off the designated haul roads or access roads is not permitted.**
- Construction vehicles must **abide to the speed limit** as this is a wildlife estate with animals roaming freely.
- The temporary haul road next to phase 4 and 10 is demarcated with painted stones – any new haul roads must be approved by the ECO in advance.
- *Singular temporary construction roads in **phases 4 & 11 & 13** must be used. Regular toolbox talks must be done with all drivers and machine operators to remain on the existing temporary construction roads.*
- *Silt fences must be installed in the stormwater outlets to prevent soil erosion and double as litter trap for the duration of the construction phase.*



Silt fence will be installed as soon as the final shaping is done

7. Civil Construction

- Construction and installation of services for **phases 4, 11 & 13** are ongoing.
- Topsoil and subsoil must be stored separately, topsoil on one side and subsoil on the other side of the trench.
- Minimal vegetation disturbance is allowed during civil services installation.
- No new temporary haul roads may be created without ECO approval.
- Toolbox talks must include use of toilet and littering as topics.

The contractor will be responsible for the rehabilitation of all disturbed areas (including temporary construction haul routes) at the end of construction and before handing the services back to the developer/HOA.

Road reserve of main access road to phases 10, 11 & 13 must be rehabilitated accordingly. Due to the antelope grazing the new growth of the wild grass seed mixture sown after construction, it is recommended that the contractor install additional erosion protection. The following is recommended:

9.1.1 ROAD VERGES

- Road construction should limit the disturbed area to the minimum within the road reserve.
- Trimming of banks to a suitable grade for vegetation.
- Topsoil from the site stockpile is required on all exposed surfaces.
- Stabilizing seed mix of indigenous grasses on all large exposed slopes.
- Mulch and brushwood should be used to retain moisture on cuttings until germination and seedling establishment have taken place.
- A geofabric and brushwood may be required on steep slopes.
- Watering will improve the success rate of the rehabilitation during dry periods.

The planting of rescued plants onto the grassed slopes will have to take place with extreme care to avoid damage to the geofabric and destabilisation of the slopes.

Additionally, the contractor can use mulch filled sausages staked horizontally to the steeper slopes along the roads to further curtail soil erosion.



Example of mulch filled sausages

8. Conclusion

The contractors are aware of the environmental requirements and are complying. It is advised that the contractors (**civil and home building**) do regular toolbox talks with all staff members with special focus on **littering and cigarette** butt disposal. The **building** contractors are also reminded to ensure that the No-Go demarcation and safety netting is maintained to ensure that no animals get injured. Construction and installation of services in **phases 4 & 11 & 13** are being monitored by the ECO – the contractor is reminded to ensure that singular temporary construction haul routes are used. Certain sections of the road verge must still be rehabilitation and erosion damage to be rehabilitated.

Reminder to owners, management and the contractors to please ensure that the following is in place prior to closing down for the festive season:

- Ensure that all demarcations are in place and maintained to prevent any unauthorised access to the site during the shutdown period;
- Ensure that all hazardous material are stored/locked away appropriately;
- Ensure that ALL stockpiles are stable and protected from erosion where necessary (wind or water);
- Ensure that any steep slopes and areas susceptible to erosion are secure and stable at all times;
 - It is advised that you use filled sandbags at the foot of the slope/within erosion gullies or mulch filled onion bags staked along the contours of the slope to decrease the likelihood of any soil erosion.
- Ensure that all plant and machinery remaining on site have suitable drip tray underneath;
- Ensure that ALL litter and construction material waste is removed from site and disposed of at an approved waste site.
- Ensure that there is no material that can blow away (plastics) and that if excessive dust is anticipated that the necessary shade netting / woodchips to prevent wind blown sand movement is in place.
- In the event of heavy rain and erosion over the Christmas shutdown, please ensure that there is someone on standby to come and place the necessary sand bags / do the necessary repairs.
- Feel free to call Cathy Avierinos on 082 558 6589 or send a WhatsApp in the event of an **emergency** for assistance and guidance.

ECO monitoring for during **November & December 2022**

Date:	Comment:
4 November 2022	ECO site inspection of the Civil contractor & site meeting (Phases 4, 11 & 13)
10 November 2022	ECO site inspection of the Civil contractor
15 November 2022	ECO site inspection of the Civil contractor & house construction
22 November 2022	ECO site inspection of the Civil contractor & house construction
2 December 2022	ECO site inspection of the Civil contractor & house construction & site meeting (Phases 4, 11 & 13)
6 December 2022	ECO site inspection of the Civil contractor & Landscaping committee meeting