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ENVIRONMENTAL MONITORING REPORT NO. 30

FOR

OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH
217, HARTENBOS



OUTENIKUASBOSCH

The Wildlife Village

Compiled by:

HilLand Environmental

Reference:

MOS24/455/122

Report Period:

January and February 2024

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OUTENIKUASBOSCH, FARMS OUTENIKUASBOSCH 149 AND HARTENBOSCH 217, HARTENBOS

ENVIRONMENTAL MONITORING REPORT NO 30
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Environmental Monitoring Report No. 30

This report monitors compliance against the Environmental Management Plan (Ref.: MOS22/455/48). This monitoring report constitutes the 30th Environmental Monitoring Report and covers inspections done during **January and February 2024** for:

Action:	Phase:	Comment:
Civil service installation / construction	9 & 19 (School site)	Civil services installation of Phase 9 has started. Bulk earthworks of the school site (phase 19) have started.
Housing construction	1, 2, 3, 4, 10, 11, and 13	Individual housing construction monitoring are done once a month and reported on twice a year (January & June/July). Concept building plans are submitted to the ECO for comment to ensure compliance with the environmental requirements. ECO introduction email and the EMPr is then sent to the owner and contractor followed by environmental induction with staff on-site.

General notes:

- Weekly ECO monitoring site inspections during civil services installation / construction, and monthly during individual 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.
- Garden and private rehabilitation areas of each erf must be approved by the landscaping committee 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's Landscaping committee 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.

ECO monitoring inspection for **January and February 2024**:

Date:
11 January 2024
17 January 2024
25 January 2024
2 February 2024
8 February 2024
15 February 2024
22 February 2024

SECTION A – CIVIL CONSTRUCTION ECO MONITORING

The following EMPr monitoring checklist is for the civil installation phase(s) – **Phases 9 & 19** (school site). The table lists the level of compliance with notes/comment where relevant.

EMPr requirements	Level of compliance	Comments / Findings	Photo's (if applicable)
CONSTRUCTION PHASE			
Environmental induction			
All contractors (civil and housing) must be briefed during environmental induction.	Compliant	Environmental induction is done prior to the start of construction.	
Demarcation of NO-GO areas			
All areas outside that of the defined works (roads and pipeline routes) are deemed as no-go areas. These areas have to be properly demarcated to prevent any construction encroachment.	Compliant and ongoing	NO-GO areas are discussed with the contractor, pegged by the surveyor and works are confined to the demarcated area. Construction haul routes must be demarcated (painted stones is recommended) to avoid machinery/delivery vehicles from driving in the veld.	

Should access be required through a no-go area, permission must be obtained from the ECO in writing prior to the use of such an area.	N/A	Nothing reported to the ECO or noted by the ECO during site inspections.	 22 February 2024 3:03 pm Mid-block sewer installation. Pegged route were followed.
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Fauna and Flora			
Animal rescue strategies should be implemented prior to bush clearing when the site is surveyed. The ECO must sign off areas prior to earthworks commencing. Plant rescue and rescue before physical construction starts. - no indigenous vegetation may be cleared from site without the prior approval of the ECO	Ongoing	Plant search and rescue must be done (entire development phase is recommended) prior to clearing of vegetation for installation of services (sewer, water, roads etc.). Topsoil stripping of the roads in phase 9 started before the ECO could sign off the plant search and rescue, however, topsoil (windrows) must be protected for the duration of the construction phase. No harm to any animals were reported to the ECO or noted during ECO site inspections.	 08 February 2024 11:39
Topsoil Stripping			
Topsoil must be stripped from all construction areas before work commences. This topsoil should be stockpiled for use in rehabilitation and landscaping and must not be contaminated with other building/construction materials. The vegetation roots are to be removed together with the top 20cm of topsoil and are to be stockpiled for use during the rehabilitation phase.	Ongoing	Topsoil of the road surface has been stripped and stockpiled to use in rehabilitation. Topsoil of the sewer/water etc infrastructure must be stockpiled on one side of the trench and replaced back on top once installation is complete.	Phase 9 – topsoil stockpiles  Phase 19 – bulk excavations

			 22 February 2024 3:29 pm
Specific Requirements from the Forestry			
Trenches for sewage and water pipes running through forested areas, must be dug manually wherever possible.	N/A	Not applicable for phases 9 & 19.	 22 February 2024 3:05 pm Within development node – no forested areas
All steps must be taken to preserve as much as possible indigenous trees, e.g.,	N/A	Not applicable for phases 9 & 19.	

trees may form an integral part of a development.			
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).	Compliant / N/A	Nothing reported to the ECO or noted by the ECO during site inspections.	
Contractors Camp Site and Management			
The contractors' camp site must be in an area indicated and approved by the ECO for this purpose and must demarcated.	Compliant	Phase 9 site camp – same site camp location that was used for phase 4. Site camp is demarcated with concrete barriers and green shade netting.	Phase 9 – same site camp that was used for phase 4.  Phase 19 – site camp within the demarcated zone. 
Portable ablution facilities (chemical toilets) are to be provided at the camp	Compliant	There are sufficient ablution facilities located at the site camp and construction site (phase 9 & 19).	

site for the use of the staff. Additional facilities are to be always provided closer to areas of work.			
A fenced off area must be created within the site camp for refuse and waste management as indicated above. ECO to inspect for compliance.	N/A	Currently there are no waste generating activities.	
Burning is not permitted as a disposal method for the entire property.	Compliant	No burning noted.	
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.	N/A	Currently there are no concrete/cement activities	
Any temporary haul roads or access roads for construction need to be maintained at all times by the contractor including demarcation, dust monitoring and management etc.	Ongoing	The main temporary haul route used to access Outeniquasbosch is maintained well (dust suppression/demarcated with painted stones). Construction haul routes must be demarcated (painted stones is recommended) to avoid machinery/delivery vehicles from driving in the veld.	
Storm Water Management			
Erosion control mechanisms must be in place during each stage of the construction phase.	Ongoing	Currently no stormwater related issues on site. Silt fences and stormwater deflection/energy dissipation will be required when the stormwater outlets are connected to the stormwater system. Permanent stormwater management are included in the EMPr (swales/berms).	 Phase 4 – stormwater berms

In the event of erosion damage or silt movement, the contractor is responsible for the clean-up required to reinstate the conditions to normal.	Outstanding Phase 4	Phase 4 erosion damage still needs to be fixed and rehabilitated – soil berms/swales will be constructed as per the EMPr.	 Phase 4 – erosion damage that must still be fixed.
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REHABILITATION SPECIFICATIONS CONSTRUCTION AREA (CIVIL INSTALATIONS)

Rehabilitation of phases 12 and 14 was successful.



Google Earth - 2022.08.31 - Site camp location for phase 12, 13 and 14.



2024.01.17 – Phase 12

The site camp area rehabilitation started. Brushwood placed on top of the rehabilitated area and stormwater berms.



2024.01.17 – Phase 14

Road verges have been shaped and seeded with indigenous grass seed mix.

SECTION B – INDIVIDUAL HOUSING CONSTRUCTION ECO MONITORING

The following EMPr monitoring checklist is for the individual housing construction. The table lists the level of compliance with notes/comment where relevant.

EMPr requirements	Level of compliance	Comments / Findings	Photo's (if applicable)
CONSTRUCTION PHASE			
Environmental induction			
All contractors (civil and housing) must be briefed during environmental induction.	Ongoing	Environmental induction is done with the main contractor (email introduction including a copy of the EMPr), and on-site environmental induction with the contractor's staff.	
Demarcation of NO-GO areas			
All areas outside that of the defined works (development footprint) are deemed as no-go areas. These areas have to be properly demarcated to prevent any construction encroachment.	Ongoing	Houses are clearly demarcated, and compliance is also monitored by the HOA. The private rehabilitation areas used for stockpiling during construction phase must be rehabilitated as required in terms of the EMPr.	2023.07.27 – Phase 10 showing demarcation in place.  2024.01.17 – Phase 4 

Fauna and Flora			
Animal rescue strategies should be implemented prior to bush clearing when the site is surveyed. The ECO must sign off areas prior to earthworks commencing. Plant rescue and rescue before physical construction starts. - no indigenous vegetation may be cleared from site without the prior approval of the ECO	Ongoing	Concept plan site inspection include identification of any plants that must be rescued before commencement with earthworks. In most cases the erven do not contain any rescue material as the house construction follows shortly after the civil services installation is completed. Leaving little time for indigenous vegetation to establish/regrow.	2024.01.17 – Phase 10 – rehabilitation in progress of the private rehabilitation zone.  Rehabilitation of the private rehabilitation zones. 
Topsoil Stripping			
Topsoil must be stripped from all construction areas before work commences. This topsoil should be stockpiled for use in rehabilitation and landscaping and must not be contaminated with other building/construction materials. The vegetation roots are to be removed together with the top 20cm of topsoil and are to be stockpiled for use during the rehabilitation phase.	Ongoing	Topsoil must be kept separate from subsoil or any home building material. Topsoil is then used during rehabilitation of the private rehabilitation area and any other internal disturbances around the development footprint.	2024.01.17 – Phase 2 - topsoil rescued for rehabilitation 

Specific Requirements from Forestry			
Trenches for sewage and water pipes running through forested areas, must be dug manually wherever possible.	N/A	Not yet applicable to any of the current construction sites.	
All steps must be taken to preserve as much as possible indigenous trees, e.g., trees may form an integral part of a development.	N/A	Indigenous (including protected) trees are generally in the valleys and not on the development zones. Placement of the development nodes took the indigenous trees into consideration.	
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).	Ongoing	No heritage remains have been uncovered during the construction of houses to date.	
Architectural requirements			
Architectural requirements are to be always adhered to during the planning and construction of any infrastructure in Outeniquasbosch. Refer to the latest version of the Architectural Guidelines	Ongoing	Architectural review committee to ensure compliance with the architectural guidelines. Concept plans are submitted to the ECO for scrutiny in terms of environmental requirements.	N/A
Contractors Camp Site and Management			
The contractors' camp site must be in an area indicated and approved by the ECO for this purpose and must be totally fenced off from the game.	Compliant	Each contractor has set up a site camp/storage area inside fenced of construction boundary as approve by the ECO or HOA.	2024.01.17 – Phase 4 – site camp within the demarcated construction zone.

			
Portable ablution facilities (chemical toilets) are to be provided at the camp site for the use of the staff. Additional facilities are to be always provided closer to areas of work.	Ongoing	There are sufficient ablution facilities on each site.	2023.10.06 – Phase 4 - demarcation and suitable toilet facility on site. 
A fenced off area must be created within the site camp for refuse and waste management as indicated above. ECO to inspect for compliance.	Ongoing	Refuse and waste are treated inside the demarcated construction site, however, construction material and litter often spread outside the demarcated boundary, which is then reported to the contractor and rectified. Skips are covered with shade netting (or similar) to prevent litter blowing away. Regular toolbox talks are required to remind contract workers to pick up litter and keep construction material inside the construction boundary/skips.	2023.08.24 – Phase 1 - Necessary measures are in place to ensure that litter is limited. 
Burning is not permitted as a disposal method for the entire property.	Compliant	No burning of any waste noted or reported to the ECO.	

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.	Ongoing	All concrete mixing must be done within the demarcated working zone and on a non-permeable layer. In general, the contractors are compliant. Most will make use of ready mix or stand mixers.	
Any temporary haul roads or access roads for construction need to be maintained at all times by the contractor including demarcation, dust monitoring and management etc.	Ongoing	Existing civil contractor haul routes and internal roads are used to access housing construction sites. NO new haul roads may be created without ECO approval. Civil contractor haul routes that are no longer in use/required MUST be closed off and rehabilitated.	
Storm Water Management			
Erosion control mechanisms must be in place during each stage of the construction phase.	Ongoing	Housing contractors must ensure that silt (or any other building material) does not enter the surrounding environment and stormwater network. In general the contractor complies and are maintaining the silt fence/no-go demarcation to contain the silt within the construction site. Silt wash onto roads is cleaned regularly which helps to prevent siltation of the stormwater outlets and immediate natural environment/detention ponds.	
In the event of erosion damage or silt movement, the contractor is responsible for the clean-up required to reinstate the conditions to normal.	Ongoing	Silt wash onto roads is cleaned regularly which helps to prevent siltation of the stormwater outlets and immediate natural environment/detention ponds. This is monitored by the ECO and HOA and must be rectified before HOA can issue the occupation certificate.	

REHABILITATION SPECIFICATIONS CONSTRUCTION AREA

Rehabilitation specifications are outlined in **Section 9** of the EMPr and will be monitored/inspected by the ECO prior to occupation certificate is issued.

- Removal of all in situ contaminated material (cement, concrete, bricks etc.)
- Replacing the topsoil from stockpile area (at least 20 cm depth)
- Seeding with a stabilizing seed mix, which will rapidly bind the soil.
- Replanting plants from the plant rescue nursery (upon approval of a landscaping plan).
- Removal of the shad cloth screen around the disturbed area only after the vegetation has re-established.

The rehabilitation and re-establishment of disturbed areas is critical to the success of this development. These disturbances could be in the form of areas exposed and destabilized during construction. Rehabilitation must occur concurrently with the phased construction progress to ensure that no areas are left exposed. Rehabilitation activities must form part of the construction phase - rehabilitation must follow all construction activities.

SECTION B – OPERATIONAL PHASE ECO MONITORING

ECO monitoring of the Operational phase related activities (fire management, game management, landscaping & waste management)

Operational phase	
Conditions and requirements	Comments and request
Fire Management	
The fire breaks are to be maintained along the property boundaries and the internal irrigation system is in place for fire management as the rehabilitation of Grootbrak Dune strandveld thicket between the residential clusters is not a fire driven ecosystem and as such fire needs to be excluded from this area. No burning of waste on ANY PART of the Estate is permitted.	Firebreaks along the external property boundary of the development are in place. The private rehabilitation zone doubles as the firebreak of each property with the necessary irrigation system as required in terms of the Architectural Guidelines.
Game Management	
The Game Management Plan covers the required aspects relating to this matter (Annexure 11).	Developer and HOA to ensure that all "rules for residents regarding game" are complied with.
Landscaping design	
General landscaping guidelines as stipulated in Landscaping Guidelines document are to be followed to ensure that the correct vegetation is planted as listed in the plant list. Note that any new plants that are not on the plant list must be approved by the Landscape committee (and ECO) to make sure that indigenous vegetation is planted (with the exception of exotic plants which is limited to private courtyards and in pots). This together with a garden designed in such a way as to use water sparingly will be required. The irrigation water provided by the estate is to be used for rehabilitation and landscaping and	The Landscaping committee will monitor compliance with the plant list and garden/landscape guidelines. A master landscape/rehabilitation plan will be created for the entire development (around the development nodes) and will be implemented by the HOA/developer. Individual owners are making use of the irrigation water provided. The visual and noise windbreak barrier has not yet been planted along the western boundary, this will be implemented in due course.

potable water should not be used for this purpose. In order to limit the visual and noise impact from the adjacent quarry a windbreak barrier will be planted along the western boundary and will be registered in terms of NEMBA.	
Waste Management	
An integrated waste management approach must be used that is based on waste minimization and which includes reduction, recycling, re-use, and disposal where appropriate. During the operational phase refuse must be in scavenger and weatherproof bins and be moved to the designated collection point for the municipal removal in accordance with the rules set in place by Outeniquasbosch or the municipality. Recycling initiatives should be adopted by the entire state. Sorting at source (within the home) is required. Collection policy is defined in Annexure 15.	The blue, green and black bag system is in place and the HOA is currently collecting the waste bags and deliver to the nearest waste disposal facility.

CONCLUSION & RECOMMENDATIONS

Phases 9 and 19 civil installations have started, and the developer and contractor are compliant with the EMPr. Housing construction sites are monitored by the ECO and HOA and any environmental issues are reported to the contractor/owner for actioning. In general, the housing contractors (various) are compliant with the EMPr.

The contractor is aware that the road verges and stormwater swales/berms in phase 4 must still be completed.