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Version 3

ENVIRONMENTAL MANAGEMENT PROGRAMME

in terms of

Regulation 22 (b) of Government Notice No. R385 in terms of Chapter 5 of the National Environmental Management Act, 1998 (Act 107 of 1998), July 2006 as amended 2008 and the Environmental Impact Assessment Regulations 2014 as amended



OUTENIKUAS BOSCH

The Wildlife Village

on

Farms Outeniquasbosch 149 and Hartenbosch 217

Hartenbos

Applicant: ZEC4 (Pty) Ltd

Compiled by: Hilland Environmental

Date: May 2022

Ref nr: MOS22/455/48

DEADP Ref: 14/3/1/1/D6/18/0574/22

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OUTENIKUASBOSCH

Submitted for:

Implementation in accordance with the Amendment EA

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1. INTRODUCTION

HillLand Environmental has been appointed by **ZEC4 (Pty) Ltd** as Independent Environmental Assessment Practitioners in terms of the National Environmental Management Act (Act No. 107 of 1998) and Environmental Impact Assessment Regulations, 2014 (as amended) for the approved residential development on an existing game farm, Outeniquasbosch – the Wildlife Village, on Farms Outeniquasbosch 149 and Hartenbosch 217. This EMPr takes the following Environmental Authorisations (EA) in consideration: EG 12/2/3/4-D6/17-1444/09 (08 October 2013); Appeal EA M3/6/5 (24 November 2014) and Amendment of the Appeal EA (14/3/1/1/D6/18/0574/22) dated 25 May 2022.

Site description:

It is the intention of the applicant to develop approximately 93ha of the farm with residential, commercial and recreational facilities, while keeping the approximate remaining 470ha as an operating farm with game moving in between residential developed area, in accordance with the Environmental and Planning Approvals granted by DEADP and the Mossel Bay Municipality respectively.

This EMPr must be included in the tender documents of all prospective contractors and must also be included in the final contract awarded. The EMPr must be regarded as binding on the Owner of the property, sub-contractors, agents, consultants and all construction staff on the property, as well as to any future Home Owners Association, Home Owners, guests and visitors.

Once the development phase is complete and the developer hands over to the HOA, this EMPr will remain binding on the HOA and any reference to ZEC4 Pty (Ltd) will be replaced with the Outeniquasbosch HOA.

The full and approved EMPr will be made available to all contractors working on the project. Certain fundamental aspects are therefore of importance:

-) The EMPr and these requirements are binding on the owner, and all sub-contractors.
-) It is the responsibility of the owner/manager to ensure that any contractors, sub-contractor is made aware of the environmental requirements.
-) The owner/manager will be required to make good any damage caused through the actions of his contractors or the actions of their sub-contractors (in addition to any penalties for non-compliance issued).

Please note that this EMPr is a dynamic document, which will grow and be changed with new developments in the field as the need arises. Method statements for various activities will be added to the document in the appropriate appendix and the report will need to be updated every 5 years following the audits as required by NEMA on a 5 yearly operational phase cycle. These 5 yearly audits will commence 5 years after the completion of the construction phase. Interim audits for the completion of individual phases will be undertaken until the full development construction phase is complete.

2. THE DEVELOPMENT PROPOSAL

The Applicant will develop approximately 93ha of his 569ha existing game farm in accordance with the approved development plan.

This includes various phases of high to low density residential, tourism, commercial and institutional components. The development concept and motivation behind the proposal was to supplement the existing agricultural practice of game farming with a capital income from development. The Applicant wishes to continue his existing game farming practice. The layout proposal has been done in such a manner as to allow for sufficient open spaces and corridors between the development for unrestricted game movement and to safeguard residents.

The **approved** Site Development Plan (SDP) showing the various phases is included in annexure 2.

Services for all of these phases as well as the bulk supply to the development are all included in the EA and are covered by the EMPr. All listed activities as indicated in the EA (annexure 8), as well as any similarly listed activities in terms of changes to the NEMA EIA regulations are covered by this EMPr.

3. TERMS OF REFERENCE

The main terms of reference of this EMPr is to identify and mitigate any potential negative environmental impacts that may be associated with the civil and residential construction and overall operations of Outeniquasbosch.

The full and approved EMPr must be made available to all contractors working on the project and must be included in all tender documentation. Certain fundamental aspects are therefore of importance:

The EMPr and these requirements are binding on all contractors and their sub-contractors.

It is the responsibility of the main contractor to ensure that any sub-contractor is made aware of the environmental requirements.

The contractor will be required to make good any damage caused through their actions or the actions of their sub-contractors (in addition to any penalties for non-compliance issued).

3.1 ENVIRONMENTAL CONTROL OFFICER

Due to the sensitivity of the site and the surrounding vegetation and conservation outcomes proposed for the property it is required that an environmental control officer (ECO) be appointed to oversee all construction and operational activities on site.

It will be the ECO's responsibility to ensure that the mitigation / rehabilitation measures and recommendations referred to in the EA (see section 4) are implemented and to ensure compliance with the provisions of this EMPr.

The developer, replaced by the HOA in time, will be responsible for the remuneration of the ECO and any other expenses encountered in the process of environmental monitoring of the development and its phases.

3.1.1 SELECTION OF THE ECO

The appointed ECO must be able to demonstrate that (s)he is of sufficient competency to undertake the required task. This includes:

- J Previous experience of environmental control of similar sites
- J Working experience with contractors
- J Intimate knowledge of the particular expansions and expected areas of concern

3.1.2 ROLES AND RESPONSIBILITIES OF THE ECO

The ECO will undertake the following tasks:

- J Ensure compliance with the EMPr at all times during the construction and operational phase;
- J Ensure compliance with relevant management conditions of the EA (see section 4) during the construction and operational phase;
- J Meet with the developer, HOA, contractors and sub-contractors in order to set out the environmental parameters within which they must work;
- J Indicate where all no-go areas are to be demarcated and to ensure adherence to these delimitations;
- J Report on and assess the success of the environmental control and to determine any further environmental control measures;
- J The ECO inspections will vary based on the development phase in progress, during intensive construction weekly inspections will be required, while during periods where construction is not taking place, or is limited, inspections will take place monthly. Phases that have been completed will fall within the Operational phase monitoring requirements. Individual home building will fall within the operational phase monitoring requirements as indicated in this report. The ECO is to be available at any time as required by the developer, HOA and authorities;
- J The ECO has the discretion to undertake more frequent visits if he/she feels, this is justified due to the actions of the contractors and to make ad hoc visits in order to ensure compliance;
- J Indicate where plant rescue may be necessary, and what species should be rescued on this site;
- J Indicate where erosion protection and siltation prevention measures are required, or need to be supplemented, and to ensure correct implementation;
- J Check up on general environmentally friendly construction practices (e.g. no littering, safe and secure environment, contamination risks, etc.);
- J Ensure that the correct earthworks practices are adhered to (e.g. no encroachment into surrounding vegetation, separation of topsoil and subsoil, correct stockpiling and stripping of topsoil);
- J The ECO is to keep a site diary; photographic record of activities taking place on site as well as copies of all monthly reports submitted to the Department, a schedule of current site activities including the monitoring of such activities and a complaints register of all public complaints and the remedies applied to such complaints;
- J Monthly monitoring checklists and photo records are to be produced.

-) It must be noted that the ECO HAS THE AUTHORITY TO SUSPEND WORK ON SITE FOR ANY ACTION BEING UNDERTAKEN THAT DOES NOT COMPLY WITH THE ENVIRONMENTAL REQUIREMENTS OF THE SITE. Such a stop order has immediate effect; and
-) The ECO is to attend meetings where programming issues are discussed to ensure proactive inclusion of the environmental requirements.
-) ECO is to produce a report every 6 months on the compliance during construction, as well as the annual construction phase audit.
-) ECO is to produce an annual audit report during the operational phase.
-) ECO to produce the 5year audit as required by NEMA for the operational phase of the development.

3.2 HOME OWNERS ASSOCIATION (HOA)

The Home Owners Association (HOA) established will be required to ensure the continued implementation of this Environmental Management Programme (EMPr) and ECO monitoring throughout the life of the development.

Environmental Management is to be included in the HOA levies and any special levies that may be required can be raised based on the HOA constitution and its requirements. Home owners must make sufficient financial contributions to the HOA on a monthly or annual basis for the continued implementation of the EMPr.

The Game Farm will continue to operate and is independent of the HOA.

Rules relating the use and movement through the game farm will be set from time to time and MUST be enforced at ALL times.

4. CONDITIONS OF AUTHORISATION AND RECOMMENDATIONS AS STATED IN THE ENVIRONMENTAL AUTHORISATIONS

The Environmental Authorisation (EA – as referenced above and as attached in annexure 8) is inserted in this section. It is binding on the developer, home owners, contractors, sub-contractors, agents, consultants and construction staff on the property.

Once the development is complete and the developer hands over to the HOA, the EA will need to be amended to reflect the HOA as the “holder” of the EA for the ongoing operational phase. Until that time, the developer, the HOA and all owners and their representatives are bound by the EA as issued.

4.1 CONDITIONS OF AUTHORISATION

<u>Conditions of Authorisation</u>	<u>Notes</u>
1. This environmental authorisation is valid for a period of five years from the date of this appeal decision. The holder must commence with all the listed activities within the said period or this environmental authorisation lapses and a new application for environmental authorisation must be submitted to the competent authority, unless the holder has lodged a valid application for the amendment of the validity period of the environmental authorisation (i.e. the amendment application must be submitted to the Ministry responsible for environmental affairs in the Western Cape Province), before the expiry of this environmental authorisation. In such instances, the validity period will be automatically extended ('the period of administrative extension') from the day before this environmental authorisation would otherwise have lapsed, until the amendment application for the extension of the validity period is decided. The listed activities, including site preparation, may not commence during the period of administrative extension.	Commencement will take place from the 12th November 2018 and will be ongoing thereafter until complete.
2. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days of the date of issue of this environmental authorisation. In the event that an appeal notice and subsequent appeal is lodged with the competent authority, the effect of this environmental authorisation may be suspended until such time as the appeal is decided.	20 days have lapsed and no-commencement occurred during this time.
3. The applicant must in writing, within 12 (twelve) calendar days of the date of this decision and in accordance with regulation 10(2) –	Notification was sent out on the EA and no further notification required in the Appeal EA.
3.1. Notify all registered and interested and affected parties of –	
3.1.1. the outcome of the application;	
3.1.2. the reasons for the decision as included in Annexure 1;	
3.1.3. the date of the decision; and	
3.1.4. the date of issue of the decision;	

3.2. draw the attention of all registered interested and affected parties to the fact that an appeal may be lodged against the decision in terms of Chapter 7 of the Environmental Impact Assessment Regulations, 2010 detailed in section F below;	
4. The holder of the environmental authorisation must give the competent authority written notice of commencement of the construction activities and provide proof of compliance with the specified conditions of authorisation. With regard to the notices, the holder must -	Written notice of commencement of construction is provided with the submission of this EMPr, 18 October 2018 .
4.1. Within thirty (30) calendar days of the date of issue of this decision give notice, with proof of compliance with conditions 2 and 3 above;	See above
4.2. Give seven (7) calendar days' notice before commencement of construction activities. This notice must include proof of compliance with the following conditions described herein: Conditions: 6, 11 and 15	Notice is given that construction will commence on the 12th November 2018 .
5. This environmental authorisation is only for the approved alternative described in Section B above and excludes development north of erven 162-168, the clubhouse and the northern boundary of the neighbouring Monte Christo development, as indicated in the layout plan dated June 2011 (DRG NR: PR04/17/L13). No development may take place in the northern section of the property aside from the proposed equestrian centre, the hotel and conference centre and the resort units as described above.	Approved plan is attached in annexure 2.
6. The applicant must amend the lay-out plan in accordance with the description of the development approved by the competent authority under Section B of the appeal environmental authorisation. This must be submitted to the competent authority and approved at least 3 weeks, prior to the commencement of construction activities.	Approved amended plan submitted to the competent authority on the 28/02/2018
7. The applicant must further furnish the competent authority with a revised Game Management Plan, which prevents access of wild animals/game to the residential portion of the development. Game proof fencing must be erected by the applicant to ensure that residents and properties are protected from wild animals. The aforementioned revised Game Management Plan must be submitted to the competent authority and approved at least 3 weeks prior to the commencement of construction activities.	The Game Management Plan and its approval by the competent authority (CapeNature) is included in annexure 11. Note all Buffalo have been removed from the game farm due to the potential risk to residents.
8. The holder is responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.	Noted and this applies to the future owners and the HOA and any agent, employee, contractor etc rendering a service within the development.
9. Any changes to, or deviations from the scope of the description set out in section B above must be accepted or approved, in writing, by the competent authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the competent authority may request such information as it deems necessary to evaluate the significance and impacts of such changes or deviations and	Noted

it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.	
10. The applicant must notify the competent authority in writing, within 24 hours thereof if any condition herein stipulated is not being complied with.	Noted
11. The holder must appoint a suitably experienced environmental control officer ("ECO") for the construction phase before commencement of any land clearing or construction activities to ensure compliance with the Environmental Management Programme ("EMP") and the conditions contained herein.	ECO to be appointed.
12. All mitigation measures recommended by the Visual Mitigation Report and the Visual Impact Assessment that formed part of the Scoping Report dated March 2010 (Appendix C) must be strictly implemented.	Visual mitigation measures all captured in the Architectural Guidelines and all residents bound by these guidelines. See annexure 10.
13. An environmental audit report must be prepared and submitted to the competent authority annually during the construction phase of the development, with the final audit report to be submitted within one year following the completion of the construction phase.	Audit reports – see sections 3.1 & 10
14. The applicable requirements with respect to relevant legislation pertaining to occupational health and safety must be adhered to.	OHS – is included in all contract documents for construction.
15. The draft Environmental Management Programme ("EMP") submitted as part of the application for environmental authorisation must be amended to include the following:	This report
15.1. Incorporate all the conditions given in this Environmental Authorisation;	Included
15.2. Be included in all contract documentation for all phases of the development;	To be included in all contract documentation
15.3. Describe the level and type of competency required of the Environmental Control Officer ("ECO"), or Environmental Site Agent where applicable;	Included
15.4. Incorporate an agreement with a recycling company for the collection of recycled waste during the operational phase of the development.	See Integrated waste section 7 and annexure 15
15.5. Determine the frequency of site visits;	Included section 3.1
15.6. Meet the requirements outlined in Section 24N (2) & 3 of the national Environmental Management Act, 1998 (Act no 107 of 1998, as amended) ("NEMA") and Regulation 34 of the Environmental Impact Assessment Regulations 2006;	Included see checklist
15.7. Provide the utilization of local labor as far as possible, this may include record keeping and reporting procedures for monitoring purposes; and	Included – section 6.2
15.8. Must incorporate the revised Game Management Plan. An application for amendment to the EMP must be submitted to the competent authority if any further amendments are to be made to the EMP, other than those mentioned above, and this may only be implemented once the amended EMP has been authorised by the competent authority. The EMP must be	Included annexure 11 Any future amendments to the EMP will follow due procedure.

included in all contract documentation for all phases of implementation.	
15.9. The mitigations measures detailed in the recent Traffic Impact Assessment, dated September 2021, by Urban Engineering must be incorporated into the Environmental Management Programme, implemented and complied with (additional condition of the Amended Appeal EA – 25 March 2022).	Please refer to Section 5.9
16. A copy of the environmental authorisation and the EMP must be kept at the site where the listed activities will be undertaken. Access to the site referred to in section C above must be granted and, the environmental authorisation and EMP must be produced to any authorised official representing the competent authority who requests to see it for the purpose of assessing and/or monitoring compliance with the conditions contained herein. The environmental authorisation and EMP must also be made available for inspection by any employee or agent of the applicant who works or undertakes work at the site.	Copy is kept on site
17. The applicant must submit an application for amendment of the environmental authorisation to the competent authority where any detail with respect to the environmental authorisation must be amended, added, substituted, corrected, removed or updated. Save that such application for amendment shall not include the personal details of the holder of the environmental authorisation (Where any of the applicant's contact details change, the physical or postal address and/or telephonic details change, the applicant must notify the Ministry in writing as soon as the new details become known to the applicant). Further, the rights granted by this environmental authorisation are personal rights (i.e. not attached to a property, but granted to a natural or juristic person). As such, only the holder may undertake the activities authorised by the competent authority. Permission to transfer the rights and obligations contained herein must be applied for in the following manner:	Noted
17.1. The applicant must submit an originally signed and dated application for amendment of the environmental authorisation to the competent authority stating that the wishes the rights and obligations contained herein to be transferred, and including (a) confirmation that the environmental authorisation is still in force (i.e. that the validity period has not yet expired or the activities were lawfully commenced with); (b) the contact details of the person who will be the new holder; (c) the reasons for the transfer; (d) an originally signed letter from the proposed new holder acknowledging the rights and obligations contained in the environmental authorisation and indicating that he has the ability to implement the mitigation and management measures and to comply with the stipulated conditions.	At the time when transfer of rights to the HOA is required, the necessary transfer procedure will be followed.
17.2. The competent authority will issue an amendment to the new holder either by way of a new environmental authorisation or an addendum to the existing environmental authorisation if the transfer is found to be appropriate.	Noted

18. Non-compliance with a condition of this environmental authorisation or EMP may result in suspension of this environmental authorisation and may render the holder liable for criminal prosecution.	Noted
19. Notwithstanding this environmental authorisation, the holder must comply with any other statutory requirements that may be applicable to the undertaking of the listed activities.	Noted
20. An integrated waste management approach, which is based on waste minimization and incorporates reduction, recycling, re-use and disposal, where appropriate, must be employed. Any solid waste must be disposed of at a landfill licensed in terms of the applicable legislation.	Noted and included in section 7 and annexure 15
21. No surface or ground water may be polluted due to any actions on the site. The applicable requirements with respect to relevant legislation pertaining to water must be met.	Noted – all storm water will pass through detention swales vegetated with natural vegetation before it continues on into the natural drainage lines. See stormwater detention swales annexure 1.
22. All associated service-infrastructure and bulk services for water, sewage, electricity and storm water drainage must be placed within the road reserve of the existing and proposed roads, to minimise the impacts.	See services plans (annexure 1) – only services not possible to place within the road reserve deviate from this provision.
23. The applicable requirements with respect to relevant legislation pertaining to cutting, damaging, disturbing or destroying protected trees or trees from a natural forest must be adhered to.	Noted and procedure for DAFF permits included in section 5.7
24. 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.	Noted and included in section 5.8

4.2 RECOMMENDATIONS IN THE AUTHORISATION

- J The landscaping and re-vegetation to be undertaken in the development and its associated open spaces should be undertaken with local indigenous trees and shrubs – see the Architectural Guidelines Landscape section (annexure 10)
- J Labour and building material sourced locally should receive preference (see section 6.2)

5. SPECIFICALLY REQUIRED ENVIRONMENTAL MANAGEMENT PRACTICES

5.1 PRE-CONSTRUCTION PHASE

All activities to consider during the pre-construction phase of Outeniquasbosch. Items listed below are to be addressed prior to commencement of any activity.

5.2 ENVIRONMENTAL INDUCTION

The developer, individual landowners and all construction personnel should be briefed in an environmental education programme regarding the environmental status and requirements of the site. This will include providing general guidelines for working on the property and in proximity of the Game, minimizing environmental damage during construction, as well as education with regards to basic environmental ethics, such as prevention of littering, lighting of fires, etc. Records of the environmental training (attendance register and training content – see annexure 4) must be kept.

Induction required for all civil contractors and for each building contractor prior to them commencing on site.

This EMPr may be used as a guideline for induction purposes.

5.3 DEMARCATION OF NO-GO AREAS

All people working on site must be made aware of the boundaries in which work is to be done. Those areas, in which no work is required, are to be considered as **no-go areas**. The following applies:

- J Civil contractors - all areas outside that of the defined works (roads and pipeline routes) is deemed a no-go area.
- J All construction activities must be restricted to the demarcated areas to ensure that no further disturbance into the surrounding vegetation. ECO to indicate the No-Go area applicable to each phase of the project and this is to be attached in annexure 12 as issued.
- J No encroachment or activities may take place outside the work areas.
- J No-Go areas will be required to be demarcated by the contractor to ensure that they are visible at all times, to all personnel.

- J Methods of demarcation will be agreed with the ECO and may include danger tape tied in a knot to a rod, rope, fencing, mulch bags, wire fencing, shade netting etc.
- J In light of the above, 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.
- J The areas of special consideration may relate to the external service lines entering and leaving the property, e.g. the water pipes and storm water detention swales. All such activities must first be approved by the ECO prior to commencement of activities. Special conditions will be applied to each of these cases.
- J Adjacent properties to the construction site may **not** be entered by any construction staff if permission is not granted by the owner.
- J The ECO should monitor adherence to the No-Go area policy.
- J Access into the No-Go areas by personnel is strictly forbidden (i.e. Work breaks such as lunch are not permitted outside the defined work area - no entry into the neighbouring properties or open space areas). A spot fine will be imposed against the contractor in the event of contravention of the **no-go policy up to a maximum of R5 000 per incident**).

5.5 FLORA AND FAUNA

The impact of earthworks on less mobile, subterranean fauna (eg snakes and moles) during construction could be mitigated by an examination of a site to be constructed, prior to commencement of any earthworks, to determine the presence of any subterranean fauna and rescue of these species.

The animal rescue strategy should be implemented prior to bush clearing, when the site is surveyed. The ECO must sign off areas prior to earthworks commencing (see annexure 13).

In order to successfully rehabilitate the site, it is necessary to undertake a plant rescue programme which is phased to run ahead of the construction phases. The programme allows for the recovery of plant species from any building area which may be suitable for transplant and replanting in the conservation areas of the site.

No indigenous vegetation may be cleared from site without the prior approval of the ECO.

Home / unit construction - Each construction node is to be screened off with a well secured shade cloth fence around the immediate building footprint. This will retain the work area and prevent game from wandering into the construction areas and injuring themselves during the construction period. Depending on the construction programme it may be prudent to screen off an entire node within the cluster, keeping the linking corridors open for game movement during construction as opposed to screening each individual erf.

The general mitigation measures required in relation to the flora on site are listed as follows:

- J A **method statement** needs to be submitted by the contractor 3 weeks prior to any phase of construction commencing.
- J The ECO will evaluate the method statement and ensure that it covers the handling of the following aspects:
 - The demarcation of the construction area and the demarcation of the NO-GO areas around the specific construction phase.
 - Method of installing services linked to that phase - **Services which fall outside the erven or road reserves MAY need to be hand excavated if the area through which they need to pass is sensitive to disturbance.**
 - Programme for trench excavation, installation, backfilling and rehabilitation. Trenches are to be immediately backfilled and rehabilitated utilizing the in-situ topsoil and vegetation which is set to the side of the trench on commencement of excavation. Under NO circumstances may the topsoil be used as bedding for pipes
 - Storm water control for erosion to be utilized in that construction phase. Temporary measures for controlling storm water and hence erosion could include, berms, soil savers, soil blankets, straw bales, mulch bags, mulch rolls, silt traps, silt fences or any other method approved by the ECO.
 - Plan for remedy of any erosion control measures which fail to perform - after site inspection; the contractor will have to remedy these at their own cost.
 - Rehabilitation plan for all areas disturbed during construction - require rehabilitation using plant material local to the site.
 - Indication of the designated haul roads to be used. These must be approved by the ECO and may be instructed by the site engineer. These require demarcation and fencing off in some form to prevent encroachment into the no-go areas.

5.6 TOPSOIL STRIPPING

- J As topsoil is a valuable resource, it 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 materials.
- J 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. This topsoil is to be stockpiled in the designated topsoil stockpile areas, to be agreed on by the ECO.

5.7 SPECIFIC REQUIREMENTS FROM THE DEPARTMENT ENVIRONMENT FOREST AND FISHERIES (DFFE)

- J In cases where it is absolutely necessary to cut, disturb or destroy Forest/thicket and or Protected Trees, application for a license, which might be issued with conditions, must be made through this office prior to ANY disturbance of the site concerned.
- J Trenches for sewage and water pipes, running through forested areas, **must be dug manually wherever possible.**
- J All steps must be taken to preserve as much as possible indigenous trees, e.g. trees may form an integral part of a development.
- J The following general comments to be considered:
 - o Compaction of soil may only take place within the footprint of structures in the development.

- o Earth moving operations must be done taking the weather patterns and peak raining season of this region into account (October – November and March – April) – additional protective measures required during peak periods.
- o Vegetation downstream must not be affected or destroyed by siltation from or water run-off from the area during the development process etc.
- o Care should be taken to prevent any contamination of groundwater during the construction phase.
- o Except for alien invaders, all vegetation in riparian zones and river banks must stay intact, no or little disturbance should be allowed in these areas.

5.8 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. The ECO is to arrange for the appropriate Heritage Practitioner to assist with the necessary requirements.

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

5.9 TRAFFIC IMPACT ASSESSMENT REQUIREMENTS

The Amendment of the Appeal EA requires that the mitigation measures of the recent Traffic Impact Assessment done by Urban Engineering in September 2021 be included, implemented and complied with in this Updated EMPr. The following mitigation measures/recommendations apply:

-) *“Improvements shown in **Figures D2 and D5** need to be implemented before the completion of Outeniquasbosch Main Phase 2. Cost apportionment can be based on the percentage of traffic contributed by each of the three developments and by natural background traffic growth;*
-) *Depending on the completion date of Main Phase 3, the improvements shown in **Figures E2 and E5** may have to be implemented. This should be confirmed through an investigation of traffic conditions at that stage. Costs may be apportioned based on the percentages shown in **Figure E4**;*
-) *It is recommended that provision should be made for a second access to Outeniquasbosch that can be used in case of emergency;*

-) Should an access control gate be provided at the Outeniquasbosch entrance, there should be at least one entrance lane for residents and one for visitors with stacking space for at least four vehicles per lane;
-) A few embayments for visitors and service vehicles need to be provided outside the gates;
-) The accesses to the commercial nodes near the entrance should comply with the relevant access spacing requirements and should not impede traffic flow at the access and exit gates;
-) The main access road, the loop road to the north and the access route to the south should have reserve widths of at least 16 metres, with blacktop widths of at least 6,8 metres;
-) Refuse truck embayments and sidewalks need to be provided along these roads, within the road reserves;
-) Each sub-phase should have sufficient parking to comply with Mossel Bay Municipality requirements for the specific land-use;
-) Provision needs to be made for embayments and turning space for minibus taxis, Uber vehicles and shuttle buses at the corresponding sub-phases (commercial, residential, resort)."

Impact Management Outcomes	Impact Management Actions	Method of monitoring the Actions	Person responsible	timeframe
Demarcation of No-Go areas	To regulate construction workers movement out of sensitive areas	Environmental induction commencement and site inspections during construction phase with monitoring checklist	Contractor ECO	Throughout the construction phase and build of each home
Plant rescue	Rescue indigenous vegetation prior to vegetation clearance to use during rehabilitation phase	Conduct plant search and rescue prior to commencement on site	ECO to identify species Contractor / subcontractor to do search and rescue	Pre-construction phase
Topsoil stripping	Topsoil stripping to conserve seed bank, roots and vegetation	Environmental induction / education prior to commencement of vegetation clearing	ECO Contractor / subcontractor	Pre-construction / vegetation clearing phase
Vegetation disturbance	DAFF licence required prior to any vegetation disturbance	Environmental education, ECO to inspect the site prior to commencement of any activity and advice accordingly	ECO to inspect site DAFF to issue licence Contractor / subcontractor to conduct vegetation clearing	Pre – construction phase, prior to any works conducted on site.

Heritage resources	Stop works if heritage resources are discovered and report to HWC.	Appoint specialist to assist and advise	ECO to ensure Heritage practitioner is appointed to assist	Construction phase
Traffic Impact Assessment	Must be implemented and complied with.	Developer, HOA and Engineer to ensure compliance	Developer, HOA and Engineer to ensure compliance	Construction phase

6. CONSTRUCTION PHASE

All activities to consider during the construction phase of Outeniquasbosch Eco Villages. Items listed below are to be addressed during construction phase

6.1 ARCHITECTURAL REQUIREMENTS

Architectural requirements are to be adhered to at all times during the planning and construction of any infrastructure in Outeniquasbosch. Refer to Annexure 10 for Architectural Guidelines and requirements

6.2 USE OF LOCAL LABOUR & MATERIALS

All casual labour and semi-skilled labour should be local to Mossel Bay.

Records must be kept of all personnel and subcontractors employed by the contractor. The main contractor is to provide the breakdowns of their various sub-contractors. These are to be broken up into the following criteria:

Classification	Numbers & % Local to Mossel Bay	Numbers and % from Southern Cape (Mossel Bay)	Number & % from outside Southern Cape
Semi skilled			
Operators			
Artisans			
Management			
Professionals			
Other			

The target is to provide 100% of semi-skilled local labour to Mossel Bay. It is suggested that the total average local (including Southern Cape) should be maintained above 80%.

Where local expertise is either not available or where the local is not economically competitive, a skills transfer programme is suggested to compensate.

All records are to be kept and available.

Construction phase records are to be submitted to the ECO on a monthly basis for submission to the Local Council and DEADP. This is to include the home building phase whether by contractor or by owner builder.

Financial records are to be kept indicating the financial contribution to the local economy through the input into wages (of all personnel living in the area permanently, personnel only living in the area for the duration of this contract) and through the use of local suppliers.

These figures are to be submitted to the ECO on a monthly basis.

There must be compliance with the Basic Conditions of Employment Act, Compensation of Occupational Injuries and Disease Act, Employment Equity Act, Labour Relations Act, Unemployment Insurance Act, and the Skills Development and Levies Act. ECO to be provided with documentary monitoring evidence.

Where possible materials should be sourced locally or within the Garden Route District. Where not possible due to availability or price, records need to be retained to motivate purchase from outside the Garden Route District.

6.3 CONTRACTORS CAMP SITE

The contractors' campsite is to be set up in the area indicated and approved by the ECO for this purpose and must be totally fenced off from the game. The initial contractors camp site will be within the school site.

The contractors' campsite, offices and storage facilities shall not be located within or adjacent to an environmentally sensitive area.

The civil contractors' campsite is to be the first area where activity will take place on site.

This camp must be within an area that is within the construction area.

The areas are to be treated as indicated for topsoil removal etc.

The camp is to be fenced off and no encroachment beyond the approved site will be permissible.

Portable ablution facilities (chemical toilets) are to be provided at the camp site for use of the staff. Additional facilities are to be provided closer to areas of work at all times. These facilities must be removed from site when the construction phase is completed, as well as the associated waste be regularly disposed of at a registered waste site.

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

No accommodation of contractors or their staff with the exception of a night watchman is permitted on site.

In terms of the Atmospheric Pollution Prevention Act, burning is not permitted as a disposal method for the entire property.

Storage of all materials required for the contract must occur within this campsite, or otherwise approved area (by 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.

Any temporary diesel storage tanks are to be secured with adequate bunding to cater for spillage and leakage. This must be to SABS standards and must be totally removable on decommissioning. All contaminated material is to be removed to an approved landfill site. ECO to sign off prior to first delivery of diesel and again on removal.

Adequate signage must be erected at the main entrance to the construction site to ensure that safety regulations are adhered to.

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.

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

6.4 ABLUTION FACILITIES

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

Toilets shall be of a neat construction and shall be provided with doors and locks and shall be secured to prevent them blowing over.

Sanitation provision and servicing shall be to the satisfaction of the environmental control officer. The contractor shall ensure that the toilet(s) are emptied regularly and also before weekends and public holiday periods.

Failure to use the chemical toilet provided and making use of the vegetation either on or off site will result in maximum penalty fine being awarded in addition to requiring the contractor to clean up.

6.5 TEMPORARY FUEL STORAGE

Temporary fuel storage must take place within the contractors campsite at a site approved by the ECO and the following measures must be in place;

-) Storage facilities should not be located within 55m of a watercourse, within a watercourse flood plain, near a wetland area or where there is a potential for any spilled fuel to enter a watercourse or groundwater
-) Fuel storage facilities should be located on flat ground and be in a bunded area
-) Bundwalls must be constructed to contain at least 110% of the total capacity of the storage tanks. Bundwalls must be constructed of impermeable material or lined to ensure that petroleum products cannot escape. A suitable material should be placed in the base of the bundwalls to soak up any accidental spillages.
-) The tanks should be locked and secured when not in use.
-) Automatic shut-off nozzles are required on all dispensing units.

- J Storage tanks should be drained within one week of completion of activities (unused fuel can be used by the contractor on other work sites or returned to the supplier).
- J All storage tanks, containers and related equipment should be regularly maintained to ensure the safe storage and dispensing of fuel.
- J Defective hoses, valves and containment structures should be promptly repaired.
- J Vehicle and equipment fuelling should be undertaken on a **hard surface** or **over drip pans** to ensure spilled fuel is captured and cleaned up.

The area must be totally rehabilitated on completion of the contract and all contaminated material must be taken to a registered dumping site for that purpose.

6.6 HEALTH AND SAFETY

Health and safety applies to those working on site as well as those using / passing through the site. The following conditions are to be adhered to:

- The Occupational Health and Safety Act (Act number 85 of 1993) must be complied with.
- The developer and contractor are responsible for maintaining / ensuring safety on site.

6.7 STORM WATER MANAGEMENT

The most stringent mitigation measures must be imposed during construction to minimise runoff and contamination of water leaving the site. The use of erosion control mechanisms such as erosion berms, silt fences, rows of onion bags, mulch, brushwood and deflection bars (the choice depending on the situation), is essential in all exposed areas and where slopes are steep, as runoff can cause erosion. These erosion control mechanisms should additionally separate the area of earthworks from the surroundings. These sites will be demarcated by the ECO before construction takes place.

- J Erosion control mechanisms must be in place during each stage of the construction phase.
- J To decrease the risk of water pollution, all construction materials must be secured (eg. only stockpiling at a predetermined site, around which there must be a boundary) so that there is no wash away or chance of them entering any water courses.
- J Storm water control measures must ensure minimization of erosion risk. Storm water outlets will need to have dissipaters to slow the outflow and trap silt during construction.
- J The development should be phased so that the area of exposed ground is limited at any single point in time.
- J It is the responsibility of the contractor digging a trench to ensure that the erosion control measures are in place throughout the period of risk (i.e. until backfilled and stabilised).
- J Where water is directed out of a trench by the contractor, they are responsible for the prevention of erosion at the discharge point and of preventing the movement of any silt beyond the work area (which may be carried in such water, or result from the erosion caused by such water).
- J In the event of erosion damage or silt movement, the contractor is responsible for the clean up required to reinstate the conditions to normal.
- J The area of open trench at any time should be limited to the minimum in order to

avoid excessive risk.

Impact Management Outcomes	Impact Management Actions	Method of monitoring the Actions	Person responsible	timeframe
Architectural requirements	To adhere to the architectural requirements pertaining to home design	Architectural plans to be approved by ECO and Developer prior to commencement of home construction	Architect Contractor Developer	Throughout the development and construction phase and build of each home
Use of local labour	Ensure that local labour is utilised during construction phase	Included in the tender document for the contractor, with weekly/monthly monitoring of local labour use during construction phase	ECO to monitor local labour use. Developer to include in the tender documentation	During construction phase
Contractors camp site	Placement and housekeeping of contractor camp, with storage of material	Contractor camp site location to be approved by ECO, with weekly monitoring of general housekeeping and storage of materials	ECO Contractor / subcontractor	Construction phase and duration of contract
Ablution facility	Ensure proper and clean ablution facility to all staff, well positioned and maintained	Environmental education, ECO to inspect the site on a weekly basis	ECO to inspect site	During the duration of the contract
Health and Safety	Ensure compliance with Health and Safety regulations	Environmental education, ECO to inspect the site on a weekly basis to monitor compliance	ECO to monitor, Health and Safety monitoring	Duration of construction phase
Storm water management	Ensure proper management of storm water outlet to minimise erosion and pollution potential	Environmental education with monitoring and site inspection by ECO to ensure proper compliance with regulations.	ECO site inspection prior, Contractor to continually monitor compliance	Duration of construction phase and throughout operational phase
Heritage resources	Stop works if heritage resources are discovered and report to HWC.	Appoint specialist to assist and advise	ECO to ensure Heritage practitioner is appointed to assist	Construction phase

7. OPERATIONAL PHASE

All activities to consider during the operational phase of Outeniquasbosch. Items listed below are to be addressed during operational phase

7.1 FIRE MANAGEMENT

Fire is a natural and necessary component of Fynbos/Renosterveld ecology and Fynbos / Renosterveld plants have lifestyles that are adapted for fire.

No fires are permitted during the construction phase by the contractor for any reason what so ever due to the risk of an uncontrolled wild fire and the game on the property.

The fire breaks are to 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.

Management of the Game Farm area and its habitats will continue in accordance with the approved Game Management Plan.

7.2 GAME MANAGEMENT

The Game Management Plan covers the required aspects relating to this matter (Annexure 11).

7.3 LANDSCAPING DESIGN

General landscaping guidelines as stipulated in Annexure 10 are to be followed to ensure that only indigenous and water wise vegetation is planted. 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 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.

7.4 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.

Disposal of waste during construction is the responsibility of the contractor and must only be removed to a licensed landfill site. A fenced off area must be created within the construction camp site for refuse and waste management. Refuse is to be collected in two separate containers, one for recyclable materials (i.e. glass, metal, paper and plastic) and the other for non-recyclable materials. These are to be disposed of at the various approved waste disposal sites.

During the operational phase refuse must be in scavenger and weather proof 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 estate. Sorting at source (within the home) is required.

Collection policy is defined in Annexure 15. ¹.

7.5 FIRE PROTECTION

There is a high risk of fires in the area, particularly during the dry summer months and periods of high wind velocities. The contractor shall take all reasonable and active steps to avoid increasing this risk. No open fires or naked flames for heating or cooking shall be allowed on site. Stoves and other electrical equipment shall only be permitted in the Contractor's camp and never be left unattended. The Contractor shall ensure that all personnel are aware of the fire risk and the need to extinguish cigarettes before disposal. Cigarettes may not be disposed of in the veld and must be disposed of properly. The Contractor should have fire-fighting equipment on site and ensure that all personnel are taught how to use it.

No burning of waste on ANY PART of the Estate is permitted

The Contractor shall identify the authorities responsible for fighting fires in the area and shall liaise with them regarding procedures should a fire start. The Contractor shall ensure that his staff are aware of the fire danger at all times and are aware of the procedure to be followed in event of a fire. The Contractor shall also ensure that all the necessary telephone numbers etc. are posted at conspicuous and relevant locations in the event of an emergency. The Contractor shall advise the relevant authority of a fire as soon as one starts and shall not wait until he can no longer control it.

7.6 HOME BUILDING

Construction of individual homes, although part of the operation phase of the development, the owner and contractors need to comply with the construction phase requirements during the building process.

Impact Management Outcomes	Impact Management Actions	Method of monitoring the Actions	Person responsible	timeframe
Fire Management	Ensure compliance according to the Fire Management protocols and regulations	Monitor compliance - monthly monitoring report during construction phase and operational phase	ECO checklist Contractor and Developer ensure compliance with regulations	During construction phase and operational phase

¹ Municipality may change their system and Outeniquasbosch will need to comply with any such changes as they occur and are implemented.

Game Management	Ensure compliance according to the game and game management regulations	Ongoing monitoring in accordance with CapeNature approvals.	Game Farm Manager	Construction phase and operational phase monitoring with checklist.
Landscaping design	Ensure compliance according to the architectural guidelines and regulations	Monitor compliance with architectural guidelines and regulations throughout construction/development phase	Contractors and developer to ensure compliance with architectural guidelines	Continual throughout the development and construction phase
Waste management	Ensure compliance with the proper waste management regulations and guidelines	Monitor the compliance with relevant waste management guidelines.	ECO to monitor and report in the monthly report, Developer to ensure compliance with relevant requirements.	Continual throughout all phases.
Fire Protection	Contractor to ensure compliance with the fire protection guidelines.	Monitoring by the ECO and reporting in the monthly report.	ECO to monitor during inspections and report on in the monthly report. Contractor to ensure compliance.	Throughout the construction and operational phase
Home building	Home owner and contractor to comply with the construction phase requirements	Monitoring by the ECO and reporting monthly	ECO to monitor during construction and report to ensure compliance – completion clearance report to be provided prior to home owner taking occupation	Throughout the construction of the home

8. DECOMMISSIONING PHASE

It is not foreseen that decommissioning of Outeniquasbosch would ever occur but should this ever be the case and the buildings ever need to be totally demolished – all material

foreign to the site must be removed from the site and must be disposed of at an approved waste disposal site. The surface is to be stripped and disposed of appropriately and the area is to be covered in topsoil and seeded with locally indigenous vegetation as well as being protected from erosion.

Any material that can be recycled should be recycled.

9. REHABILITATION

This section will focus on the rehabilitation of the construction areas, open space areas and landscaping of development areas.

The rehabilitation of disturbed areas will require the following treatment:

- o Removal of all *in situ* contaminated material (cement, concrete, bricks etc.)
- o Replacing the topsoil from stockpile area (at least 20 cm depth)
- o Seeding with a stabilizing seed mix, which will rapidly bind the soil.
- o Replanting plants from the plant rescue nursery.
- o Removal of the shade 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.**

9.1 REHABILITATION SPECIFICATIONS FOR THE CONSTRUCTION AREA

BOOKMARK NOT DEFINED.

Various methods of rehabilitation are available, however, this site requires the use of indigenous plant species which will be tolerant of the conditions on site. All plant rescue plants will be stored in an on-site nursery for use in the rehabilitation phase.

All topsoil must be stockpiled (top 20-30cm) from any construction area for use in the rehabilitation.

The initial phase of the revegetation and landscaping rehabilitation programme will consist of establishing a rapid ground covering on the exposed slopes such as road verges, pipeline routes and other disturbed areas. Once this initial covering is established, plants which have been rescued can be replanted within key areas. The choice of plants should be determined in accordance with the Vegetation Community occurring in the area (fynbos in the fynbos areas, forest within the forest areas).

Plant succession is the process whereby a vegetation community changes in plant composition and association with time (pioneer to climax) until reaching the climax vegetation type in accordance with the biophysical conditions of the site.

The planting of the correct plant species will assist in speeding up the process of natural plant succession. Seed should be collected from the surrounding natural vegetation to assist with rehabilitation.

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.

9.1.2 STORM WATER DETENTION SWALES

The outlet of every stormwater pipe will discharge into a detention swale with the intention to create a "wetland" area where water can stand and then slowly dissipate into the natural environment. These swales will be vegetated with locally occurring species and will form the basis of the rehabilitation phase of the thicket clusters through the planting of the locally occurring species around the swales to make use of the additional water available for plant growth. The detention swales will be planted with species that can tolerate inundation with water and the irrigation water system can be used to supplement the restoration of these areas during periods of low rainfall.

Species lists and rehabilitation guidelines are included in the Architectural Guidelines and will be amended from time to time depending on the availability of plants.

9.1.3 OPEN SPACE AREAS BETWEEN NODES

The rehabilitation of the areas between nodes will be done in a manner to recreate the naturally occurring vegetation of the area. This will be undertaken by planting bushclump thicket pockets that will bring the natural vegetation back between the development nodes while not detracting from the game management and wildlife corridors. These areas in addition to the zones between homes are all retained for the purpose of allowing continual movement of game. The majority of the open space areas between the nodes are currently cultivated grazing lands and these will be restored with clusters of Grootbrak Dune Strandveld and Thicket over time.

10. AUDITING AND MONITORING

Environmental compliance monitoring must take place during all the construction phases as well as during operational phases.

Once construction of any phase is complete an Environmental Audit should be undertaken to ensure compliance with the EMP and EA. This is to be submitted to DEADP.

During the operational phase an annual audit is required for the first 5 years and thereafter every second year.

The following environmental control monitoring report requirements apply:

10.1 ECO MONITORING REPORTS

-) Monthly monitoring reports and checklists during the construction phase.
-) Six monthly monitoring reports and checklists during the operational phase.

The following Audit requirements apply:

10.2 CONSTRUCTION PHASE AUDITS

-) Annual audit report to be prepared for the developer and HOA meeting

10.3 OPERATIONAL PHASE AUDITS

-) Annual audit report to be prepared for the developer and HOA meeting.

11. LEGISLATIVE REQUIREMENTS

Penalties in terms of Chapter 9 of the Western Cape Bill on Planning and Development as published in the Extraordinary Provincial Gazette No 5183, 3 October 1997, are applicable for any action, which leads to damage to the natural environment.

In addition to the penalties in terms of the Act (NEMA), spot fines up to a **maximum value of R10 000 per offence** can be instituted at the discretion of the ECO for any breach or non-compliance in terms of the EMPr (**FINES ISSUED WILL INCREASE EXPONENTIALLY FOR REPEAT OFFENCES**).

In the event of damage being caused, the HOA will be responsible for the cost of cleanup, repair or rehabilitation as necessary, as well as being liable for the fine. Where appropriate the HOA can pass the fine on to the individual home owner or contractor as the case may be.

A fund is to be established for the collection of fines and the spending of this fund is to be at the discretion of the ECO for environmental rehabilitation of the area.

10.1 NOISE

The owner/manager and his contractor(s) must comply with the regulations pertaining to noise (SANS 10400 is applicable) and take the neighbours into account when working on site. Contractor and staff are only permitted to work Mondays to Fridays (08:00 – 17:00). No work on public holidays or weekends permitted to avoid disturbance to local residents.

10.2 SOLID WASTE

Compliance with the National Environmental Management Waste Act must be adhered to.

10.3 NEMA ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS APPENDIX 4

The National Environmental Management Act (Act 107 of 1998 and Amendment Act (Act 62 of 2008) are the most important legislation affecting this EMP, as it controls the possible impacts of the proposal on the environment. Sections of the Act which deals with Compliance monitoring and Offences are relevant to the various environmental impacts that this development may have.

An EMPr must comply with Section 24N of NEMA and the Environmental Impact Assessment Regulations 2014 (GN 982 Appendix 4) which requires that it must include the following:

Table 1 NEMA EIA Regulation Appendix 4 requirements of an EMPr

REQUIREMENTS	REPORT SECTION
1. An EMPr must comply with section 24N of the Act and include-	
(a) details of- (i) the EAP who prepared the EMPr; and (ii) the expertise of that EAP to prepare an EMPr, including a curriculum vitae;	Annexure 9
(b) a detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description;	Section 2
(c) a map at an appropriate scale which superimposes the proposed activity, its associated structures, and infrastructure on the environmental sensitivities of the preferred site, indicating any areas that should be avoided, including buffers;	Annexure 2 and 3
(d) a description of the impact management outcomes, including management statements, identifying the impacts and risks that need to be avoided, managed and mitigated as identified through the environmental impact assessment process for all phases of the development including- (i) planning and design; (ii) pre-construction activities; (iii) construction activities;	Sections 5, 6, 7, 8 & 9

(iv) rehabilitation of the environment after construction and where applicable post closure; and (v) where relevant, operation activities;	
(f) a description of proposed impact management actions, identifying the manner in which the impact management outcomes contemplated in paragraph (d) will be achieved, and must, where applicable, include actions to – (i) avoid, modify, remedy, control or stop any action, activity or process which causes pollution or environmental degradation; (ii) comply with any prescribed environmental management standards or practices; (iii) comply with any applicable provisions of the Act regarding closure, where applicable; and (iv) comply with any provisions of the Act regarding financial provision for rehabilitation, where applicable;	Sections 5,6,7,8 & 9
(g) the method of monitoring the implementation of the impact management actions contemplated in paragraph (f);	Sections 3, 5,6 & 7
(h) the frequency of monitoring the implementation of the impact management actions contemplated in paragraph (f)	Sections 3, 5, 6, 7 & 10
(i) an indication of the persons who will be responsible for the implementation of the impact management actions;	Sections 5, 6 & 7
(j) the time periods within which the impact management actions contemplated in paragraph (f) must be implemented;	Sections 5, 6 & 7
(k) the mechanism for monitoring compliance with the impact management actions contemplated in paragraph (f);	Sections 5, 6 & 7
(l) a program for reporting on compliance, taking into account the requirements as prescribed by the Regulations;	Sections 5, 6 & 7 Annexure 5, 7, 13,
(m) an environmental awareness plan describing the manner in which- (i) the applicant intends to inform his or her employees of any environmental risk which may result from their work; and (ii) risks must be dealt with in order to avoid pollution or the degradation of the environment; and	Annexure 4
(n) any specific information that may be required by the competent authority.	As required

12. CONCLUSION

This EMPr was updated to include the condition of the Amendment Appeal EA and remains binding on the Owner/manager, all contractors and sub-contractors on site and constitutes Best Practice for construction activities. This EMPr is a dynamic document, which will grow and be changed with new developments in the field as the need arises.