17.15 Dust Control

The Contractor must take all reasonable measures to minimize the generation of dust as a result of construction activities (including dust generated on haul roads) to the satisfaction of the ECO and Local Authority

17.16 Solid Waste Management

No on-site burying or dumping of any waste materials, vegetation, litter or refuse must occur. The Contractor must provide problem animal and-weather proof bins with lids of sufficient number and capacity to store the solid waste produced on a weekly basis. The lids must be kept firmly on the bins at all times. Bins must not be allowed to become overfull and must be emptied at least once a week. Waste from bins may be temporarily stored on Site in a central waste area that is weatherproof and scavenger-proof and which the Engineer and the ECO has approved.

All solid waste must be disposed of off-site at an approved landfill site in terms of the National Environmental Management: Waste Act (Act No. 59 of 2008). The Contractor must supply the ECO with a certificate of disposal. All hazardous waste must be disposed of at a licensed hazardous waste site.

The Contractor must be responsible for the establishment of a refuse control system that is acceptable to the ECO. Disposal arrangements must be made in advance and cleared with the ECO before construction starts. The Contractor must make provision for workers to clean up the Contractor's camp and working areas on a daily basis so that no litter is left lying around and so that the site is in a neat and tidy state. The Contractor must remove from site the refuse collected at least once a week. This requirement must be strictly enforced and special note taken of the penalties applicable in the case of non-compliance.

17.17 Toilets & Ablution Facilities

The Contractor must provide suitable sanitary arrangements near the construction site for all site employees. A minimum of one toilet must be provided per 15 persons at each working area (station) or as stipulated and approved in the Method Statement. The toilet must be within easy reach (max 300m) of the working area and be in good working condition and cleaned on a daily basis. Toilet paper must be provided and emptied on a weekly basis or when full or when instructed by the ECO on site, whichever is the appropriate action.

Disposal arrangements must be made in advance and cleared with the ECO before construction starts. Sanitation provision and servicing must be to the satisfaction of the ECO. The Contractor must ensure that toilets are emptied prior to any builders' holidays, and/or weekends. Toilets must be of a neat construction and must be provided with doors and locks and must be secured to prevent them blowing over.

NB No burying of any waste material on or near the construction site nor anywhere on the surrounding property is permitted.

17.18 Stockpiling

Any stockpiling of gravel, cut, fill or any other material including spoil must only be allowed in degraded areas or areas below the future cover of buildings and tar or paved parking

surface. The Contractor must indicate the proposed areas for such operations and method of undertaking such operations in a Method Statement to be submitted to the ECO for approval before any such activity begins. Any area used for stockpiling and not covered by building development must be returned to at least the state they where in before stockpiling and it must be ensured that the erosion potential of these areas is not increased.

The Contractor must ensure that the material does not blow or wash away or mix with each other. If the stockpiled material is in danger of being washed or blown away, the Contractor must cover it with a suitable material, such as hessian, netting or plastic.

17.19 Preparation of Building Material

The Contractor must ensure that any delivery drivers are informed of all procedures and restrictions (including "no go" areas) required to comply with the Specifications. The Contractor must ensure that these delivery drivers are supervised during off-loading, by someone with an adequate understanding of the requirements of the Specifications

All manufactured and/or imported material must be stored within the demarcated area, and, if so required, out of the rain. All lay down areas outside of the construction camp must be subject to the Engineer and the ECO's approval in such a way as not to cause a nuisance or environmental damage. All building materials are to be prepared at the batching plant, to enable the effects of cement and other substances, and the resulting effluent to be more easily managed.

It is essential that any imported material i.e. base material for road works, building sand, bedding base sand for pipe / cable lines etc. must be screened and of which the origins must be identified prior to arriving at the receiving environment, this must be approved by the Engineer / ECO.

17.20 Discharge of construction water

Potential pollutants of any kind and in any form must be kept, stored, and used in such a manner that any escape can be contained and the water table not endangered. This particularly applies to water emanating from runoff from fuel depots/workshops/truck washing areas. Wash down areas must be placed and constructed in such a manner so as to ensure that the surrounding areas are not polluted.

Contaminated water includes water that is carrying excess sediment due to construction activities. The contractor, being responsible for the construction and effective containment and maintenance of settlement ponds must ensure that the surrounding environment is not adversely affected as a result of construction activities. Contaminated water storage facilities must not be allowed to overflow and appropriate protection from rain and flooding must be implemented. Contaminated water that is removed from site must be disposed of at a facility approved by the ECO and Local Authority. No contaminated water that does not meet the water quality standards and criteria under the National Water Act may be released into a natural system, whether it is to surface or groundwater

All cement effluent from mixer washings, and run-off from batching areas and other work areas must be contained in suitable sedimentation ponds. Sedimentation ponds must be allowed to dry out on a regular basis to allow for solid material to be removed. This material must be disposed of in a suitable manner, depending on the nature of the material, and to the discretion of the ECO.

17.21 Treating (flushing/testing) of Pipelines

Cleaning/sterilization/flushing of pipelines shall not impair surrounding environmental quality. Any contaminated water from such activities shall be contained until it complies with the standards contained in the National Water Act or other relevant Acts, as well as those laid down by the Local Authority. Alternatively, it shall be removed from site and disposed of at an approved waste disposal site.

17.22 Contractors Temporary Camping Site & Eating Areas

The Contractor must designate eating areas for the approval of the ECO, which must be clearly demarcated. No eating of meals must take place outside these designated areas without the approval of the Contractor/ECO. No washing in dams or streams are allowed. The feeding or leaving of food for animals is strictly prohibited. Sufficient waste bins must be present in this area and emptied regularly.

The contractor must supply cooking facilities that are suitable for the environment and are not liable to cause the outbreak of fires. No overnight camping/staying on site is allowed. If overnighting is necessary for security purposes then it must be cleared with the ECO on site.

17.23 Traffic, Access Routes & Haul Roads

The Contractor must control the movement of all vehicles and plant including that of his suppliers so that they remain on designated routes. In addition such vehicles and plant must be so routed and operated as to minimise disruption to regular users of the routes not on the Site. On gravel or earth roads on Site, the vehicles of the Contractor and his suppliers must not exceed a speed of 25 km/h. On public roads adjacent to the Site vehicles will adhere to municipal and provincial traffic regulations.

As far as possible any access routes/haul roads must utilise existing roads or tracks. Any new access roads/haul roads must be designed so as to minimise erosion and must run across slopes and not directly up-hill. All temporary access routes must be rehabilitated at the end of the contract to the satisfaction of the ECO. Method Statements for any new access/ haul roads must be submitted

17.24 Site Clean Up and Rehabilitation

The Contractor must ensure that all structures, equipment, materials and facilities used or created on site for or during construction activities are removed once the project has been completed. The construction site must be cleared and cleaned to the satisfaction of the ECO. Immediately after the demolition of the camp site, the contractor shall restore the site to it's original state, paying particular attention to it's appearance relative to the general landscape. The contractor's procedure for rehabilitation shall be approved by the ECO and Engineer.

This shall include but not be limited to:

- Earthworks to reinstate the physical characteristics of the site. Here attention to the natural vertical and lateral heterogeneity in landform shall guide the reinstatement of natural areas.

- Replacement of topsoil material – care shall be taken to ensure that the same material that was removed from each area is replaced there, since this will carry the seed complement appropriate for re-establishment of each plant community type.
- Final landscaping by machine, but landscaping by hand may be required in many areas under rehabilitation.
- Re-seeding and / or replanting of rehabilitated areas.
- The Contractor shall not be permitted to use fertilisers or pesticides unless cleared in a Method Statement and approved by the ECO

It is imperative that any potential erosion problems are addressed. This may require subsequent site visits to monitor the efficacy of erosion control measures.

17.25 Land Management

Vehicles accessing the construction site must be made aware of driving in hazardous road conditions, sharp bends, narrow roads, bad weather, on or near children or domestic animals along the road if this is applicable. Vehicle movements should be kept to a minimum during rain to avoid damage to access roads and oil erosion must be prevented at all times along the access roads and around construction areas.

No fences or gates on the relevant construction property must be damaged. A decision on the open or closed status of all access gates to the property (construction site) must be taken with a view to manage the movement of domestic and/or wild animals on the site. Access by unauthorised personnel should also be controlled.

17.26 Socio-Cultural Issues

Property owners or property occupiers must be treated with respect and courtesy at all times. The cultural lifestyles of the communities living in close proximity to the construction areas must be respected. The Contractor must keep a Complaints Register in which all complaints lodged by outsiders or occupiers on site or adjacent to the site and the action taken with regard to such complaints, is recorded.

17.27 Additional Associated Installations

17.27.1 Construction of new access roads

In the event of the necessity for the construction of a new access road to the site the access route must be pre-determined prior to the On Site Start-Up Meeting.

Discussions pertaining to the "Access Road Start-Up Discussion" should include the following but are not restricted to;

- EMP and contents thereof.
- Demarcation of the access route.
- Containment of soil and rock from excavations.
- Transit areas for excess excavation road materials.
- Stockpile areas for sub-base and surface material.
- Earthmoving machinery for specific tasks.
- Mandatory site equipment.
- Placing of on site toilet facilities.
- Specific requests from farmers or the CLIENT and land owners.
- Dust Pollution.

- Post construction erosion methods.
- Site Specific agreements emanating from the Start-Up Meeting.

17.27.2 Eskom/Telkom - Installation of power and communication lines (overhead or furrowing/trenching of AC/optic fibre cables)

In the event of the necessity for the installation of an Eskom/Telkom line, (overhead or the furrowing / trenching of optic fibre/AC cable, the proposed route must be pre-determined prior to the On Site Start-Up Meeting. Discussions at the Eskom power & Telkom line installation Start-Up Meeting include the following but not restricted to;

- EMP and contents thereof.
- Establishing the location of the "tap-off" point.
- Arranging a time for the physical inspection of the Eskom power line/Telkom line route by the ECO with the contractor and site ESO. [If required a representative from the Client may be present as well as the landowner].
- Establishing suitable stockpile areas for poles, machinery and accessories.
- Placing of poles on heavy duty plastic.
- Exit and entry points along the Eskom power/Telkom line route.
- Method of Pole Drilling, Pole Planting and Stringing phases.
- Method of approach to pole hole location [i.e. Drive in - Reverse out].
- Specific requests from landowners or the Client.
- Mandatory site equipment.
- Placement and type of site toilets.
- AC/optic fibre cable furrowing/trenching.
- Site Specific agreements emanating from the On Site Start-Up Meeting.

18 OPERATIONAL PHASE

There are a number of operational issues that have been identified during the impact assessment process.

The rehabilitated wetland area would need to be managed in order to ensure that a variety of wetland plants thrive in the wetland. The crux of maintaining this biodiversity is coupled to the varying topographical features that has to be maintained in the wetland area. This starts off during the wetland reconstruction phase where it is necessary to create an undulating topographical base that would result in a variety of water depths when filled. The water flow in the wetland also has to be managed so that it will meander through the wetland and not be concentrated to flow in a single channel that would cause short-circuiting of as large section of the wetland.

The water level would also need operational manipulation during the operational phase so that the optimal water levels in time could be maintained. For this reason a water level control structure in the form of weir boards are to be installed at the outlet channel of the wetland area. From time to time in the future years it will also be necessary to manage the vegetative cover and topographical elements of the wetland system to ensure the maintenance and even enhancement of the wetland.

There will also be a section of re-instated fynbos and this would also require operational management, even possibly by means of establishing a fire regime. In addition there will also be plantings of indigenous large trees that occur naturally in the area. The intention of the Overstrand Municipality is to incorporate this rehabilitated area into the Fernkloof Nature

Reserve and enter into a stewardship agreement with Cape Nature. This agreement will also have certain environmental requirements attached to it.

With regard to the other operational issues of noise, parking and financial viability, the Overstrand Municipality has indicated that they will manage the approval of events and conditions pertaining to events organisers. The municipality will also be responsible for administering noise and traffic control of the public recreational area.

19 APPENDICES:

Appendix 1: SITE START-UP REPORT

Appendix 2: PENALTIES FOR NON-COMPLIANCE

Appendix 3: DECLARATION OF AGREEMENT

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APPENDIX 1: START-UP REPORT

TO BE INCLUDED AFTER START-UP MEETING

APPENDIX 2: PENALTIES FOR NON-COMPLIANCE

The contractors / sub-contractors must contact the ECO at any stage if unsure about any matter, or if a pollution incident occurs, or vegetation or animals are damaged.
ECO = Environmental Control Officer ESO= Environmental Site Officer

PHASE	Penalty for Non-compliance	
PRE-CONSTRUCTION PHASE	Bottom range	Top Range*
Construction area to be marked off before construction starts.		5000
The demarcated area must be maintained throughout the construction phase	500	1000
Site area for stock piling of building material must be demarcated	500	5000
Site area for storing of waste material must be demarcated	500	5000
Fencing off the construction site with mesh fencing of 1.8m, where necessary or other suitable material as agreed on by ECO	500	1000
Sitting of access road/s to be approved by ECO & demarcated with stakes before any construction starts (if applicable)		5000
Temporary route used for construction must be determined on site with ECO (if applicable)	1000	5000
Telecommunications & AC power routes must be determined with the ECO (if applicable)	1000	5000
Sensitive features that may be harmed must be clearly marked or demarcated.	500	2000
Vegetation that may not be removed must be clearly marked or demarcated.	500	5000
Contractor must make the Construction team and all sub-contractors aware of all environmental aspects that could lead to imposition of penalties	100	5000
Contractor to sign Declaration of Understanding (DOU) before construction starts		5000
Contractor to assure that all subcontractors be informed and signed DOU	1000	5000
Method statements must be provided on request by the ECO. No work may commence until the Method Statement is accepted by the ECO and Engineer	1000	5000
CONSTRUCTION PHASE		
Information		
A copy of the EMP & Environmental Authorisation with all the conditions of approval and the relevant Method Statements must be at site at all times.	200	5000
Construction crew behaviour		
Construction crews may not overnight on site.	200	5000
No amplified music allowed on site	100	200
Construction crew must stay within the demarcated construction area. (Applicable in sensitive sites)	50	500
Eating of meals only allowed in demarcated area	50	500
No pets permitted on site		100
Driving, Parking & Storing of machinery and vehicles are only allowed inside demarcated areas and existing roads	1000	5000
Machinery may only be used on the road and may not disturb the vegetation on the sides of the road except if cleared by ECO. Machinery used must be carefully considered to limit environmental damage	500	5000
No vegetation other than that agreed on may be damaged – i.e. no access to areas outside construction area.	500	2000
No individual may cause unnecessary damage to flora and fauna on, around or near the site	20	2000
No littering allowed (incl. cigarette butts)	50	500

Excavations		2000
No topsoil may be removed or altered outside the demarcated area and/or which was not specified.	200	5000
Commercial sources of sand, rock and gravel to be cleared with ECO	500	5000
All surplus material to be taken off-site and be disposed of at approved site		
Toilets		3000
Sufficient ablution facilities must be provided	100	1000
Toilets to be secured to prevent them from falling or blowing over.	100	1000
They must be serviced regularly, (according to the manufacturer's instructions) and kept clean.	50	1000
Everybody on site must make use of ablution facilities		
Fire Prevention	500	4000
All mandatory fire fighting equipment (as specified at start-up) must be on site at all times	500	2000
Fire fighting equipment to be in good working order and serviced.	1000	5000
No fires, including cooking fires, allowed on site		
Concrete & Cement Activities	500	5000
Wash-down site of Ready Mix delivery trucks must be pre-determined prior to commencement of the activity.	500	5000
Concrete may only be mixed within the boundaries of the bunding area or demarcated area and/or where was agreed on by the ECO.	200	5000
All excess cement & concrete mixes to be contained on construction site and removed from site when necessary or requested by the ECO	500	5000
Any cement / concrete spillage to be cleaned up immediately.	500	1000
Mixing and storage areas must be appropriately located in demarcated area or as agreed upon at the on site Start-Up Meeting		
Dust pollution control	100	1000
Ensure that loose building material is covered to prevent dust pollution		
Water run-off	500	5000
Contamination of water bodies, rivers, dams or wetlands must be prevented at all cost	500	5000
Rainwater from construction & building site/s must be channelled, contained & allowed to dry out, so as not to transport any pollutants into the surrounding area. Temporary trenches, straw stabilising, brush cutting can be used		
Waste control	500	2000
Sufficient refuse bins must be placed on site	100	1000
Refuse bins must be cleaned on a regular basis	500	3000
General litter / building refuse must be cleaned up on a regular basis from the site	500	5000
Cement-contaminated water; paint; oil; cement slurries etc must be stored in watertight containers or as agreed with ECO	100	1000
Store all refuse & waste material in wind & animal proof containers	500	5000
Waste must be disposed of at an official waste deposit site on a regular basis.	500	5000
The absence of or inadequate drip trays or bunding facilities	200	5000
Failure to address oil/fuel leaks from on-site machinery		
Herbicides	200	2000
No herbicides or pesticides whatsoever may be used.		
Construction road	500	5000
Road must be upgraded to prevent degradation and erosion of the road and surrounds.		
Power and Telecommunications supply	500	5000
Demarcate power supply route	500	5000
No vehicles to drive through vegetation unless authorised by ECO	500	5000
Storage of equipment may only take place at an area demarcated by the ECO.	N/A	
Working must be done in phases to prevent trampling of vegetation		

Use of generators and fuel powered equipment		
A watertight cover must be place under the power generator equipment to prevent accidental spillage of fuel & oil seeping into the soil.	500	5000
Drip tray must be able to take 120% of fuel on site	500	5000
All waste material generated from the use of this equipment must be contained and removed from the site	500	5000
Mobile fuel powered equipment must be well maintained and must not have any fuel or oil leaks.	200	5000
Soil Stabilisation		
Ensure that soil material for filling and stabilisation comes from a source that does not contain seeds alien to the area. The source must be cleared with the ECO.	100	2000
Rehabilitation		
Remove rocks and stones and stock pile in area recommended by ECO	500	5000
Remove all plants that can be used for rehabilitation and store on- or off-site in appropriate manner as agreed with ECO	200	5000
Removal of all old concrete and alien materials from site	500	5000
Site must be cleared of all waste and building material	500	5000

*(Large scale / repeated offence)

APPENDIX 3: DECLARATION OF AGREEMENT

DECLARATION OF UNDERSTANDING

I, _____

Representing _____

Declare that the conditions of the DEA&DP Environmental Authorisation were brought under my attention and that I have read and understood the contents of the Environmental Management Plan (which includes all documents as per DEA&DP Environmental Authorisation).

SITE: Piet se Bos and Grotto Beach area

DEA&DP Environmental Authorisation Ref: 16/3/1/1/E2/14/2026/13

I also declare that I understand my responsibilities in terms of enforcing and implementing the Environmental Specifications as set out in the various documents for the aforementioned site.

I also undertake to inform all persons under my supervision of such specifications and contents of the documents.

Signed: _____

Place: _____

Date: _____

Witness 1: _____

Witness 2: _____

APPENDIX 4: INFORMATION ON METHOD STATEMENTS

Method Statements are to be completed by the person undertaking the work (i.e. the Contractor). The Method Statement will enable the potential negative environmental impacts associated with the proposed activity to be assessed.

The Method Statement can only be implemented once approved by the ECO.

The Contractor (and, where relevant, any sub-contractors) must also sign the Method Statement, thereby indicating that the works will be carried out according to the methodology contained in the approved Method Statement.

The ECO will use the Method Statement to audit compliance by the Contractor with the requirements of the approved Method Statement.

Changes to the way the works are to be carried out must be reflected by amendments to the original approved Method Statement; amendments require the signature of the ECO denoting that the changed methodology or works are necessary for the successful completion of the works, and are environmentally acceptable. The Contractor will also be required to sign the amended Method Statement thereby committing him/herself to the amended Method Statement.

This Method Statement MUST contain sufficient information and detail to enable the ECO to apply their minds to the potential impacts of the works on the environment. The Contractor will also need to thoroughly understand what is required of him/her in order to undertake the works.

THE TIME TAKEN TO PROVIDE A THOROUGH, DETAILED METHOD STATEMENT IS TIME WELL SPENT. INSUFFICIENT DETAIL WILL RESULT IN DELAYS TO THE WORKS WHILE THE METHOD STATEMENT IS REWRITTEN TO THE ER'S AND ESO'S SATISFACTION. The page overleaf provides a *pro forma* method statement sheet, which needs to be completed for each activity requiring a method statement in terms of the EMP.

APPENDIX 5: EXAMPLE OF METHOD STATEMENT

METHOD STATEMENT

CONTRACT:..... **DATE:**.....

PROPOSED ACTIVITY (give title of method statement and reference number):

WHAT WORK IS TO BE UNDERTAKEN (give a brief description of the works):

WHERE ARE THE WORKS TO BE UNDERTAKEN (where possible, provide an annotated plan and a full description of the extent of the works):

START AND END DATE OF THE WORKS FOR WHICH THE METHOD STATEMENT IS REQUIRED:

Start Date:

End Date:

HOW ARE THE WORKS TO BE UNDERTAKEN (provide as much detail as possible, including annotated maps and plans where possible):
Note: please attach extra pages if more space is required

DECLARATIONS

1) ENVIRONMENTAL CONSULTANT AND/OR ENVIRONMENTAL CONTROL OFFICER
The work described in this Method Statement, if carried out according to the methodology described, is satisfactorily mitigated to prevent avoidable environmental harm:

_____ _____
(Signed) (Print name)

_____ _____
(Signed) (Print name)

Dated: _____

2) PERSON UNDERTAKING THE WORKS
I understand the contents of this Method Statement and the scope of the works required of me. I further understand that this Method Statement may be amended on application to other signatories and that the ECO will audit my compliance with the contents of this Method Statement

_____ _____
(Signed) (Print name)

Dated: _____

3) THE CLIENT
The works described in this Method Statement are approved.

_____ _____ _____
(Signed) (Print name) (Designation)

Dated: _____

4) APPROVING AUTHORITY
The works described in this Method Statement are approved.

_____ _____ _____
(Signed) (Print name) (Designation)

Dated: _____

APPENDIX 6: CONTACTOR: ENVIRONMENTAL WEEKLY CHECKLIST

CONTACTOR/S REPRESENTATIVE: ENVIRONMENTAL WEEKLY CHECKLIST

SITE: _____

PHASE OF WORK AND % OF COMPLETION: _____

ENVIRONMENTAL ASPECT	YES/ NO (✓ or X)	COMMENTS
• How many workers are on site		
• All new personnel on site are aware of the contents of the EMP and have been through the environmental awareness course.		
• Contractor's camp is neat and tidy and the labourers' facilities are of an acceptable standard.		
• Sufficient and appropriate fire fighting equipment is visible and readily available.		
• Waste control and removal system is being maintained.		
• Refuse bins in place and maintained		
• Toilets are in place and clean		
• Demarcation and other fences are being maintained.		
• What machinery are on site		
• Drip trays are being utilised were there is a risk of incidental spillage		
• Bunds/ drip trays are being emptied on a regular basis (especially after rain).		
• No leakages (oil & fuel) are visible from construction vehicles		
• No go areas, remaining natural features and trees have not been damaged.		
• Dust control measures (if necessary) are in place and are effectively controlling dust.		
• Noise Control measures (if necessary) is in place and is working effectively.		
• Erosion control measures (if necessary) are in place and are effective in controlling erosion. (Access road, site areas etc.)		
• Stockpiles are located within the boundary of the site, do not exceed 2 m in height and are protected from erosion.		

Completed by:..... Sign:..... Date:.....

To be submitted at the end of each week to the Environmental Site Officer (ESO)

Received by:

Environmental Site Officer: ..... Sign:..... Date:.....

APPENDIX 7: BASIC RULES OF CONDUCT

BASIC RULES OF CONDUCT

The following list represents the basic Do's and Don'ts towards environmental awareness, which all participants in this project must consider whilst carrying out their tasks. These are not exhaustive and serve as a quick reference aid.
NOTE: **ALL new site personnel must** attend an environmental awareness presentation. Please inform your foreman or manager if you have not attended such a presentation or contact the ESO.

DO:

- USE THE TOILET FACILITIES PROVIDED – REPORT DIRTY OR FULL FACILITIES
- CLEAR YOUR WORK AREAS OF LITTER AND BUILDING RUBBISH AT THE END OF EACH DAY – use the waste bins provided and ensure that litter will not blow away.
- REPORT ALL FUEL OR OIL SPILLS IMMEDIATELY & STOP THE SPILL CONTINUING.
- DISPOSE OF CIGARETTES AND MATCHES CAREFULLY. (Littering is an offence.)
- CONFINE WORK AND STORAGE OF EQUIPMENT TO WITHIN THE IMMEDIATE WORK AREA.
- USE ALL SAFETY EQUIPMENT AND COMPLY WITH ALL SAFETY PROCEDURES.
- PREVENT CONTAMINATION OR POLLUTION OF STREAMS AND WATER CHANNELS.
- ENSURE A WORKING FIRE EXTINGUISHER IS IMMEDIATELY AT HAND IF ANY "HOT WORK" IS UNDERTAKEN e.g. welding, grinding, gas cutting etc.
- REPORT ANY INJURY OF AN ANIMAL.
- DRIVE ON DESIGNATED ROUTES ONLY.
- PREVENT EXCESSIVE DUST AND NOISE.

DO NOT:

- REMOVE OR DAMAGE VEGETATION WITHOUT DIRECT INSTRUCTION.
- MAKE ANY FIRES.
- INJURE, TRAP, FEED OR HARM ANY ANIMALS – this includes birds, frogs, snakes, lizards etc.
- ENTER ANY FENCED OFF OR MARKED AREA.
- ALLOW CEMENT OR CEMENT BAGS TO BLOW AROUND.
- SPEED OR DRIVE RECKLESSLY
- ALLOW WASTE, LITTER, OILS OR FOREIGN MATERIALS INTO THE STREAM
- SWIM IN THE DAM.
- LITTER OR LEAVE FOOD LAYING-AROUND

Notes:
1. Must any animals such as tortoises, chameleons or snakes be encountered then do not harm them. The ESSO or RE must be contacted to remove these safely. The harming of any animal will result in disciplinary action.
2. Construction and heavy machine operators must be particularly sensitive to staying within access routes and prevention of unnecessary damage. Dust and noise is also of particular concern. Ensure that vehicles and machinery do not leak fuel or oils. Refuelling or maintenance must be done within the maintenance camp area only.
3. Alien plant clearing and control work teams must be closely supervised.

BASIESE GEDRAGSKODES

Die volgende lys vertenwoordige die Moets en Moenies vir omgewingsbewustheid wat alle deelnemers aan hierdie projek in ag moet neem tydens die uitvoer van hul take. Hierdie lys is nie volledig nie en dien slegs as 'n vinnige verwysing.
NOTA: **ALLE nuwe terreinpersoneel moet** 'n aanbieding ten opsigte van omgewingsbewustheid bywoon. Indien u nog nie so 'n aanbieding bygewoon het nie, lig asseblief u voorman of bestuurder in of kontak die Omgewings Terreinbeampte.

MOETS:

- GEBRUIK DIE BESKIKBARE TOILET-GERIEWE – RAPPORTEER VUIL OF VOL GERIEWE.
- MAAK U WERKPLEK SKOON VAN ROMMEL OF BOUROMMEL AAN DIE EINDE VAN ELKE DAG – gebruik beskikbare vullisdromme en verseker dat rommel nie rondwaai nie.
- RAPPORTEER ALLE BRANDSTOF- EN OLIE STORTINGS ONMIDDELLIK – STOP VERDERE STORTING.
- WEES VERSIGTIG MET DIE WEGDOEN VAN SIGARETTE EN VUURHOUTJIES. (rommelstrooi is 'n oortreding.)
- BEPERK WERKAKTIWITEITE EN DIE STOOR VAN TOERUSTING TOT DIE ONMIDDELLIKE WERKAREA.
- GEBRUIK VEILIGHEIDSTOERUSTING EN VOLDOEN AAN ALLE VEILIGHEIDS-MAATREËLS.
- VOORKOM BESOEDELING VAN STROME EN WATERBANE
- VERSEKER DAT 'N BRANDBLUSSER IN WERKENDE TOESTAND BYDERHAND IS WANNEER "WARM" WERK VERRIG WORD bv. Sweis, wegslyp, gasny, ens.
- RAPPORTEER BESEERDE DIERE.
- RY SLEGS OP AANGEWESE ROETES.
- VOORKOM OORMATIGE STOF EN GERAAS.

MOENIE:

- PLANTEGROEI VERWYDER OF BESKADIG SONDER DIREKTE INSTRUKSIE NIE.
- ENIGE VURE MAAK NIE.
- ENIGE DIERE DOOD, BESEER, VANG OF VOER NIE, insluitende voëls, paddas, slange, akkedisse, ens.
- ENIGE OMHEINDE OF AFGESPERDE AREAS BINNETREE NIE.
- SEMENT OF SEMENTSAKKE LAAT RONDWAAI NIE.
- VINNIG OF ROEKELOOS BESTUUR NIE.
- ENIGE ROMMEL, AFVAL, OLIE OR ENIGE VREEMDE MATERIAAL IN STROME LAAT BELAND NIE.
- IN DIE DAM SWEM NIE.
- ROMMELSTROOI OF KOS LAAT RONDLÊ NIE.

Notas:

1. Indien enige diere soos skilpaaie, verkleurmannetjies of slange teëgekom word, moet hulle nie beseer of dood nie. Kontak die OTB of RI om hulle veilig te verwyder. Die besering van diere sal lei tot dissiplinêre optrede.
2. Operateurs van konstruksie- en swaar masjiene moet veral versigtig wees om binne toegangsroetes te bly en om enige onnodige skade te voorkom. Verseker dat voertuie en masjiene nie olie of brandstof lek nie. Brandstofaanvulling en voertuigonderhoud mag slegs binne die onderhoudsarea gedoen word.
3. Streng toesig moet gehou word oor indringerplantbeheerspanne.

EZIPPHAMBILI EKUNYANZELEKILEYO UKUBA ZENZIWE

Zonke ezi zinto zilandelayo zizinto ekufuneka zenziwe nekufuneka zingenziwanga. Wonke umntu ofikayo kufuncka afundiswe ngemigaqo kupala. Needa yazisa iforman yakho ikuba awukhange uye kufundiswa.

IZINTO EMAZENZIWE

- SEBENZISA IZINDLU ZANGASESE, YAZISA XA KUKHO UMONAKALO.
- ZAMA UKUCOCA APHO UBUSEBENZA KHONA.
- SEBENZISA IMIGQOMO YENKUKUMA UNGAYEKI IPHAPHTIEKE.
- YAZISA XA UBONA IOIL ECHITHSKALAYO OKANYE IPETROL.
- CIMA LOZOLI CIGARETTE XA UGQIBIBILE UKUTSHAYA
- ZONKE IZIXHOBO USEBENZA ZIBUYISELE APHO ZIHLAKA KHONA XA UCGIBILE APHO ZIHLALA KHONA XA UGQIBILE UKUZISEBENZISA:
- ZISEBENZISE IZIKHUSELIXA UZINKIWE.
- SUKUGALELA IZINTO EMLANJENI.
- MASIBEKHO ISICIMA MLILO XAUSEBENZA NGOMLILO.
- YAZISA MSINYANE XA UBONE ISILWANYANA EZONZAKELEYO.
- XAUQHUBA ISITHUTHI HAMBA ENDLELENI QHA UNGAFATHULINJE.
- NAPHINA ZAMAUNGENZI THULI OKANYE INGXOLO XA USEBENZA.

EMAZINGENZIWA

- SUKUSUSA NESIPHINA ISITYALO UNGAKHANGE UXELELWE
- SUKWENZA MLILO NOKUBA SEKUBANDA
- AMAGQARA UKUBULALA IZILWANYANA NOKUZIFIDA AKUVUMELEKANGA
- SUKUNGENA XA KUVALIWE NGAPHANDLE KWE MVUME
- INGXOWA ZESAMENTE MAZINCEDWE ZINGALAHLWA NJE
- SUKUQHUBA NGESANTYA ESIPHAKAMILEYO
- SUKUGALELE NAYIPHI INTO PHAYA EMLANJENI
- SUKUQUBHA EDAMENI Q OQOSHA YONK INKUKUMA

APPENDIX 8: ECO/ESO WEEKLY REPORT/CHECKLIST

ECO/ESO WEEKLY REPORT/CHECKLIST

PROJECT: **LOCATION:**.....

PROPONENT: **PHASE:**.....

WEEK NO. **DATE:**

ENVIRONMENTAL ASPECT	Y/N	COMMENTS
Is the site free of day-to-day litter? And are clean within acceptable tolerance levels?		
Contractor's camp is organised and is he maintaining good housekeeping standards on site?		
Labourer's quarters are adequate with acceptable ablution facilities?		
Are there sufficient refuse bins on site?		
Boundary fences remain in place and are being maintained?		
No-go areas, remaining natural features and trees have not been damaged?		
Waste control and removal systems are being maintained?		
Wastewater control system is being maintained?		
On-site fire fighting equipment rechecked and is in good working order?		
Heavy earth-moving equipment and vehicles operating within site boundaries?		
Bunds and drip trays are being used and emptied on a regular basis?		
Construction vehicles are mechanically sound with no visible oil leaks?		
Are on-site refuelling areas in compliance with the site EMP specs?		
Dust control measures (when necessary) are in place and minimise dust pollution effectively?		
Erosion control measures have been installed and are working effectively?		

ESO WEEKLY CHECKLIST

ENVIRONMENTAL ASPECT	Y/N	COMMENTS
Stockpiles of topsoil or rocks are being located within the site boundary and do not exceed maximum heights?		
Has there been unauthorized removal or alteration of soil or rock not specified in the EMP?		
If applicable, if rivers or streams flow through or near the site, have pollution measures been installed?		
State approximate no of workers currently on site		
Have any wildlife species been found on the site. If so what measures were taken for relocation?		
If applicable is the concrete batching area well maintained and in compliance with the EMP? And are spillages removed on a regular basis?		
Are empty cement bags contained and removed daily?		
Has there been any increase of heavy earthmoving or construction machinery brought onto the site not stated on original EMS forms?		
Has it been necessary to impose spot fines or penalties on the site? If so for what reasons?		
Completed by: Date:		Title: Signature

ESO OBSERVATION SHEET

ITEM	ACTIONS

APPENDIX 9: DEA&DP ENVIRONMENTAL AUTHORISATION.

APPENDIX 10: RECOMMENDATIONS AS PER EIA REPORTS

APPENDIX 11: CLIENT PROJECT STANDARD ENVIRONMENTAL SPECIFICATIONS

APPENDIX 12: DRAWING/S

To be included

APPENDIX 13: ANY OTHER RELEVANT DOCUMENTS

APPENDIX J

IMPACT ASSESSMENT METHODOLOGY USED

The potential impacts of the proposed activity on the various components of the receiving environment was evaluated in terms of nature, duration (time scale), extent (spatial scale), magnitude and significance as outlined in Table 1. The impacts were furthermore assessed in terms of the probability of the impact occurring, the degree in which the impacts may be reversed, the degree in which the impact may cause irreplaceable loss of resources and the degree in which the impact may be mitigated. These impacts could either be positive or negative.

The magnitude of an impact is a judgement value that rests with the individual assessor while the determination of significance rests on a combination of the criteria for duration, extent and magnitude. Significance thus is also a judgement value made by the individual assessor.

In addition to determining the individual impacts against the various criteria, the element of mitigation, where relevant, was also brought into the assessment. In such instances the impact was assessed with a statement on the mitigation measure that should be applied.

Table 1: Criteria used for evaluating impacts

Criteria	Category
Duration	**Long term:** >15 years **Medium term:** 5 – 15 years **Short term:** 1 – 5 years **Temporary:** < 1 year (not including construction)
Extent	**Large:** Beyond 5 km of the site (regional) **Medium:** Within 5 km of the site (local) **Small:** On site or within 1 km of the site (limited)
Magnitude	**High:** Natural and/or social functions/processes are severely altered **Medium:** Natural and/or social functions/processes are notably altered **Low:** Natural and/or social functions/processes are slightly altered **Very low:** Natural and/or social functions/processes are negligibly altered
Significance (The impact on each component is determined by a combination of the above criteria and defined as follows)	**Very high:** Impacts have a high magnitude and will be experienced regionally for at least the life span of the development, or will be irreversible **High:** Impacts will be experienced in the local and surrounding areas for the life span of the development and may result in long term changes **Medium:** Impacts will be localised and short to long term **Low:** Impacts will be site specific and temporary **No change:** A potential concern which was found to have no impact when evaluated
Probability	**Certain:** The impact will occur **Likely:** The impact is likely to manifest wholly or partially **Unlikely:** It is unlikely that the impact will occur
Degree of Reversal	**High:** The impact may be reversed in such a way that the *status quo* prior to development is attained **Medium:** The impact may be reversed to a state where certain processed remain altered while others are restored **Low:** The impacts cannot be reversed
Degree in which irreplaceable loss of resources may occur	**High:** Impact will result in loss of resource that is not replaceable and not replicated elsewhere **Medium:** Impact will result in loss of resource that is not replaceable but is replicated elsewhere **Low:** Impact will not result in any loss of resources or restricted to a very minor loss
Degree to which impact can be mitigated	**High:** The impact may be mitigated in such a way that the *status quo* prior to development is attained **Medium:** The impact may be mitigated to a state where certain processed remain altered while others are restored **Low:** The impacts cannot be mitigated or only very minor mitigation can be achieved.

GROTTO/ PIET SE BOS PUBLIC MEETING HELD ON 18 JANUARY 2014 AUDITORIUM HERMANUS OVERSTRAND MUNICIPALITY

The meeting held on 18 January 2014 and attended by 90 people as per the attendance list was chaired by Mr. W Zybrands.

Please note that the following minutes as presented is a summarised version of the event and a copy of the verbatim minutes is attached as reference.

The meeting can be divided into 4 issues discussed at the meeting:

1. The legality of the public participation process followed during the Basic Assessment Review Process (BAR).

   The Grotto Action Group contended that the public participation process was flawed. The group obtained legal advice on the matter and the opinion of its legal representative is that the process was flawed. One of the main issues was the fact that e-mails were not accepted by the Environmental Practioner. During the discussion the Environmental Practioner indicated that he will accept e-mails provided it has an attachment containing all legally prescribed reference information. It was suggested by the Chairman that the Municipality obtain a legal opnion in response to GAG's legal opinion.

2. The proposed Amphitheatre:

   The vast majority of the audience made it clear that an amphitheatre in any format was not acceptable. .The main concerns revolved around issues such as:

   -noise pollution;
   -traffic congestion;
   -inadequate parking;
   -late night events, and
   -alcohol abuse.

3. Wetland rehabilitation:

   No objection was raised against the proposed rehabilitation and related matters such as the extension and partial relocation of the boardwalk, the protection of the caves ("grottos"), the planting of more milkwood trees, the re-introduction of fynbos in certain areas and the rehabilitation of the discharge point of the canal on Grotto beach . It was however suggested that large trees be planted and/or thatch style gazebos be erected in the picnic area in order to provide shade for picnic sites and that the braai facilities be upgraded and moved to the area outside the proposed boardwalk. Plant material must be endemic to the specific area in question and done in collaboration with the Hermanus Botanical Society.

4. Restaurant:

   The majority of the attendees felt that the exisitng 'Dutchies" must be extended and upgraded to fullfil the function of a restaurant and that there was no need for a restaurant on the "Old Nautilus" site. Concerns were raised regarding the "Nautilus" site such as climate change, the 1:100 floodline and the setback line. The proposed building was excessive in bulk and height. It was suggested that the site be rehabilitated to a milkwood forest. It was also suggested that the possibility of making the road from Tenth Avenue to Dutchies a two way road be investigated.