Appendix F: Ground-truthing Reports
OYSTER BAY WIND FARM

GROUND-TRUTHING REPORT

DEA Reference: 12/12/20/1585

Prepared for:

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EOH Coastal and Environmental Services

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1. INTRODUCTION

Renewable Energy Systems South Africa (Pty) Ltd. (RES) received an Environmental Authorisation (EA) for their Oyster Bay Wind Energy Facility (WEF) near the town of Oyster Bay in the Eastern Cape (Figure 1.1) on the 8th May 2012. Condition 20 on page 9 of the EA (DEA Ref: 12/12/20/1585) states that “The holder of the authorisation must appoint qualified vegetation, fauna, flora, heritage and avifaunal specialists to ground-truth every infrastructure footprint and their recommendation must inform the final layout of the facility and the EMP to be submitted to the Department for approval.” RES appointed EOH Coastal & Environmental Services (EOH CES) to conduct & complete ground-truthing for the Oyster Bay Wind Farm.

![Figure 1.1. Proposed layout of the Oyster Bay Wind Farm and overhead powerline.](image)

1.1 Project description

1.1.1 Windfarm

The Oyster Bay WEF is located on various farm portions that are situated north of the coastal holiday village of Oyster Bay in the Eastern Cape Province (Table 1.1). These are the same properties as described in the EA. No additional properties have been included in the layout as shown in Figure 1.1.

<table>
<thead>
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<th>Farm number</th>
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<tr>
<td>RE 5/732 (Klipperdrift); RE 715</td>
<td>O.J. Strydom</td>
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<tr>
<td>10/681; 12/681; RE 1/715</td>
<td>Kobus du Plessis</td>
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<tr>
<td>RE 4/715</td>
<td>Willie du Plessis</td>
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1.1.2 Powerline

The project will also require a 5km long 132 kV transmission line with 25 monopole towers to connect the Oyster Bay Wind Farm to the national grid at the Kouga Substation north of the town of Oyster Bay.

1.2 Ground-truthing

A ground-truthing site visit was conducted to determine the relevance of the local environmental conditions with respect to the final development layout of the Oyster Bay Wind Farm. The site visit took place between Monday the 13th July 2015 and Friday the 17th July 2015. Ground-truthing was limited to basic Phase 1 surface surveys of the final turbine footprints and associated linear development alignments.

The Eskom overhead power line connecting the Oyster Bay Windfarm to the Melkhout substation north of Oyster Bay was not included in the ground-truthing exercise.

1.3 Project team

The following specialists were involved in ground-truthing the Oyster Bay WEF and their final comments are included in this report. The final Environmental Management Programme (EMP) will also include these comments and will be submitted to DEA in due course:

- Dr. Alan Carter (EOH CES) – Report Reviewer
- Roy de Kock (EOH CES) – Project Manager, Botanical Review
- Mark Marshall (Sandula Conservation) – Faunal & Floral specialist
- Chris van Rooyen (Chris van Rooyen Consulting) – Avifaunal specialist
- Dr. Peter Nillsen - Archaeological & Heritage specialist
- Dr. Brian Colloty (Scherman Colloty & Associates) – Aquatic specialist

1.4 Team experience

EOH CES was established in 1990 as a specialist environmental consulting company.

EOH CES has considerable experience in terrestrial, marine and freshwater ecology, the Social Impact Assessment (SIA) process, State of Environment Reporting (SOER), Integrated Waste Management Plans (IWMP), Environmental Management Plans (EMP), Spatial Development Frameworks (SDF), public participation, as well as the management and co-ordination of all aspects of the Environmental Impact Assessment (EIA) and Strategic Environmental Assessment (SEA) processes. EOH CES has been active in all of the above fields, and in so doing have made a positive contribution towards environmental management and sustainable development in the Eastern Cape, South Africa and many other African countries. We believe that a balance between development and environmental protection can be achieved by skilful, considerate and careful planning.

Some examples of projects that CES has been involved in that show relevant expertise to this proposal include:

- Kouga Wind Farm micro-siting – Oyster Bay, Eastern Cape Province (2012)
- Waainek Wind Farm micro-siting, Grahamstown, Eastern Cape Province (2013)
- Grassridge Wind Farm ground-truthing – Addo, Eastern Cape Province (2013)
- Chaba Wind Farm ground-truthing – Komga, Eastern Cape Province (2014)
- Paleisheuvel Solar Farm ground-truthing – Namaqualand, Northern Cape Province (2014)
- Tom Burke Solar Farm ground-truthing – Northwest Province (2014)
- Nojoli Wind Farm ground-truthing – Cookhouse, Eastern Cape Province (2015)
- Gibson Bay Wind Farm ground-truthing – Oyster Bay, Eastern Cape Province (2015)
1.4.1 Alan Carter

Dr Alan Carter, Director of the East London Office, has extensive training and experience in both financial accounting and environmental science disciplines with international accounting firms in South Africa and the USA. He is a member of the American Institute of Certified Public Accountants and holds a PhD in Plant Sciences. He is also a certified ISO14001 EMS auditor with the American National Standards Institute. Alan is a registered environmental practitioner registered with the Environmental Assessment Practitioners of South Africa (EAPSA) as well as with SACNASP.

1.4.2 Roy de Kock

Mr Roy de Kock, Pri. Nat. Sci. Roy is a Senior Consultant holding a BSc Honours in Geology and an MSc in Botany from the Nelson Mandela Metropolitan University in Port Elizabeth. His MSc thesis focused on Rehabilitation Ecology using an open-cast mine as a case study. He has been working for CES since 2010, and is based at the East London branch where he focuses on Ecological and Agricultural Assessments, Geological and Geotechnical analysis, Environmental Management Plans, mining applications and various environmental impact studies. Roy has worked on numerous projects in South Africa, Mozambique, Zambia and Malawi. Roy is registered as a scientist with SACNASP.

1.4.3 Mark Marshall

Mark has a National Certificate in Nature Conservation through UNISA. He was the curator of the Port Elizabeth Snake Park; worked for the Western District Council as a law enforcement officer then the Nelson Mandela Metro in environmental management. Mark has been consulting as a private environmental consultant for eight years specialising in fauna. He was the chairperson for the P.E. Herpetological Club for 12 years; Board of Trustees for Bayworld; Board of Trustees for DAMREC where he was chairman a year. Recently Mark has produced faunal specialist reports for numerous wind farms; including Kouga Wind Farm; various mining proposals in Limpopo and Port Elizabeth; Thyspunt new proposed roads and the Motherwell Extension.

1.4.4 Peter Nilsen

Peter has a PhD in archaeology from the University of Cape Town (2000). He is a Professional member - in good standing - of the Association of South African Professional Archaeologists (ASAPA), including the Cultural Resource Management section of the same association (ASAPA professional member # 097). Peter is also an accredited Principal Investigator for archaeozoology (specialist analysis), coastal & shell midden archaeology and Stone Age archaeology; Field Director for Colonial Period; Field Supervisor for Iron Age and Rock Art. He has completed around 250 investigations relating to Archaeological Impact Assessments, Notifications of Intent to Develop, impact statements, archaeological excavations in mitigation, total station mapping and archaeological management plan. These have included submissions to SAHRA, HWC and ECPHRA. Peter has 25 years’ experience in archaeological research and work in the field of cultural resource management.
1.4.5 Chris van Rooyen

Chris van Rooyen has 16 years’ experience in the management of avifaunal interactions with industrial infrastructure. He was head of the Eskom-Endangered Wildlife Trust Strategic Partnership from 1996 to 2007, which has received international acclaim as a model of cooperative management between industry and natural resource conservation. He is an acknowledged global expert in this field and has worked in South Africa, Namibia, Botswana, Lesotho, New Zealand, Texas, New Mexico and Florida. Chris also has extensive project management experience and has received several management awards for his work in the Eskom-EWT Strategic Partnership. He is the author of 15 academic papers (some with co-authors), co-author of two book chapters and several research reports. To date he has been involved as ornithological consultant in numerous power line construction projects, wind generation projects and risk assessments on existing power lines and power stations. Chris also works outside the electricity industry and has completed a wide range of bird impact assessment studies associated with various residential and industrial developments. Chris left the services of the Endangered Wildlife Trust in November 2007 and has since operated as a free-lance ornithological consultant.

1.4.6 Brian Colloty

Brian is a registered Ecologist & Environmental Assessment Practitioner with both SACNASP & EAPSA (Pr. Sci. Nat. 400268/07). He specialises in ecology and conservation importance ratings of inland habitats, wetlands, rivers & estuaries with 16 years’ experience in the field. Brian main focus is in environmental sensitivity and conservation assessments of aquatic and terrestrial systems inclusive of Index of Habitat Integrity (IHI), WET Tools, Riparian Vegetation Response Assessment Index (VEGRAI) as well as wetland delineations throughout Africa. He also has experience in biodiversity and ecological assessments with regards to sensitive terrestrial fauna and flora, within the marine, coastal and inland environments.

1.5 Findings

The final layout (as indicated in Appendix A) was found to be in keeping with the requirements of the Environmental Authorisation and was approved by all specialists.

The following chapters summarise each specialist finding.

Note that the old turbine numbering system is used in this report (Refer to Table 1.1 of the EMPPr).
2. ARCHAEOLOGICAL ASSESSMENT

Provided that the below recommendations are considered and/or implemented there are no objections to the current placement and extents of wind turbine, substation, lay-down and site camp areas for the Oyster Bay Wind Farm.

Recommended mitigation measures:

- **WT 25:** It is recommended that test excavations be conducted to ascertain the heritage sensitivity of this locality prior to the construction phase. Test excavations with a mechanical excavator must be undertaken in the presence of a suitably qualified professional archaeologist. Further, it is recommended that a precautionary approach be adopted and that archaeological monitoring should be conducted during vegetation clearing and earthmoving activities associated with the development. The rocky outcrop should be avoided and a buffer zone as indicated by the yellow polygon in Figure 5 should be implemented by means of temporary fencing during the construction phase of development.

- **Between WT 14 and WT 15:** It may be prudent, as a precautionary approach, to conduct archaeological monitoring during the construction phase of wind turbines, roads and trenching for electric cables in the vicinity of WT 14 and WT 15.

- **WT 24:** Due to the presence of Stone Age quarry sites at these localities, it is recommended that these WT24 be moved to avoid the yellow polygon shown in Figure 5. If this is not possible, then a more detailed examination of the stone artefact scatter should be undertaken. The latter will involve the mapping, sampling and analyses of artefacts under an excavation permit from the relevant heritage authorities. The yellow polygon at WT 24 should be demarcated as a no-gone zone. It is recommended that this site be conserved in perpetuity as an example of the range of MSA quarry sites that are present in the area.

- While the disused stone dwelling **NW of WT 67** is considered to be of low heritage value, it nevertheless is protected by legislation, and therefore, it is recommended that a temporary fence encloses the structure so that it is not damaged or disturbed during the construction of WT 67 and associated infrastructure.

- **WT 43:** This Stone Age quarry site should be fenced or demarcated so that it is not damaged or disturbed during the construction phase of development. It is further recommended that test excavations with a mechanical excavator be conducted to inspect sub-surface sediments to determine whether or not this quarry site extends toward the current placement of WT 43. Test excavations must be undertaken in the presence of a suitably qualified professional archaeologist. It is also recommended that a precautionary approach be adopted and that archaeological monitoring should be conducted during vegetation clearing and earthmoving activities associated with the development.

- More generally, it is recommended that as a precautionary approach archaeological monitoring should be conducted by a professional archaeologist during the construction phase of development as is currently taking place at the Gibson Bay Wind Farm. This approach could significantly aid in avoiding delays and additional expenses during the construction phase of development.

- Note that micro-siting will be required for the proposed alignments of access and internal roads once these have been finalised and pegged out on the ground.

Required mitigation measures:

- In the event that vegetation clearing and earthmoving activities expose archaeological materials, such activities must stop and Eastern Cape Provincial Heritage Resources Authority (EC PHRA) or the South African Heritage Resources Agency (SAHRA) and/or a professional archaeologist must be notified immediately. Heritage related resources must be dealt with in accordance with the National Heritage Resources Act (No. 25 of 1999) and at the expense of the developer.

- In the event of exposing human remains older than 60 years during construction, the matter will fall into the domain of the South African Heritage Resources Agency (Mrs Colette Scheermeyer) and will require a professional archaeologist to undertake mitigation if needed.
3. FLORAL ASSESSMENT

The Final Layout Plan is approved in terms of the Flora on the site.

3.1 Sites on agricultural land

The following sites are situated on agricultural and/or grazing land and therefore there are no issues regarding construction:

- Turbines 7; 8; 11; 12; 13; 14; 15; 21; 22; 27; 28; 33; 34; 35; 37; 38; 48; 52; 54; 55; 66; 67
- Substation 1;

3.2 Sites in alien vegetation

The following sites are situated in a black wattle/Port Jackson woodlot (alien invasive vegetation) with no plants of special concern observed:

- Turbine 10; 18; 19; 20; 26; 65

3.3 Sites in sensitive areas

The following sites are situated in sensitive areas (rocky outcrops, natural vegetation, fynbos, etc.) and will require Search & Rescue to be conducted prior to commencement of construction activities:

- Turbine 16; 23; 24; 30; 40; 41; 42; 43; 49; 50; 51 & substation site; 62; 63 & laydown area; 64; 75; 76;

The following plant species of concern were identified onsite and will require relocation through a Search & Rescue exercise:

- Tritonia sp.
- Brunsvigia sp.
- Gazania sp.
- Hypoxis sp.
- Crassula sp.
- Boophane sp.
- Family Mesembryanthiiae
- Lampranthus spp.
- Asparagus sp
- Drosera sp

With reference to Drosera sp. (carnivorous plant) it must be noted that this plant is seasonal and only occurs after heavy rains and in damp areas. Approximately one hundred plants were found during the inspection. If a floral search and relocation of these plants is to occur, one must take note of the correct time of year to relocate these plants.

3.4 Sites requiring buffers

The following sites will require the placement of a buffer area:

- Turbine 53 (The site lies within grazing land; the vegetation is dominated by Helichrysum spp. which are species of special concern on the farm; there are no issues with this site. It is recommended that a buffer of 30 meters be placed around the rocky outcrop South West of the proposed turbine site.)
4. FAUNAL ASSESSMENT

The following sites are situated in sensitive areas (rocky outcrops, natural vegetation, fynbos, etc.) and will require faunal Search & Rescue to be conducted prior to commencement of construction activities:

**Turbine 25:**
This site impacts on a rocky outcrop, in this case a total exclusion is recommended due to the isolated characteristic of the outcrop. This outcrop acts as a conservation island within the agricultural grazing land which serves as a refuge for faunal species. The area should be left as a natural no-go area and be fenced off before construction occurs. A buffer of at least 20 (twenty) meters is recommended between the outcrop and the construction site. (It is therefore recommended that the turbine site be moved a minimum of 20m away from the rocky outcrop).

**Turbine 30 and 24:**
The two abovementioned sites fall within the same extensive, continuous rocky outcrop. For the sake of this report, they will be discussed together. These sites fall within an extensive rocky outcrop, this outcrop represents faunal protected species such as Cape girdled lizard, *(Cordylus cordylus)* and raucous toads *(Amietophrynus rangeri)*. Both species protected under Ordinance 19 of 1974. Due to the extent of the outcrop it is not possible to move the turbine as the entire immediate area consists of this outcrop. It is therefore recommended that a faunal search and rescue operation be conducted prior to commencement of construction.

**Turbine 76:**
Placement of this site is within a rocky outcrop zone. A colony of Cape Girdled lizards occurs within this outcrop. A faunal search and rescue/relocation is needed before construction occurs.

**Turbine 63 and lay down area:**
The above two sites are placed together for this report as they are both within an extensive rocky outcrop area and next to each other on the site. Various faunal species of special concern were found during the investigation. An extensive search and rescue should be conducted before construction commences.

**Substation:**
This proposed site lies within a typical climax fynbos plant community associated with an extensive rocky outcrop. This habitat are high in faunal diversity such as snakes, lizards etc. Due to the size of the construction footprint (substation) it is not recommended to move the footprint but to rather conduct an extensive faunal search and rescue/relocation prior to commencement of construction activities.

Large faunal species will easily vacate the development sites as there are enough flight paths and habitats to vacate to. The development, however, will disturb the habitats for reptiles and due to the nature of these habitats, it be adequate to conduct a manual search and rescue of the species as the use of for example drift set lines together with drop buckets etc. is unnecessary. Amphibian species will be captured by hand using small nets and they will be relocated from the development sites to the nearest water body where disturbance will not be present.

This Final Layout Plan is approved in terms of the Fauna on the site.
5. AVIFAUNAL ASSESSMENT

The final lay-out of the turbines and the 132kV overhead powerline has been studied and is considered satisfactory. This Final Layout Plan is approved in terms of the Avifauna on the site.
Ground-truthing Report – November 2015

6. AQUATIC ASSESSMENT

The proposed layout for the Oyster Bay Wind Farm will have a negligible impact on the aquatic environment. The Oyster Bay Wind Farm has adhered to specialist recommendations and the infrastructure that would have posed even a slight risk to water resources has been moved outside of any direct wetlands or water course areas.

Three powerline pylons are located within wetland buffer areas, but the locality of these has been verified, and they have been positioned with areas that are either degraded or will not limit the continued functioning of the wetlands.

No protected or species of conservation concern (fauna & flora) were observed within the adjacent areas. Therefore, the significance of the impacts assessed for the aquatic systems after mitigation would be LOW. The author of this report would thus not object to the authorisation for any of the supporting infrastructure.

The following mitigations are recommended to be included in the final EMPr:

- The storage of flammable and combustible liquids such as oils must be stored in designated areas which are appropriately bunded, in compliance with MSDS files, as defined by the SHE Representative / ECO.
- Any spills must receive the necessary clean-up action. If required, bioremediation kits are to be kept on-site and used to remediate any spills that may occur. Appropriate arrangements to be made for appropriate collection and disposal of all cleaning materials, absorbents and contaminated soils (in accordance with a waste management plan).
- Any storage and disposal permits/approvals which may be required will be obtained, and the conditions attached to such permits and approvals must be complied with.
- Routine servicing and maintenance of vehicles is not to take place on-site (except for emergency situations or large cranes which cannot be moved off-site or within a demarcated site camp). Repair of vehicles must take place using an appropriate drip tray to be used to contain any fuel or oils.
- Transport of all hazardous substances must be in accordance with the relevant legislation and regulations.
- Waste disposal records must be available for review at any time.
- Construction contractors must provide specific detailed waste management plans to deal with all waste streams.
- Specific areas must be designated on-site for the temporary management of various waste streams, i.e. general refuse, construction waste (wood and metal scrap) and contaminated waste. Location of such areas must seek to minimise the potential for impact on the surrounding environment, including prevention of contaminated runoff, seepage and vermin control.
- Where possible, construction and general waste on-site must be reused or recycled. Bins and skips must be available on-site for collection, separation and storage of waste streams (such as wood, metals, general refuse etc.).
- Disposal of waste must be in accordance with relevant legislative requirements, including the use of licensed contractors.
- Hydrocarbon waste must be contained and stored in sealed containers within an appropriately bunded area.
- Waste and surplus dangerous goods must be kept to a minimum and must be transported by approved waste transporters to sites designated for their disposal.
- Documentation (waste manifest) must be maintained detailing the quantity, nature and fate of any hazardous waste.
- An incident/complaints register must be established and maintained on-site.
- Hazardous and non-hazardous waste must be separated at source. Separate waste collection bins must be provided for this purpose. These bins must be clearly marked and appropriately covered.
• All solid waste collected must be disposed of at a registered waste disposal site. A certificate of disposal must be obtained and kept on file. The disposal of waste must be in accordance with all relevant legislation. Under no circumstances may solid waste be burnt or buried on site.
• Supply waste collection bins at construction equipment and construction crew camps.
• Construction equipment must be refuelled within designated refuelling locations, or where remote refuelling is required, appropriate drip trays must be utilised.
• All stored fuels to be maintained within a bund and on a sealed surface.
• Fuel storage areas must be inspected regularly to ensure bund stability, integrity and function.
• Oily water from bunds at the substation must be removed from site by licensed contractors.
• Spilled cement or concrete must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site.
• Corrective action must be undertaken immediately if a complaint is received, or potential/actual leak or spill of polluting substance identified. This includes stopping the contaminant from further escaping, cleaning up the affected environment as much as practically possible and implementing preventive measures.
• In the event of a major spill or leak of contaminants, the relevant administering authority must be immediately notified as per the notification of emergencies/incidents.
• Any contaminated/polluted soil removed from the site must be disposed of at a licensed hazardous waste disposal facility.
• Upon the completion of construction, the area will be cleared of potentially polluting materials.
• Align underground cables and internal access roads as far as possible along existing infrastructure & disturbances.
• Rehabilitate any disturbed areas as soon as possible once construction is completed in an area.
• Control storm water and runoff water through the implementation of a storm water management plan for the site.
• Obtain a permit as required in terms of the National Water Act from DWS to impact on any water resource.
• Storage areas must be located more than 50 m away from the watercourse.
• The storage of flammable and combustible liquids such as oils must be in designated areas which are appropriately bunded, and stored in compliance with MSDS files, as defined by the SHE Representative / ECO.
• Any spills must receive the necessary clean-up action. If required, bioremediation kits are to be kept on-site and used to remediate any spills that may occur. Appropriate arrangements to be made for appropriate collection and disposal of all cleaning materials, absorbents and contaminated soils (in accordance with a waste management plan).
• Any storage and disposal permits/approvals which may be required will be obtained, and the conditions attached to such permits and approvals must be complied with.
• Routine servicing and maintenance of vehicles is not to take place on-site (except for emergency situations or large cranes which cannot be moved off-site or within a demarcated site camp). Repair of vehicles must take place using an appropriate drip tray must be used to contain any fuel or oils.
• Transport of all hazardous substances must be in accordance with the relevant legislation and regulations.
• Waste disposal records must be available for review at any time.
• Construction contractors must provide specific detailed waste management plans to deal with all waste streams.
• Specific areas must be designated on-site for the temporary management of various waste streams, i.e. general refuse, construction waste (wood and metal scrap) and contaminated waste. Location of such areas must seek to minimise the potential for impact on the surrounding environment, including prevention of contaminated runoff, seepage and vermin control.
• Where possible, construction and general wastes on-site must be reused or recycled. Bins and skips must be available on-site for collection, separation and storage of waste streams (such as wood, metals, general refuse etc.).
Disposal of waste must be in accordance with relevant legislative requirements, including the use of licensed contractors.

- Hydrocarbon waste must be contained and stored in sealed containers within an appropriately bunded area.
- Waste and surplus dangerous goods must be kept to a minimum and must be transported by approved waste transporters to sites designated for their disposal.
- Documentation (waste manifest) must be maintained detailing the quantity, nature and fate of any hazardous waste.
- An incident/complaints register must be established and maintained on-site.
- Hazardous and non-hazardous waste must be separated at source. Separate waste collection bins must be provided for this purpose. These bins must be clearly marked and appropriately covered.
- All solid waste collected must be disposed of at a registered waste disposal site. A certificate of disposal must be obtained and kept on file. The disposal of waste must be in accordance with all relevant legislation. Under no circumstances may solid waste be burnt or buried on site.
- Supply waste collection bins at construction equipment and construction crew camps.
- Construction equipment must be refuelled within designated refuelling locations, or where remote refuelling is required, appropriate drip trays must be utilised.
- All stored fuels to be maintained within a bund and on a sealed surface.
- Fuel storage areas must be inspected regularly to ensure bund stability, integrity and function.
- Oily water from bunds at the substation must be removed from site by licensed contractors.
- Spilled cement or concrete must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site.
- Corrective action must be undertaken immediately if a complaint is received, or potential/actual leak or spill of polluting substance identified. This includes stopping the contaminant from further escaping, cleaning up the affected environment as much as practically possible and implementing preventive measures.
- In the event of a major spill or leak of contaminants, the relevant administering authority must be immediately notified as per the notification of emergencies/incidents.
- Any contaminated/polluted soil removed from the site must be disposed of at a licensed hazardous waste disposal facility.
- Upon the completion of construction, the area will be cleared of potentially polluting materials.

The following monitoring is required during construction:

- Fortnightly inspections of the "construction activity" by ECO
- Fortnightly inspections of sediment control devices by ECO
- Fortnightly inspections of surroundings, including drainage lines by ECO
- Immediate reporting of ineffective sediment control systems
- An incident reporting system must record non-conformances to the EMP/IWWMP.
- The ESO must develop and maintain a Public complaints register on site.
- Habitat loss in watercourses should be monitored before and after construction.
- The presence and development of erosion features downstream of any construction must be monitored.
- The ECO should be responsible for driving and monitoring this process while the contractor is responsible for the implementation of the monitoring systems.
- An incident reporting system must be used to record non-conformances to the EMPr.
- The ESO must develop and maintain a Public complaints register on site
- Observation and supervision of chemical storage and handling practices and vehicle maintenance throughout construction phase
- A complaints register must be maintained, in which any complaints from the community will be logged. Complaints must be investigated and, if appropriate, acted upon
- Observation and supervision of waste management practices throughout construction phase
- Waste collection to be monitored on a regular basis
• Waste documentation to be completed
• An incident reporting system must be used to record non-conformances to the EMP/IWWMP
• An appointed ESO is responsible for ensuring the implementation of the mitigation measures.
• An appointed ECO must monitor indicators listed above to ensure that they have been met for the construction phase.
7. CONCLUSION

The final layout was found to be in keeping with the requirements of the Environmental Authorisation and was approved by all relevant specialists. The main findings are summarised below:

1. Floral search & rescue are required at various sites prior to commencement of construction activities onsite.
2. Faunal search & rescue are required at various sites prior to commencement of construction activities onsite.
3. The final layout has not resulted in an amendment to the avifaunal mitigations from the EIA. As such all existing avifaunal mitigations from the EIA is still relevant.
4. Archaeological monitoring is required at various sites during construction while it is recommended that WT24 be moved to avoid a heritage sensitive site.
5. All new access roads must be pegged out prior to construction. An archaeological specialist must then do a walkthrough of these roads. Any new or additional findings must then be included in the updated EMP approved by the Department of Environmental Affairs prior to commencement of construction activities onsite.
6. Various mitigations & monitoring requirements from the Aquatic assessment must be included into the final EMP.
7. The current layout (as indicated in Figure 1.1) was updated with the findings of this report and the final layout map is included in Appendix A.
## APPENDIX B
### FINAL TURBINE COORDINATES

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APPENDIX C
SPECIALIST REPORTS

F1 - Archaeological Assessment
F2 - Floral & Faunal Assessment
F3 - Avifaunal Assessment
F4 – Aquatic Assessment