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DRAFT ENVIRONMENTAL MANAGEMENT PROGRAM FOR THE CONSTRUCTION OF A MAINTENANCE, REPAIRS AND OVERHAUL (MRO) HANGAR, A CARGO TERMINAL WAREHOUSE, AIRSIDE PLATFORM, AND STORMWATER INFRASTRUCTURE, ON A PORTION OF ERF 183 LANSERIA INTERNATIONAL AIRPORT (LIA) EXTENSION 1, LANSERIA, GAUTENG

APPLICANT:

LANSERIA AIRPORT 1993 PTY LTD

NOVEMBER 2025

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DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Lanseria Airport 1993 PTY LTD has appointed Messrs Stephanie Cliff of Seedcracker Environmental Consulting, a registered Environmental Assessment Practitioner (EAP), to compile an Environmental Management Programme (EMPr) which will be used to promote and ensure environmental monitoring, control and management associated with the environmental authorisations received for the project. Messrs Cliff has no business, financial or personal interest in the development, and is therefore able to provide an independent, objective assessment.

Environmental Assessment Practitioner (EAP):	**SEEDCRACKER ENVIRONMENTAL CONSULTING CC**
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EAP Qualifications	BSc Hons Animal Science BSc Hons wildlife Mgmt IAIA Member Registered EAP

Messrs Cliff is a qualified Animal Scientist and Wildlife Manager, and practicing Environmental Assessment Practitioner, with over 20 years experience in leading and conducting environmental impact assessments in the development sector. Messrs Cliff is a founding member of the EAPASA accreditation board and a long-standing member of IAIA SA. Messrs Cliff is a registered Environmental Assessment Practitioner, Number 2019/487. Stephanie has considerable experience in the management and co-ordination of all aspects of the Environmental Impact Assessment (EIA) processes. Her experience includes the integration of various specialist assessments in the compilation of environmental impact reports and environmental management plans.

DETAILS OF THE APPLICANT

Applicant details:	LANSERIA AIRPORT 1993 PTY LTD
Contact person:	RAMPA RAMMOPO
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EMPr REQUIREMENTS

REQUIREMENT	SECTION IN REPORT
1. Details of the EAP who prepared the EMPr; and the expertise of the EAP to prepare an EMPr, including a curriculum vitae.	**Page 2**
2. A detailed description of the aspects of the activity that are covered by the EMPr as identified by the project description.	Section **12** – Implementation of the Management Plans Section **11** – Environmental Impacts and Mitigations Section **5** – Roles and Responsibilities
3. 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.	**Appendix 1**
4. 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 the phases of the development including – a. Planning and design; b. Pre-construction activities; c. Construction activities; d. Rehabilitation of the environment after construction and where applicable post closure; and e. Where relevant, operation activities.	Section **12** – Implementation of the Management Plans Section **11** – Environmental Impacts and Mitigations Section **5** – Roles and Responsibilities
5. A description of the proposed impact management actions, identifying the manner in which the impact management outcomes contemplated above will be achieved and must, where applicable include actions to – a. avoid, modify, remedy control or stop any action, activity or process which causes pollution or environmental degradation; b. comply with any prescribed environmental management standards or practises; c. comply with any applicable provisions of the act regarding closure, where applicable; and d. comply with any provisions of the act regarding financial provisions for rehabilitation, where applicable.	Section **11** – Environmental Impacts and Mitigations

REQUIREMENT	SECTION IN REPORT
6. The method of monitoring the implementation of the impact management actions contemplated above.	Section **6** – **Env compliance, monitoring and reporting** Section **12** – Implementation of the Management Plans
7. The frequency of monitoring the implementation of the impact management actions contemplated above.	Section **6** – **Env compliance, monitoring and reporting**
8. An indication of the persons who will be responsible for the implementation of the impact management actions.	Section **5** – Roles and Responsibilities
9. The time periods within which the impact management actions must be implemented.	Section **12** – Implementation of the Management Plans
10. The mechanism for monitoring compliance with the impact management actions.	Section **6** – **Env compliance, monitoring and reporting**
11. A program for reporting on compliance, taking into account the requirements as prescribed in the Regulations.	Section **6** – **Env compliance, monitoring and reporting** Section **12** – Implementation of the Management Plans
An environmental awareness plan describing the manner in which – The Applicant intends to inform his or her employees of any environmental risk which may result from their work; and Risks must be dealt with in order to avoid pollution or the degradation of the environment.	Section **8 -**Environmental Awareness Training and Induction Annexure **12**: Environmental Awareness Material
13. Any specific information that may be required by the Competent Authority.	None required.

DEFINITIONS

Assessment is the evaluation, judgement, organising, rating, interpreting and communication of information which is relevant.

Clearing means the clearing and removal of vegetation, whether partially or in whole, including trees and shrubs, as specified.

Commence means the start of any physical activity, including site preparation or any other activity on the site.

Competent Authority in respect of the activities listed in the EIA Regulations, 2014 (as amended) is the Competent Authority in the province in which the activity is to be undertaken. In case of this development, the Gauteng Department of Environmental (GDE) is the Competent Authority.

Contractor – The Contractor has overall responsibility for ensuring that all work, activities, and actions linked to the delivery of the contract, are in line with the Environmental Management Programme and that Method Statements are implemented as described.

Construction activity is any action taken by the Contractor, the Sub-Contractors, suppliers or personnel in undertaking the construction work, otherwise referred to as "works".

Construction area is all areas used by the Contractor to carry out the required construction activities.

Development means the building, erection, construction or establishment of a facility, structure or infrastructure, including associated earthworks or borrow pits, that is necessary for the undertaking of a listed or specified activity, but excludes any modification, alteration or expansion of such a facility, structure or infrastructure, including associated earthworks or borrow pits, and excluding the redevelopment of the same facility in the same location, with the same capacity and footprint.

Ecosystem is a biological community of interacting organisms (plants and animals) and their physical environment.

Environment is the surroundings within which humans exist and that are made up of land, water and atmosphere; micro-organisms, plant and animal life; any part or combination of the above and the interrelationships among and between them; the physical, chemical, aesthetic and cultural properties and conditions of the foregoing that influence human health and well-being.

Environmental Authorisation is the permission required from the Competent Authority for an activity listed in the National Environmental Management Act: Environmental Impact Assessment Regulations, 2014 (as amended).

Environmental Impact refers to any change to the environment, whether desirable or undesirable, that would result directly or indirectly from any construction activity.

Environmental Management ensures that environmental concerns are included in all stages of development to ensure that the proposed activity or development is done in a sustainable manner and does not exceed the carrying capacity of the surrounding local environment.

General waste means waste that does not pose an immediate hazard or threat to health or to the environment, and includes domestic waste; building and demolition waste; business waste; inert waste; or any waste classified as non-hazardous waste in terms of the regulations made under section 69, and includes non-hazardous substances, materials or objects within business, domestic, inert, building and demolition wastes.

Domestic waste in this case means waste, excluding hazardous waste, that emanates from the MRO operations; municipal waste; and food waste.

Inert waste means waste that does not undergo any significant physical, chemical or biological transformation after disposal; does not burn, react physically or chemically biodegrade or otherwise adversely affect any other matter or environment with which it may come into contact; and does not impact negatively on the environment, because of its pollutant content and because the toxicity of its leachate is insignificant; and which include: discarded concrete, bricks, tiles and ceramics; discarded glass; and discarded soil, stones and dredging spoil.

Hazardous Substances are substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances. Hazardous Substances is a substance governed by the Hazardous Substances Act, 1973 (Act No. 15 of 1973) as well as the Hazardous Chemical and Substances Regulations, 1995.

Hazardous waste means any waste that contains organic or inorganic elements or compounds that may, owing to the inherent physical, chemical or toxicological characteristics of that waste, have a detrimental impact on health and the environment and includes hazardous substances, materials or objects within business waste, residue deposits and residue stockpiles.

Indigenous is a "native" species of plant or animal that occurs naturally in a particular place or region and was not artificially or intentionally introduced.

Invasive Alien Plants are all undesirable vegetation, defined as but not limited to, all declared category 1 and category 2 plants in terms of the National Environmental Management: Biodiversity Act, 2014 (Act No. 10 of 2004), as amended.

Local Authority is referred to as the local municipal authority that operates or is responsible in said area.

Method Statement means a written submission by the Contractor to the Employer's Representative in response to this EMPr or if requested by the Employer's Representative and Environmental Control Officer (ECO). The Method Statement must set out the equipment, materials, labour and method(s) the Contractor proposes using to carry out activities as part of the proposed development. This must be done in such detail that the Project Manager and ECO are able to assess whether the Contractor's proposal is in accordance with this specification and/or will produce results in accordance with this specification.

Rehabilitation means restoring an area impacted by activities/works to its original or better condition prior to the impacts from the activities/works having occurred.

Significant impact means an impact that may have a notable effect on one or more aspects of the environment or may result in non-compliance with accepted environmental quality standards, thresholds or targets and is determined through rating the positive and negative effects of an impact on the environment based on criteria such as duration, magnitude, intensity and probability of occurrence.

Solid waste means all solid waste, including construction debris, hazardous waste, excess cement/ concrete, wrapping materials, timber, cans, drums, wire, nails, food and domestic waste (e.g. plastic packets and wrappers).

Spoil means excavated material which is unsuitable for use as material in the construction works or is material that is surplus to the requirements of the construction works.

Topsoil means a varying depth (up to 300mm) of the soil profile irrespective of the fertility, appearance, structure, agricultural potential and composition of the soil.

Wastewater is water containing waste, or water that has been in contact with waste material. Wastewater includes: domestic wastewater; biodegradable industrial wastewater; and industrial wastewater

Works means the activities to be executed in terms of the Contract.

1. INTRODUCTION

Lanseria Airport 1993 PTY LTD, as the applicant, proposes developing (i) a new Maintenance, Repair, and Overhaul hangar (MRO hangar 3) (for aircraft checks and servicing, fixing aircraft components and the disassembly and inspection of aircraft parts or systems), (ii) a new International Cargo Terminal (Cargo terminal 4)(a facility designed to handle, store, screen, and process international import and export cargo), (iii) a cargo aircraft stand, (iv) access roads, fencing and access control, and (v) stormwater and service infrastructure.

Seedcracker Environmental Consulting CC (SEC) has been appointed by Lanseria Airport 1993 PTY LTD, to compile an Environmental Management Programme (EMPr) which will be used to promote and ensure environmental monitoring, control and management associated with the any environmental authorisations received for the project. Environmental Authorisation (EA) is to be received from the approving authority, the Gauteng Department of Environment (GDEnv), for the project activities.

This EMPr is compliant with the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA), as amended, and the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended). This EMPr is viewed as a dynamic document that may be reviewed and updated by the ECO where necessary. The EMPr is valid for the duration of the construction phase of the project.

This EMPr contains management requirements and recommendations made by the EAP, technical specialists, and best practices. This EMPr is supplementary to the mitigation measures provided in the draft Basic Assessment Report compiled for by SEC. Section 28 of NEMA provides for the Duty of Care principle that "*…obliges every person who causes, has caused or may cause significant environmental degradation to take reasonable measures to prevent such degradation from occurring, continuing or recurring*". This clause forms the underpinning philosophy of this EMPr.

The Applicant will be the Holder of the EA. The applicant has a legal obligation to comply with the specifications of this EMPr. The Holder of the EA must ensure that this EMPr forms part of any contractual agreements with the Contractor(s) and Sub-Contractors for the execution of the development proposal. The Contractor must make adequate financial provision for the implementation of this EMPr.

It is the responsibility of the applicant to undertake the following:

i. Ensure that all requirements of the EMPr are met for the duration of the construction works. The Holder of the EA always has the ultimate responsibility to ensure compliance with South African law.
ii. Appoint an Environmental Control Officer (ECO) to monitor the implementation of the construction phase of the EMPr.
iii. Bind all Contractors undertaking work on the site to the specifications in this EMPr.

1.1 Purpose of this EMPr

The purpose of this EMPr is to ensure that the environmental impacts and management of the various phases of the proposed development on the receiving environment are managed, mitigated and kept to a minimum. This EMPr clearly defines the impact management actions that must be implemented during each phase of the proposed development to achieve the impact management outcomes. The EMPr is a dynamic document that is flexible and responsive to new and changing circumstances.

This document is binding on the Holder of the EA, all Contractors, Sub-Contractors and visitors to the site (Erf 183, LIA X 1). The EMPr should be included as part of any tender documents/agreements, as well as contractual documents between the Holder of the EA and any Contractors to ensure that the requirements of this EMPr is provided for and implemented during all phases of the development. A copy of this EMPr must always be available on-site and all senior personnel are expected to familiarise themselves with the contents of this EMPr and EA.

2. EMPr PHASING

This EMPr addresses the environmental management of all phases of the development including:

1. planning and design;
2. pre-construction activities;
3. construction activities;
4. operation activities (where relevant)

2.1 Planning, Design and Pre-construction Phase

The pre-construction phase refers to the design phase of the project. This will ensure that any requirements and best practise mechanisms are built into the design of the proposal to be implemented in the construction and operational phases.

2.2 Construction Phase

The development (or construction) phase refers to the actual construction works or activities that includes all earthworks and building of structures and infrastructure.

2.3 Operational and Maintenance Phase

The operational phase begins upon completion of the proposed development.

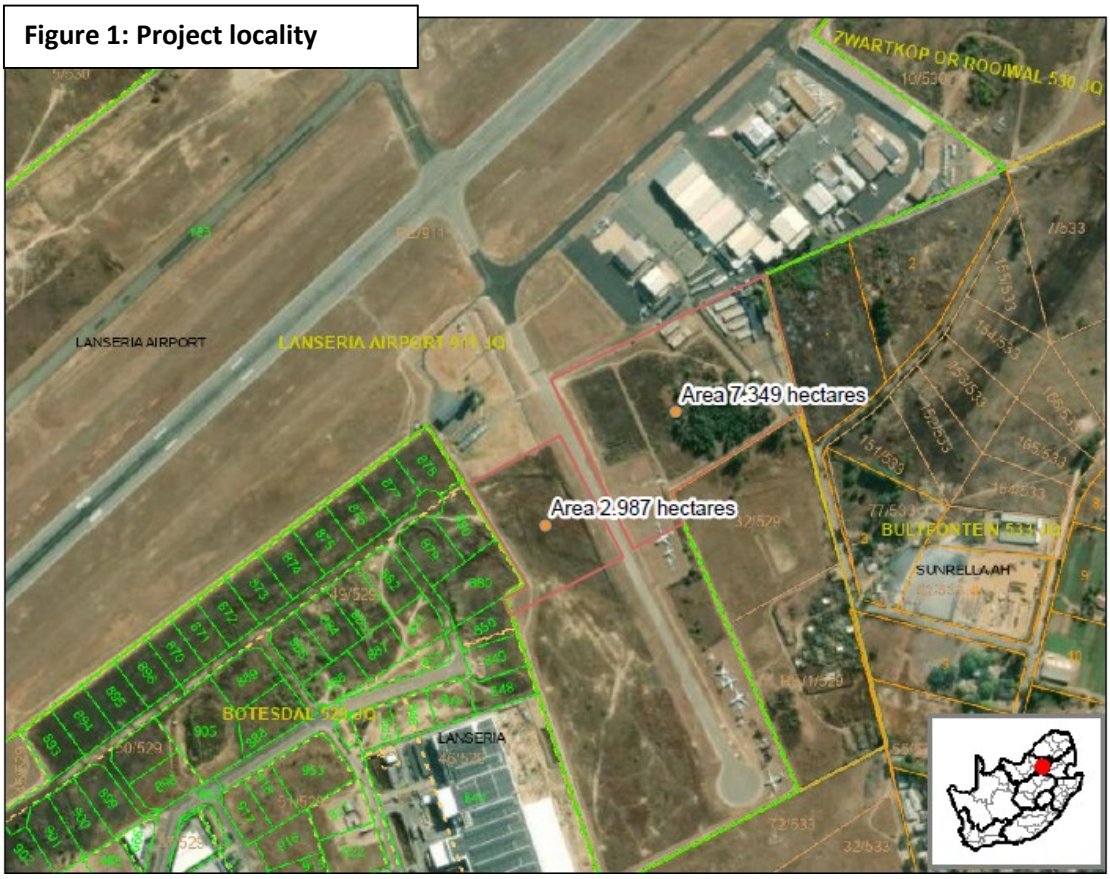
3. DESCRIPTION OF THE PROPOSED ACTIVITY

Project Locality and Extent

The project area is located *within the Lanseria International Airport*, on the eastern and western sides of the existing LIA *Charlie taxiway*. The area for which this EIA application applies, measures a total of 10.2ha. The site is in the southern most portion of the Lanseria Airport X 1 township. The Lanseria Airport, and therefore the application area, is situated within an area that has been

classified as an Industrial node, and Peri Urban in terms of the City of Johannesburg Nodal Review 2019/20 Policy document.

Figure 1: Project locality



Project Description

Erf 183, Lanseria Airport Extension 1, is currently zoned "Special" permitting land use for purposes necessary and in connection with airport, including aircraft hangers, aircraft maintenance, storage of goods, and accessories related to aircraft maintenance offices which are related to the use of the erf and buildings for the purposes of aircraft operations, including shops, retail and place of refreshment facilities subservient to the main use of the erf, aircraft runways, taxi aprons, air traffic control towers, repair and maintenance facilities, and such other associated land uses which the municipality may approve in writing.

Lanseria Airport 1993 PTY LTD, as the applicant, proposes developing (i) a new Maintenance, Repair, and Overhaul hangar (MRO hangar 3) (for aircraft checks and servicing, fixing aircraft components and the disassembly and inspection of aircraft parts or systems), (ii) a new International Cargo Terminal (Cargo terminal 4)(a facility designed to handle, store, screen, and process international import and export cargo), (iii) a cargo aircraft stand, (iv) access roads, fencing and access control, and (v) stormwater and service infrastructure.

Geoid Geotechnical Engineers (GGE) have conducted a detailed geotechnical investigation for the Lanseria International Airport expansion project, of which a portion of Erf 183 LIA Extension 1, forms a part of. Based on Geotechnical field profiling, Geoid has characterised the application site by five

geotechnical zones, Zones 1,2,3,5 and 6. See section 5 of this BA report and Appendix G for this specialist report. Given the complexity of the site, with single structures likely to straddle multiple zones, it is recommended that the Geotechnical Specialist be appointed to interact with the professional team to provide ongoing support for the duration of the project to further investigate, delineate transition zones, provide costings, undertake preliminary designs and procurement advice, finalise the designs, and inspect / monitor the ground improvement / foundation works for compliance with the project recommendations and specifications on all in ground works.

A Terrestrial biodiversity Assessment for the greater Lanseria Southern Precinct, of which the present study areas form part of, was conducted by EnviroGaurd Ecological Services CC in 2024. The present study areas are comprised of *degraded grassland vegetation, lawn grassland, artificial wetlands and Eucalyptus woodland* units. The conservation and biodiverse importance of the grassland and *Eucalyptus* woodland units are very low. The artificial wetland unit is medium.

Galago Environmental CC conducted the Wetland Assessment for the Lanseria Airport Southern Precinct, on portions of Erf 183 Lanseria international Airport, Extension 1. The artificial wetlands on site are the result of upstream stormwater, from the larger catchment, draining into the area. The stormwater from the Charlie Taxiway is also channelled into this area. This increase in surface water has over time created some wetland functionalities, with emphasis on *attenuation of flow*. The Present Ecological Status (PES) of the artificial wetlands was calculated by Galago Environmental CC, to category F, with the Ecological Importance and Sensitivity calculated to Low/Marginal. The wetland function is for the confluence and attenuation of stormwater. The stormwater designs for the precinct will replace the artificial wetland function, in the new proposed and properly designed attenuation ponds. See section B5 of this report for stormwater management. This will allow for the engineered system to be utilized for the maintenance of the attenuation ponds, and to ensure their proper function.

There are no municipal stormwater infrastructure networks in the area. A natural watercourse is located to the northeast of the adjacent Lanseria Extension 11 township. The southern precinct of Lanseria Extension 1 drains via north-easterly overland flow into this watercourse. Additionally, the adjacent Lanseria Extension 75 includes a stormwater attenuation dam, which discharges overland into the southern precinct of Lanseria Extension 1, creating the artificial wetlands. From the western side of Charlie taxiway, the stormwater continues to drain eastwards toward the natural watercourse via swales and stormwater channels constructed by the LIA under taxiway Charlie.
EDS Engineers prepared a stormwater management plan considering the greater Lanseria Airport Extension 1 Southern Precinct. The Stormwater Management Plan (SWMP) proposed for the Lanseria X1 Southern Precinct will consist of onsite attenuation as well as an integrated network of underground stormwater systems, ultimately connecting to the Stormwater Connection Point at the approved Lanseria X 11.

The existing informal stormwater attenuation ponds affecting the Lanseria Airport Southern Precinct, while unintentionally functioning as artificial wetland systems, lack the design, control, and resilience necessary to sustainably manage stormwater in an expanding airport and logistics hub environment. These informal features may pose environmental and operational risks over the long

term, including uncontrolled flooding on the Charlie taxiway, aquaplaning, erosion, and degradation of water quality. The development of a formally engineered stormwater management system for the southern precinct is critical to ensuring that stormwater is managed in a way that is both environmentally responsible and functionally reliable. Engineered systems are designed to handle peak runoff volumes more effectively, reducing the risk of localized flooding and erosion across the Charlie taxiway. They incorporate on site attenuation features, infiltration elements, and discharge control structures to mimic natural hydrological processes more accurately than informal ponds. Engineered systems are more adaptable to future climate conditions and provide a robust, maintainable infrastructure to support sustainable airport operations.

EDS Engineers have confirmed that since the new developments will be situated within the existing township of Lanseria Airport Extension 1, a new internal water reticulation system will be implemented for the development, which will connect to the existing Lanseria Airport X1 infrastructure. All new water reticulation pipelines and fire hydrants will be installed by the developer. With regards sewer services, the airport has its own approved Wastewater Treatment Works (WWTW). As a result of the gradient design constraints, the proposed development will be situated at a lower elevation than the existing LIA gravity sewer system that leads to the wastewater treatment plant (WWTP). The new MRO development will therefore include a central sewer pump station, which will collect effluent via a gravity-fed network and pump it to the nearest gravity sewer line leading to the LIA WWTP. See Appendix I of the EDS Engineers report in Appendix G of this BAR. The internal sewer reticulation system will comprise 110mm Ø gravity sewer pipes and a 63mm Ø pumped rising main, both to be installed by the developer. The existing 200mm Ø gravity sewer main will be rerouted accordingly. No external sewer infrastructure upgrades will be required as part of this development.

The existing Eskom MV network in the area will supply the MRO facilities.

4. APPLICABLE LEGISLATION AND GUIDELINES

See Table 1 for the list of environmental legislation applicable to the Holder of the EA/Applicant at the time of project authorisation.

Table 1: Governing Legal Framework for activities on the site.

DESCRIPTION OF COMPLIANCE WITH RELEVANT LEGISLATION, POLICY OR GUIDELINE:	
Legislation, policy of guideline	**Description of compliance**
National Environmental Management Act (Act 107 of 1998), as amended (NEMA)	The National Environmental Management Act (Act 107 of 1998) (NEMA), as amended, makes provision for the identification and assessment of activities that are potentially detrimental to the environment, and which require authorisation from the relevant authorities based on the findings of an environmental assessment. NEMA is a national act, which is enforced by

	the Department of Environmental Affairs (DEA). These powers are delegated in Gauteng, to the Department of Environment (GDE).
National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations 2014 (as amended)	In terms of Section 24(2) of NEMA, the Minister and or any MEC in concurrence with the Minister may identify activities which require authorisation as these activities may negatively affect the environment. The Act requires that in such cases the impacts must be considered, investigated and assessed prior to their implementation and reported to the organ of state charged by law with authorising, permitting, or otherwise allowing the implementation of an activity. The NEMA EIA Regulations guide the processes required for the assessment of impacts of Listed Activities. Three Listing Notices have been published under Government Gazette No 40772 on 07 April 2017; and are an amendment of the 2014 Regulations that were published under Government Gazette No. 38282 on 04 December 2014. The levels of environmental assessment required under each of these Listing Notices are as follows: ▪ Listing Notice 1 (GNR 983 in Government Gazette No 40772 of 07 April 2017): This Notice identifies listed activities that require a Basic Assessment. ▪ Listing Notice 2 (GNR 984 in Government Gazette No 40772 of 07 April 2017): This Notice identifies listed activities that require Scoping and Environmental Impact Assessment. ▪ Listing Notice 3 (GNR 985 in Government Gazette No 40772 of 07 April 2017): This Notice identifies listed activities that require Basic Assessment in specifically identified geographical areas An Environmental Authorisation must be obtained for any activity that is listed in any of the above notices. Such an authorisation may only be granted once the required assessment has been compiled by an independent environmental assessment practitioner, and submitted to the competent authority. See the activities applied for in Section 1A of this report.
Assessment for Reporting on Identified Environmental Themes	The Department of Forestry, Fisheries and the Environment (DFFE) has published requirements in terms of site sensitivity verification, GN 320 of 20 March 2020, Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Section 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998, when applying for Environmental Authorisation. In terms of this notice, prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the national web based environmental

	screening tool (screening tool), where determined, must be confirmed by undertaking a site sensitivity verification. In terms of this notice, the following is applicable: • The site sensitivity verification must be undertaken by an environmental practitioner or a specialist. • The site sensitivity verification must be undertaken using: A desktop analysis, using satellite imagery, A preliminary on-site inspection, and any other available and relevant information. The outcome of the site sensitivity verification must be recorded in the form of a report that confirms or disputes the current land and the environmental sensitivity as identified by the screening tool, such as new development or infrastructure, the change in vegetation cover or status etc., Contains motivation and evidence (e.g., photographs) of either the verified or different use of the land and environmental sensitivities, and is submitted together with the relevant assessment report prepared in accordance with the requirements of the EIA Regulations. See Appendix G for the Terrestrial biodiversity Assessment conducted by Enviroguard Ecological Services cc for the site. The present study areas are comprised of *degraded grassland vegetation, lawn grassland, artificial wetlands and Eucalyptus woodland* units. The conservation and biodiverse importance of the grassland and *Eucalyptus* woodland units are very low. The artificial wetland unit is medium.
National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)	The objectives of this act are (within the framework of NEMA) to provide for: • The management and conservation of biological diversity within the Republic of South Africa and of the components of such diversity; • The use of indigenous biological resources in a sustainable manner; • The fair and equitable sharing among stakeholders of the benefits arising from bio prospecting involving indigenous biological resources; • To give effect to ratify international agreements relating to biodiversity which are binding to the Republic; • To provide for cooperative governance in biodiversity management and conservation; and • To provide for a South African National Biodiversity Institute to assist in achieving the objectives of this Act. This act alludes to the fact that management of biodiversity must take place to ensure that the biodiversity of the surrounding areas is not negatively impacted upon, by any activity being undertaken, to ensure the fair and equitable sharing among stakeholders of the benefits arising from indigenous biological resources.

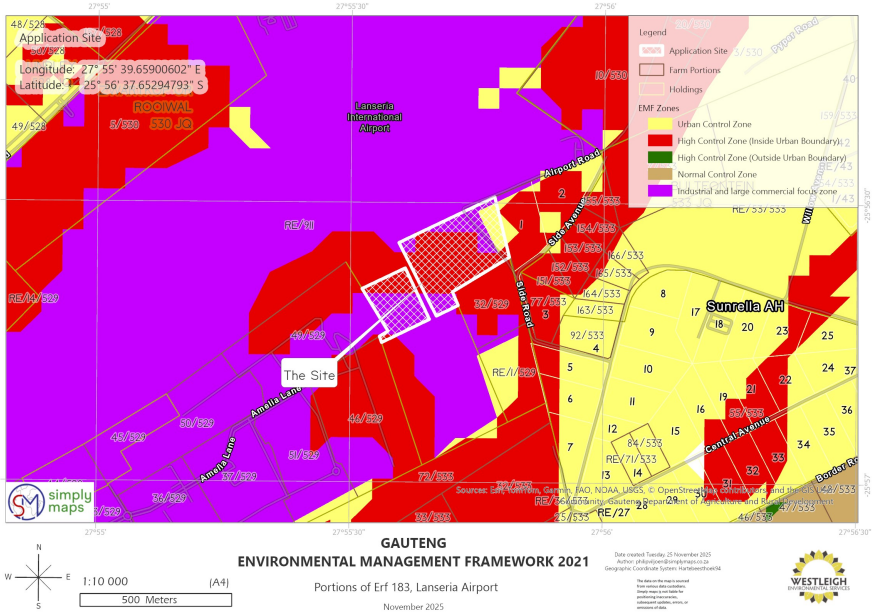
	Furthermore, a person may not carry out a restricted activity involving either: a) A specimen of a listed threatened or protected species; b) Specimens of an alien species; or c) A specimen of a listed invasive species without a permit. Chapter 7 of the NEMBA regulations govern the 'permit system for listed threatened or protected species. To remove or relocate any Threatened or Protected Species (TOPS) should they be identified on the site and relevant permits must be applied for. According to the 2022 Red List Ecosystems (RLE) database, the study area is located within the remaining extent of the Critically Endangered (CR) Egoli Granite Grassland. From a provincial biodiversity management perspective, the Gauteng Conservation Plan (C-Plan) V 3.3 indicates that the majority of the study area is located within an area considered to be of biodiversity importance, most notably an Important Critical Biodiversity Area (CBA) (also referred to as CBA 2). Triggering features of the Important CBA include the presence of Red and Orange Listed (OL) plant species and primary vegetation. CBAs are areas of high biodiversity value and need to be maintained in a natural state. CBA Important Areas are areas considered important for the survival of threatened species and includes valuable ecosystems such as wetlands, untransformed vegetation, and ridges. A small section in the north of the study area is also located within an Ecological Support Area (ESA). Enviroguard Ecological Services cc was appointed to conduct a terrestrial biodiversity assessment as part of the Environmental Authorisation (EA) application process for the study area. See Section F and Appendix G of this report, for the detail of this specialist study. The specialist study is aligned to the requirements of this act. The application area is characterised by *degraded grassland vegetation, lawn grassland, artificial wetlands and Eucalyptus woodland* units. The conservation and biodiverse importance of the grassland and *Eucalyptus* woodland units are very low. The artificial wetland unit is medium.
Government Notice 598 Alien and Invasive Species Regulations (2014), including the Government Notice 864 Alien Invasive Species List as published in the Government Gazette 40166 of 2016, as it	NEMBA is administered by the Department of Environmental Affairs and aims to provide for the management and conservation of South Africa's biodiversity within the framework of the NEMA. In terms of alien and invasive species. This act in terms of alien and invasive species aims to: - Prevent the unauthorized introduction and spread of alien and invasive species to ecosystems and habitats where they do not naturally occur, - Manage and control alien and invasive species, to prevent or minimize harm to the environment and biodiversity; and

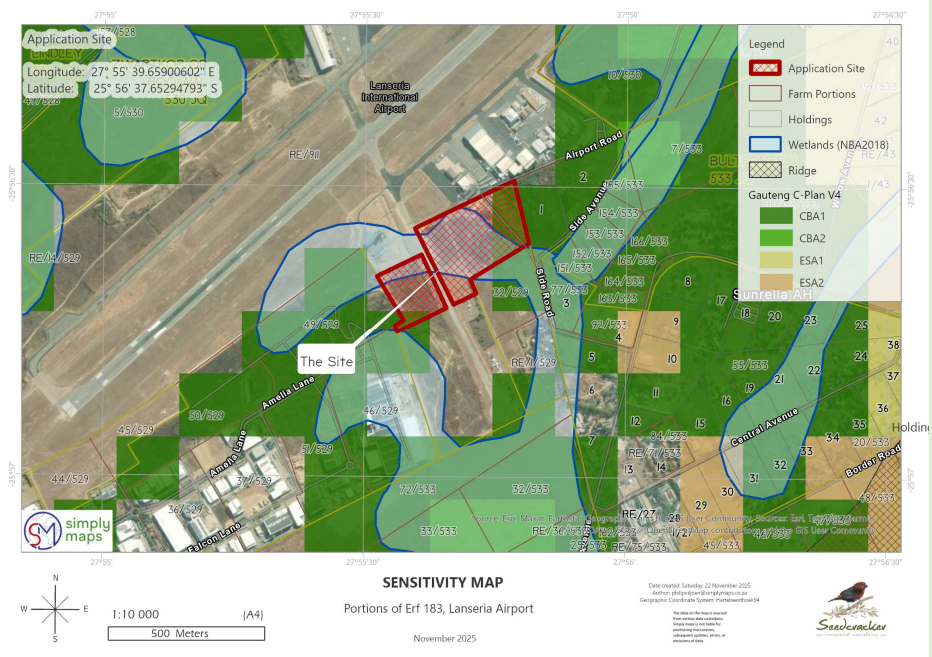
relates to the National Environmental Management Biodiversity Act, 2004 (Act No 10 of 2004)	- Eradicate alien species and invasive species from ecosystems and habitats where they may harm such ecosystems or habitats. Alien species are defined, in terms of the National Environmental Management: Biodiversity Act, 2004 (Act no 10 of 2004) as: (a) A species that is not an indigenous species; or (b) An indigenous species translocated or intended to be translocated to a place outside its natural distribution range in nature, but not an indigenous species that has extended its natural distribution range by natural means of migration or dispersal without human intervention. Categories according to NEMBA (Alien and Invasive Species Regulations, 2017): - Category 1a: Invasive species that require compulsory control; - Category 1b: Invasive species that require control by means of an invasive species management programme; - Category 2: Commercially used plants that may be grown in demarcated areas, provided that there is a permit and that steps are taken to prevent their spread; and - Category 3: Ornamentally used plants that may no longer be planted. Alien plants present on site must be controlled as a high priority, since they pose a huge risk to ecosystems further away. All Category 1 Declared Weeds and other alien invaders must be removed from the site.
The National Water Act, 1998, Act 36	The National Water Act (Act 36 of 1998) "NWA" provides a framework to protect, develop, conserve, and manage the nation's water resources. Water use is defined broadly in terms of the NWA, and includes taking and storing water, activities which reduce stream flow, waste discharges and disposals, controlled activities (activities which impact detrimentally on a water resource), altering a watercourse, removing water found underground for certain purposes, and recreation. Galago Environmental CC conducted a **Wetland Assessment** for the Lanseria Airport Southern Precinct, on portions of Erf 183 Lanseria international Airport, Extension 1. Galago Environmental CC confirmed that the artificial wetlands on site are the result of upstream stormwater, from the larger catchment, draining into the area. The stormwater from the Charlie Taxiway is also channelled into this area. This increase in surface water has over time created some wetland functionalities, with emphasis on *attenuation of flow*. The **Present Ecological Status (PES) of the artificial wetlands was calculated by Galago Environmental CC, to category F, with the EIS calculated to Low/Marginal.** The wetland function is for the confluence and attenuation of stormwater. The stormwater designs for the precinct will replace the artificial wetland function, in the new proposed and properly

	designed attenuation ponds. This will allow for the engineered system to be utilized for the maintenance of the attenuation ponds, and to ensure their proper function. The NWA provides for pollution prevention measures, with particular emphasis on water resource pollution. In accordance, the licensee shall ensure that activities impacting upon water resources and effluent releases are monitored for compliance with the applicable Regulations. Emergency incidents involving water resources are included in the Act, requiring the polluter to remediate and mitigate the impacts of such an emergency incident. In terms of Section 19 of the NWA, "an owner of land, a person in control of land or a person who occupies or uses the land on which any activity or process is or was performed or undertaken; or any other situation exists, which causes, has caused or is likely to cause pollution of a water resource must take all reasonable measures to prevent any such pollution from occurring, continuing or recurring". A water use must be licensed (in terms of Section 21) unless it is listed in Schedule 1 as an existing lawful water use; is permissible under a general authorisation; or if a responsible authority waives the need for a licence. INDEX (Pty) Ltd has been appointed to compile a Water Use Authorisation Application (WUA) process for the proposed development, and the impact it may have on freshwater resources within a 500m radius of the site.
Government Notice 509 as published in the Government Gazette 40229 of 2016 as it relates to the National Water Act, 1998 (Act No. 36 of 1998)	In accordance with GN509 of 2016 as it relates to the National Water Act, 1998 (Act 36 of 1998), a regulated area of a watercourse in terms of water uses as listed in Section 21c and 21i is defined as: • the outer edge of the 1 in 100 year flood line and/or delineated riparian habitat, whichever is the greatest distance, measured from the middle of the watercourse of a river, spring, natural channel, lake or dam; • in the absence of a determined 1 in 100 year flood line or riparian area, the area within 100 m from the edge of a watercourse where the edge of the watercourse is the first identifiable annual bank fill flood bench; or • a 500m radius from the delineated boundary (extent) of any wetland or pan in terms of this regulation. Any development on the study site has the potential to impact the aquatic ecosystems and must be authorised in terms of Section 21 of the National Water Act (1998). INDEX (Pty) Ltd has been appointed to compile a Water Use Authorisation Application (WUA) process for the proposed development, and the impact it may have on freshwater resources within a 500m radius of the site.
National Environment	The NEM: Waste Act (NEMWA) was accented to on 10 March 2009 and came

Management Waste Act, 2008 (Act No. 59 of 2008)	into effect on 01 July 2009. This Act repeals the sections in the Environment Conservation Act, Act 73 of 1989 that previously dealt with the licensing of general and hazardous waste storage facilities. The Act was established to regulate waste management for the protection of human health and the environment. Section 19 of the NEMWA authorises the Minister to publish a list of waste management activities which would require an environmental assessment and waste management licence. On 3 July 2009 the Minister published a schedule of waste management activities in respect of which a waste management licence is required in accordance with section 20(b) of NEMWA (GN R718, GG 32368). Activities listed under Category A of GN R 718 for which a waste management licence is required, are equivalent to those that require a Basic Assessment process as stipulated in GN R 544 of June 2010. Category B activities are equivalent to those that require a full EIA process as stipulated GN R 545 of June 2010. None of the activities relating to the construction and operation of the proposed MRO hangar 3 and Cargo Terminal 4, will require a waste management license.
National Heritage Resource Act 25 of 1999	The National Heritage Resource Act 25 of 1999 introduce an integrated and interactive system for the management of the national heritage resources; promote good government at all levels, and empower civil society to nurture and conserve their heritage resources so that they may be bequeathed to future generations and Chapter 2 section 35 subsection 3 states that any person who discovers archaeological or paleontological objects or material or a meteorite in the course of development or agricultural activity must immediately report the find to the responsible heritage resources authority, or to the nearest local authority offices or museum, which must immediately notify such heritage resources and subsection 4 says that no person may, without a permit issued by the responsible heritage resources authority— a) destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or paleontological site or any meteorite; b) destroy, damage, excavate, remove from its original position, collect or own any archaeological or paleontological material or object or any meteorite; and section 36 subsection 3 states that no person may, without a permit issued by SAHRA or a provincial heritage resources authority— c) destroy, damage, alter, exhume or remove from its original position or otherwise disturb the grave of a victim of conflict, or any burial ground or part thereof which contains such graves; d) destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside a formal cemetery administered by a local authority;

	or e) bring onto or to use at a burial ground or grave referred to in paragraph (a) or (b) any excavation equipment, or any equipment which assists in the detection or recovery of metals In accordance with Section 38 of the NHRA, an independent heritage consultant has been appointed to conduct a cultural heritage assessment of the site, to determine if the development activities will have an impact on any sites, features or objects of cultural heritage significance. This specialist report will be included in the draft BAR submitted to the approving authorities, GDEnv & COJ.
The Gauteng Provincial Environmental Management Framework, 2015	The Gauteng Provincial Environmental Management Framework is a legal instrument in terms of the Environmental Management Framework Regulations. The regulations are designed to assist environmental impact management including EIA processes, spatial planning and sustainable development. The objectives of the policy are: • To ensure efficient urban development (including associated service infrastructure) in defined selected areas with lower environmental concerns and high development demand in order to help facilitate the implementation of Gauteng Growth and Management Perspective, 2014. • To facilitate the optimal use of current industrial, mining land and other suitable derelict land for the development of non-polluting industrial and large commercial developments. • To protect Critical Biodiversity Areas (CBAs) within urban and rural environments. To ensure the proper integration Ecological Support Areas (ESAs) into rural land use change and development. • To use ESAs as defined in municipal bioregional plans in spatial planning of urban open space corridors and links within urban areas. • To focus on the sustainability of development through the implementation of initiatives such as Energy efficiency programmes, plans and designs, Waste minimisation, reuse and recycling, Green infrastructure in urban areas, and Sustainable Urban Drainage Systems (SUDS) According to the GDE Environmental Management Framework, the study and investigation areas fall within the following EMF Zones: EMF Zone 2: (High control area inside Zone 1): Linear bands associated with drainage in the study and investigation areas are classified as being in Zone 2. This zone is sensitive to development activities. Only conservation should be allowed in this zone. Related tourism and recreation activities must be accommodated in areas surrounding this zone.

	EMF Zone 5: Zone 5 is identified as the Industrial and Large Commercial Focus Zone. The primary objective of this zone is to facilitate non-polluting industrial and large-scale commercial developments. This approach aims to promote economic growth while ensuring environmental sustainability. The figure below shows the location of the site within the GPEMF 2021 mapping: 
Gauteng C-Plan v4	The Gauteng Conservation Plan (Version 4) classified areas within the province based on its contribution to reach the conservation targets within the province. These areas are grouped as Critical Biodiversity Areas (CBAs) or Ecological Support Corridors (ESAs). The CBAs comprise 'Irreplaceable' areas that must be conserved and areas classified as 'Important' to reach the conservation targets of the Province. ESAs are areas that are not essential for meeting biodiversity representation targets/thresholds but which nevertheless play an important role in supporting the ecological functioning of CBAs and/or in delivering ecosystem services that support socio-economic development, such as water provision, flood mitigation or carbon sequestration to ensure sustainability in the long term. From a provincial biodiversity management perspective, according to GDARD's C-Plan 4, the study area is characterised by a CBA and wetland on portions of the application site.



Johannesburg Spatial Development Framework, 2040 **Nodal Review, 2020**	The application site falls within a Peri-Urban Zone and is further identified as an Industrial Node within the City of Johannesburg Nodal Review. The Lanseria International Airport expansion land use plans are in line with this earmarked zone.
The Draft Greater Lanseria Master Plan (GLMP) 2021	'The application site falls within the primary zone of the GLMP, which supports land uses like Business, Commercial and Industrial uses. The Lanseria Airport and Logistics Hub is a specialist node, forming the northern anchor of Malibongwe major arterial activity spine.
Lanseria Airport and Logistics Hub	The Lanseria Airport and Logistics Hub represents a strategic initiative to position the airport as a central node for aviation, business, and logistics in the region. The Lanseria Airport and Logistics Hub is part of a broader vision to transform the airport into a significant aviation and business center. This initiative forms part of the smart city around the airport.
Lanseria Regional Spatial Development Policy (LRSDF) 2017	The Lanseria Regional Spatial Development Policy (LRSDF), established in 2017, plays a pivotal role in shaping the future of the Greater Lanseria area in Gauteng Province, South Africa. The LRSDF aims to create a smart city within the Lanseria region, as envisioned by President Cyril Ramaphosa. This transformative initiative seeks to address the spatial legacy of apartheid by developing a modern, sustainable urban environment. The Greater Lanseria Master Plan (GLMP) serves as the first phase of this smart city development. Key stakeholders include: · Gauteng Growth and Development Agency (GGDA) · Department of Water and Sanitation · Gauteng Dept of Environment (GDE) · City of Johannesburg

	The smart city project initially aimed to accommodate 350,000 to 500,000 people by 2030. The focus was to be on building essential infrastructure, including Wastewater treatment facilities. The LRSDF represents a progressive step toward realizing a modern, interconnected, and forward-thinking urban landscape in the Lanseria area. The project site falls within an area identified for development in the LRSDF 2017.

5. ACCOUNTABILITY AND ENVIRONMENTAL CONTROL

5.1 Administration

Copies of this EMPr must be kept at the site office and will be distributed to all senior contract personnel. All senior personnel shall be required to familiarize themselves with the contents of this document.

5.2 Roles and Responsibilities

The implementation of this EMPr requires the involvement of several stakeholders, each fulfilling a different but vital role involved in the implementation of the EMPr and mitigation measures presented in the approved EIA Report and project Environmental Authorisation, relevant to the various phases of the development of the MRO facility and associated activities, and the establishment thereof.

5.3 The Applicant: The Holder of the EA

The applicant remains ultimately responsible for ensuring that implementation of this EMPr complies with the relevant legislation, and that the authorised activities are implemented according to the requirements of the EMPr.

Although the applicant will appoint an external Contractor to undertake the contract on a design and construct basis, the responsibility remains with the applicant. The applicant must ensure that sufficient resources (time, financial, labour, equipment, etc.) are available to the other role players e.g. the Environmental Control Officer (ECO), and contractor, to efficiently perform their tasks in terms of the EMPr. The applicant will be held responsible for restoring the environment in the event of negligence leading to damage to the environment.

- The applicant must ensure that the EMPr is included in tender documentation so that the contractor who is appointed is bound to the conditions of the EMPr.
- The applicant must be familiar with all the recommendations and mitigation measures of this EMPr.
- The applicant must monitor site activities on a frequent basis for compliance.
- The applicant must conduct internal audits of the construction site against the EMPr.

- The applicant must confine the activities to the areas already occupied, and ensure that no encroachment into open areas which are sensitive in nature occurs.
- The applicant must rectify transgressions through the implementation of corrective action.

5.4 Authorities

The authorities (GDEnv, DWS) are responsible for processing and issuing necessary permits and authorisations within the NEMA regulated time frames. The authorities ensure that the applicant complies with the terms that are stipulated within the Environmental Authorisation. Where necessary, the authorities must assist the applicant in understanding and meeting the specified requirements. The authorities will perform random site visits and audits, to ensure compliance with the authorisation conditions. In case of long-term non-compliance, the applicant must provide an action plan with corrective measures for approval by the authorities.

5.5 Contractors and Project Engineers

The Project Engineer (PE), appointed by the applicant, reports directly to the applicant project manager, and oversees all technical aspects of the various projects. The PE oversees construction programmes and all construction activities performed by the Contractor, and as such also any EMP implementation, EMP compliance and environmental related activities, issues and impacts.

The contractor acts as the applicant's agent on site and is bound to the EMPr conditions through his/her contract with the applicant. The contractor is responsible for ensuring that he/she adheres to all the conditions of the EMPr. The contractor must thoroughly familiarise him/herself with the EMPr requirements before coming onto site and must request clarification on any aspect of these documents, should they be unclear. The contractor must ensure that he/she has provided sufficient budget for complying with all EMPr conditions at the tender stage.

The contractor must comply with all orders (whether verbal or written) given by the ECO, project manager or site engineer in terms of the EMP. It is the Contractor's role to always implement and comply with recommendations and conditions of the EMPr.

The PE works in close cooperation with the ECO and must ensure that the EMPr is implemented correctly. **The Contractor or Project Engineer must appoint a dedicated Environmental Site Officer (ESO) for the duration of the construction period.** The ESO must be a senior member of the construction company or on-site team, and have overall environmental management responsibilities for the site. The ESO must monitor the activities of the Contractor and all subcontractors, and must ensure that mitigation measures contained in this document are implemented and adhered to on a daily basis. The ESO must liaise with the Environmental Control Officer (ECO), where applicable, on a regular basis to inform the ECO of the adherence to and effectiveness of the prescribed management measures. In the absence of an ECO, an ESO will take on the duties of an ECO.

The ESO is the direct link between the ECO and the Contractors and subcontractors. The ESO must ensure that the EMPr forms part of the tender documentation to the Contractor and becomes legally binding on the Contractor and anyone acting on behalf of the Contractor during construction. It is the responsibility of the project engineers, contractors and sub -contractors to prepare and

implement Method Statements which detail the means they will employ in order to meet the objectives set in the EMPr. The contractors and sub-contractors will be required, where specified, to provide Method Statements to the Resident Engineer setting out in detail how the management actions will be implemented in order to ensure that the environmental management objectives will be achieved. Regular consultation with the ECO is required in this regard.

The PE is responsible for the implementation of the general and specific environmental awareness training programme (to be presented by the ESO). Further responsibilities include keeping records of waste disposal, audits, inspections, monitoring and corrective actions. The PE must assist the ECO with the identification of any new significant environmental impacts, and the necessary environmental management requirements to manage them.

5.6 The Environmental Control Officer (ECO)

The Environmental Control Officer (ECO) must be an independent environmental consultant appointed by the applicant or contractor to act as the applicant or contractors representative, to monitor and review the on-site environmental management and implementation of this EMPr by the Contractor.

The ECO must form part of the project team and be involved in all aspects of project planning that can influence environmental conditions on the site. The ECO must attend relevant project meetings, conduct inspections to assess compliance with the EMPr and be responsible for providing feedback on potential environmental problems associated with the development.

The ECO's duties will include the following:

- Assisting the applicant in ensuring that any necessary environmental authorisations and permits have been obtained.
- Maintaining open and direct lines of communication between the applicant, project engineers, Contractor and Environmental Control Officer (ECO), with regard to environmental matters.
- Appointing specialists (botanists, ecological ecologists, etc.) as required to advise the ECO.
- Reporting on environmental issues at construction site meetings.
- Reviewing and approving the Contractor's construction method statements.
- Regular site inspections of all construction areas with regard to compliance with the EMPr.
- Monitoring and verifying adherence to the EMPr, the Environmental Authorisation (EA), and approved method statements at all times, monitoring and verifying that environmental impacts are kept to a minimum.
- Taking appropriate action if the specifications are not followed.
- Assisting the Contractor in finding environmentally responsible solutions to problems.

- Monitoring the undertaking by the Contractor of environmental awareness training for all new personnel coming onto site.
- Advising on the removal of person(s) and/or equipment not complying with the specifications.
- Recommending the issuing of fines for transgressions of site rules and penalties for contraventions of the EMPr.
- Auditing the implementation of the EMPr and compliance with the EA on a monthly basis.
- Undertaking a continual review of the EMPr and recommending additions and/or changes to the document to the developer and contractor for discussion.
- Keeping a photographic record of progress on site from an environmental perspective. This can be conducted in conjunction with the ESO as the ESO will be the person that will be onsite at all times and can therefore take photographic records weekly. The ECO would need to check and ensure that the ESO understands the task at hand.
- Recommending additional environmental protection measures, should this be necessary.
- Providing report back on any environmental issues at site meetings.

The ECO has the right to enter the site and carry out monitoring and auditing based on prior arrangement with the landowner/ applicant, and subject to compliance with health and safety requirements applicable to the site (e.g. wearing of safety boots and protective head gear.

6. ENVIRONMENTAL MANAGEMENT COMPLIANCE, MONITORING AND REPORTING

Monitoring is crucial for assessing the effectiveness of management actions by measuring environmental changes. Consistency and continuity are vital for scientific accuracy in determining baselines, thresholds, and measuring changes or deviations, which inform management responses. Photographs must be taken during each ECO compliance monitoring inspection throughout the development phase.

6.1 Environmental Officers (ESO and ECO)

The Environmental Control Officer is responsible for the implementation of environmental management measures with monitoring and reporting. The applicant and the Project Engineer must appoint an Environmental Site Officer (ESO) for the duration of the construction period. An ECO must be appointed to monitor the compliance with the pre-commencement and planning and design phase. The first construction ECO report must provide a description on compliance measures for this phase. The ECO must audit the site for compliance with the monitoring specifications / requirements once a month, and compile and submit an ECO report during the construction phase to the applicant and approving authority on a monthly basis.

It must be noted that the ECO is responsible for providing an independent evaluation of compliance with the EMPr, and not for enforcement of the conditions of the EMPr. The

responsibility of enforcement of the conditions of the EMPr lies with the Applicant and PE, while the GDE Environmental Management Compliance Inspectors may also enforce existing and potentially new conditions through compliance notices.

The Contractor ESO must be a senior member of the construction on-site team and have overall environmental management responsibilities for the site daily. The ESO must monitor the activities of the Contractor and all subcontractors daily and must ensure that mitigation measures contained in this document are implemented and adhered to and corrective measures taken as per reports and instructions. Where relevant (e.g., significant environmental incidents and complaints), actions plan with timeframes and responsibilities must be developed and implemented by the ESO. The ESO must liaise with the Environmental Control Officer (ECO) on a regular basis to inform the ECO of the adherence to and effectiveness of the prescribed management measures.

Non-compliance with the conditions of the EMPr must be viewed as a breach of appointment contract for which the construction contractors will be held liable. The appointed contractor is in non-compliance with the EMPr if:

- There is evidence of contravention of the EMPr, or the Method Statements developed by the contractor within the boundaries of the construction site or areas of contractor responsibility;
- Construction related activities take place outside the defined boundaries of the site;
- Environmental damage occurs due to negligence/laziness/blatant disregard to the environment;
- The contractor fails to comply with corrective or other instructions issued by the ECO within an agreed time frame; or
- The contractor fails to respond adequately to complaints from the public or authorities.

The applicant and the construction contractors are liable for any construction rehabilitation costs associated with their non-compliance with the EMPr. This rehabilitation will be undertaken to the satisfaction of the ECO and the GDARD.

6.2 Reporting and Review

Environmental monitoring is the continual evaluation of the status of the environment and condition of environmental elements. Its purpose is to detect activities that may have a negative impact on the environment as well as changes that takes place in the environment over time. It therefore involves the checking and correcting of onsite activities as well as the measuring of physical, social and economic variables associated with development impacts. Monitoring will be ensured in terms of the Environmental Authorisation, Permits, Licenses and EMPr as per conditions and relevant authority requirements by the Holder of the Authorisations as undertaken by the Holder and Contractor ESO and ECO appointments.

The timeframes for monitoring are specified as per the relevant conditions of the various phases i.e., planning and design, construction, and operational. The specific conditions related to the monitoring requirements per timeframe have been specified as per relevant condition and must be ensured. An ECO

must be appointed to monitor the compliance with the pre-commencement and planning and design phase. The first construction ECO report must provide a description on compliance measures for this phase.

The ESO must monitor the site activities *daily* during the construction phase and submit proof of inspections with findings and corrections to the ECO for consideration during the ECO visits to be conducted during the construction phase. The ESO must report any problems in terms of adherence with the EMPr directly to the PE and ECO.

The ECO must audit the site for compliance with the monitoring specifications / requirements once a month and compile and submit an ECO report during the construction phase to the applicant monthly.

The EMPr reporting and documentation requirements must be based on best environmental practice principles. ECO reports must be regularly reviewed by all accountable parties. The contents of this EMPr must be discussed at monthly or weekly project meetings with all contractors project managers. No parties may use the excuse, "I didn't know". The construction contractors will be contractually obliged to fulfill any reasonable recommendations, and implementation of these actions will be assessed in the ECO audits.

The Contractor is deemed not to have complied with the Environmental Specification / EMPr if:

- There is evidence of contravention of clauses within the boundaries of the site;
- Environmental damage ensues due to negligence;
- The Contractor ignores or fails to comply with corrective or other instructions issued by the applicant or Project Engineer within a specified time; and
- The Contractor fails to respond adequately to complaints from the public.

6.3 Environmental File on site

The Holder of the EA is responsible for maintaining the official Environmental File. At a minimum, the following documentation must be stored in the Environmental File, which must be available on-site during the development phase, either in hard copy or electronically:

- Copy of the approved EA and amended EAs
- Copy of the approved EMPr and amended EMPr (including all relevant Appendices/Annexures)
- Copies of all licences/permits/approvals required
- Copy of the Stormwater Management Plan (if applicable)
- Copy of the Rehabilitation Plans (if applicable)
- All approved Method Statements compiled by the Contractor
- Minutes and attendance registers of environmental site meetings
- Attendance registers for all environmental awareness inductions
- Any up-to-date environmental awareness materials
- Complaints register
- Waste documentation, such as Waste and Sewerage Disposal Certificates (or slips)
- Material Safety Data Sheets for hazardous substances
- Dust Suppression Register (if required)
- A copy of all corrective actions signed off, with references to non-compliance records

- All Environmental Monitoring Reports compiled by the ECO
- All Environmental Audit Reports compiled by the appointed Environmental Auditor
- Declarations of understanding by the Applicant; Project Engineer; Contractors and sub-contractors; designated Environmental Site Officer;
- Notification of Emergencies and Incidents
- Service receipts for chemical toilets and waste removal; and
- Records of all remediation / rehabilitation activities.

A copy of the EMPr, Environmental Monitoring Reports, and Audit Reports must be kept on-site and made available to authorised officials upon request.

6.4 Public Liaison and Communication

Open, transparent communication with affected landowners, communities, and local staff is vital for effective environmental impact management and mitigation. Adequate signage should be erected around the site to inform the public of ongoing construction activities. The signage should include:

- The name of the Contactor
- The name and contact details of the site representative to be contracted in the event of emergencies or complaints

6.5 Complaints and Incidents register

Identifying, recording and reporting complaints and environmental incidents further ensures the monitoring and auditing of environmental compliance and assessment of performance against the actual and perceived environmental aspects and impacts on site.

The complaints must be communicated to the Applicant and ECO who will respond accordingly. An investigation must be carried out, and a response to the complainant must be provided within seven working days. All environmental incidents occurring on the site must be recorded by the Contractor,PE, ESO, ECO and submitted to the applicant. The following information will be documented:

- Time, date, location and nature of the incident
- Actions taken and by whom
- Response to complainant
- Measures to be implemented to address the complaint

The ECO, in conjunction with the Engineer and Contractor, will identify and authorize remediation action where necessary.

EMPr compliance is the responsibility of all the parties that make up the project team. Similarly, all these parties have a role to play in EMPr compliance monitoring and reporting in accordance with the authority structure. For example, sub-contractors must monitor their own compliance and report any discrepancies, non-compliances or incidents to the contractor, while the contractor must in turn monitor the sub-contractor compliance. In turn, the Engineer must monitor the Contractor's EMPr compliance on a day-to-day basis while the ECO has the role to undertake regular site inspections and audits and prepare audit reports.

The above records will form an integral part of the Contractors' Records. These records will be kept with the EMPr, and will be made available for scrutiny if so, requested by the applicant or authorities.

Outlined below are levels relating to the severity of environmental problems, which will be implemented. The principle is to keep as many issues at the lowest levels of severity as possible.

Level 1: The ECO discusses the problem with the contractor or guilty party, and they work out a solution together. The ECO records the discussion and the solution implemented.

Level 2: The ECO or Client observes a more serious infringement, and notifies the guilty party in writing, with a deadline by which the problem must be rectified. All costs will be borne by the contractor.

Level 3 : The ECO shall order the contractor to suspend part, or all, the works. The suspension will be enforced until such time as the offending party/parties, procedure or equipment is corrected and/or remedial measures put in place if required. No extension of time will be granted for such delays and all cost will be borne by the contractor.

Level 4: Breach of contract - One of the possible consequences of this is the removal of a contractor and/or equipment from the site and/or the termination of the contract, whether a construction contract or an employment contract. Such measures will not replace any legal proceedings that the applicant may choose to institute against the contractor.

7. METHOD STATEMENTS

A method statement must be completed *by the Contractor*, for each activity requiring a method statement, as specified in this EMPr or as requested by the ECO. A method statement is a document that details the way a work task or process is to be completed. The method statement should outline the hazards involved in the task, and include a step by step guide on how to implement the action in a safe manner, that reduces the overall risk to people and the environment. The method statement must also detail the control measures and remediation activities to ensure the safety of persons who are affected by the task or process, as well as the environment.

The method statement must identify the risks associated with the various work stage at hand. Steps to reduce the potential risk associated with these stages must then be determined and included in the method statement. The sequential steps and actions to be followed by the persons carrying out the works must be written down and signed by the responsible party. The Resident Engineer or his representative (and the ECO) must approve any deviations from the approved Method Statements. All amendments must be in writing and must be submitted to the Resident Engineer or his representative.
The method statement must cover applicable details with regard to:

- construction procedures,
- materials and equipment to be used,

- getting the equipment to and from site,
- how the equipment/ material will be *moved* and where it will be *stored* while on site,
- the containment (or action to be taken if containment is not possible) of leaks or spills of any liquid or material that may occur,
- timing and location of activities,
- any other information deemed necessary by the RE and ECO.

The method statement should be written by a person that is competent in the tasks to be undertaken and how these can be effectively communicated. *The contractor shall not commence an activity until all required method statements have been approved the ECO.* Such approval should not unreasonably be withheld.

All control measures detailed in the method statement must be the subject of "environmental awareness" talks prior to the initiation of works. By explaining these important measures during the environmental awareness discussion, everyone involved will have a clear understanding of how to carry out the work, as well as the safe work method sequences and equipment required. See Appendix B for the recommended Method Statement Template.

Approved method statements must be readily available on site, preferably in the contractors camp. The location of the approved method statements must be communicated to all relevant personnel. The contractor shall carry out the works in accordance with the approved method statements as they apply to the work in progress.

The contractor should produce the following method statements as a minimum, prior to construction activities:

- Site Office establishment
- Stockpiling of materials
- Stormwater management plan
- Site Dust Management
- Crew Camps and construction lay down areas
- Solid Waste Management
- Sourcing, excavating, transporting and dumping of fill and spoil material
- Mitigating the construction impacts on the artificial wetlands north of the study area
- Hazardous Material Management
- Hydrocarbon Management
- Surface Water Management
- Noise and Vibration Management
- Cement and Concrete Batching
- Pollution Control
- Site Access and Traffic Management
- Incident and Emergency Response Management

Additional method statements must be developed (or revised) if the need therefore is identified during the construction phase of the project.

The Contractor must abide by these approved method statements, and any activity covered by a method statement shall not commence until the ECO has approved the method statement. The method statement must be submitted to the ECO 2 weeks prior to the intended date of commencement of the activity. See Appendix 2 for the proposed Method Statement Template.

8. ENVIRONMENTAL AWARENESS TRAINING

The ESO and ECO will be responsible for putting an Environmental Awareness Training Programme in place, for all staff members. Before commencing with any work, all staff members must be briefed about the Environmental Code of Conduct. After being briefed about the contents of the Environmental Code of Conduct, staff members must sign an Environmental Training register as proof of their training.

The presentation shall be conducted, as far as is possible, in the employees' language of choice. As a minimum, training should include:

* Explanation of the importance of complying with the EMPr.
* Discussion of the potential environmental impacts of construction activities.
* Explanation of the mitigation measures that must be implemented when carrying out their activities.
* The significant environmental impacts, actual or potential, because of their work activities.
* The importance of not littering.
* The need to use water sparingly.
* Details of, and encouragement to, minimise the production of waste and re-use, recover and recycle waste where possible.
* Details regarding archaeological and/or historical sites which may be unearthed during construction and the procedures to be followed should these be encountered.
* Details regarding fauna, and the procedures to be followed should these be encountered during the construction phase.

Training should be conducted by a suitably qualified person and if necessary, in more than one language to ensure it is understood by all workers. Copies of the environmental training must be available on site in languages appropriate to the work force. Records of the training sessions including attendance registers, nature of training and date of training should be kept to ensure all parties have received the necessary training and for auditing purposes. In addition to training, general environmental awareness must be fostered among the project's workforce to encourage the implementation of environmentally sound practices throughout its duration. Environmental awareness and training is an important aspect of the implementation of the EMPr.

Once the awareness plan and training material are available, the entire workforce and project management team should undergo an environmental awareness training course. Environmental

awareness training is critical for the workforce to understand how they can play a role in achieving the objectives specified in the EMPr. All visitors to the site (including project team members which are not based onsite), must undergo Environmental Induction before being permitted to the construction and associated area. The Environmental Induction should be structured to provide a condensed version of the comprehensive Environmental Awareness Training that will be provided to the workforce / onsite staff.

Environmental awareness could be fostered in the following manner:

- Induction for all workers on site, before commencing work;
- Refresher courses as and when required;
- Daily toolbox talks at the start of each day with all workers coming on site, where workers might be alerted to particular environmental concerns associated with their tasks for that day or the area/habitat in which they are working; and
- Courses must be given by suitably qualified personnel and in a language and medium understood by workers/employees. The Environmental Awareness Plan should be drawn up by the PM, in consultation with the ECO and EO and should be kept for implementation and audit purposes. The Environmental Awareness Plan should be a dynamic document (or set of documents) which should be updated as changes to the project, environment, staff and etc. occur.

The applicable training will be as follows:

- The ESO must be appropriately trained in environmental management and shall possess the skills necessary to impart environmental management skills to all personnel involved in the construction of the proposed mixed land use and residential development;
- The PE and ESO must ensure, on behalf of the applicant, that the employees (including construction workers, engineers, and long-term employees) are adequately trained and understand the management measures provided in the EMPr; and
- All employees shall have an induction presentation on environmental awareness.

The induction and training must, as a minimum, include the following:

- The importance of conformance with all the specifications of the EMPr and other environmental policies and procedures;
- The significant environmental impacts, actual or potential, of their work activities;
- The environmental benefits of improved personal performance;
- Their roles and responsibilities in achieving conformance with the EMPr and other environmental policies and procedures;
- The potential consequences of departure from specified operating procedures; and
- The mitigation measures required to be implemented when carrying out their work activities.

9. NON-COMPLIANCE, PENALTIES AND STOP WORK ORDERS

The EMPr will be binding on all contractors operating on the site and must be included within the Contractual Clauses. The Contractor shall comply with the environmental specifications and requirements on an ongoing basis and any failure on his part to do so will entitle the ECO and applicant to impose a penalty.

9.1 Remedial and Preventative Action / Management of Environmental Incidents as they arise

The ECO must devise a Remedial Action Procedure for implementing corrective and preventive action. The Corrective Action Procedure is to be implemented by all contractors and subcontractors on site. This system should:

a) Report non-compliance with procedures or targets identified during monitoring and inspections (on a formal Incident Form).
b) Report other failures creating environmental problems.
c) Report imminent non-compliance and potential environmental problems.
d) Through the Resident Engineer, delegate responsibility for corrective and preventive action.
e) Document the resolution of the reported non-compliance or environmental problem.
f) Impose disciplinary action where persistent non-compliance occurs.

9.2 Individual transgressions

It is recommended that the engineers/contractors institute fines for the following less serious violations and any others determined during work as detailed below:

- Littering on site.
- Lighting of illegal fires on site.
- Persistent or un-repaired fuel and oil leaks.
- Any persons, vehicles or equipment related to the Contractor's operations found within designated "no-go" areas (artificial wetlands).
- Excess dust or excess noise emanating from site.
- Possession or use of intoxicating substances on site.
- Any vehicles being driven in excess of designated speed limits.
- Removal and/or damage to heritage objects on site.
- Urination and defecation anywhere except at designated facilities.
- Unauthorised camp establishment (including stockpiling, storage, etc.);
- Hydrocarbons / hazardous material: negligent spills / leaks and insufficient storage;
- Ablution facilities: non-use, insufficient facilities, insufficient maintenance;
- Late method statements or failure to submit method statements;
- Insufficient solid waste management (including clean-up of litter, unauthorised dumping etc.);
- Erosion due to negligence / non-performance;
- Excessive cement / concrete spillage / contamination
- Insufficient fire control and unauthorised fires;
- Non-induction of staff.

The Project Engineer should use these as a guide and use his/her own judgement in determining the issues of non-compliance and the severity of the contravention and thus the value of the spot fine:

An individual entering the defined No Go boundaries of the site;	R500 – 150
An individual driving a vehicle into the defined No Go boundaries of the site;	R300 – 1500
An individual driving any earthmoving plant into the defined No Go boundaries of the site;	R500 – 3000
A plant operator ignoring a verbal warning to have an oil leak from machinery repaired;	R100 – 300
An individual littering on site;	R50 – 300
An individual not making use of the ablution facilities;	R50 – 200
An individual spilling fuels (non use of funnels/pumps etc);	R100 – 500
An individual eating outside of the defined eating area;	R50 – 200
Smoking on site other than in the designated site camp;	R50 – 200

These fines should be revised when the construction phase commences to ensure relevance.

For each subsequent similar offence committed by the same individual, the fine should be doubled in value to a maximum value of R5 000. The Project Engineer will not collect the fines from individuals, but will rather inform the Contractor of the contravention, the individual's identity and the amount of the fine. The fine will be deducted from the Contractors' monthly certificate, or the Project Engineer will issue a variation order, to the value of the fine, for the Contractor to undertake activities that would in some way enhance the state of the environment or the site. It will be the Contractor's responsibility to reclaim such fines from the guilty individuals. These fines do not preclude any prosecution under any other law.

9.3 Contractors Transgressions

Offences and Penalties

The Project Engineer, in consultation with the ECO, may also issue penalties directly to the Contractor for general non-compliance with the EMPr. The following serves as a guide for such penalties in certain situations. Any avoidable non-compliance with the conditions of the EMP shall be considered sufficient ground for the imposition of a penalty. Possible offences, which should result in the issuing of a contractual penalty, include, but are not limited to:

- Entrance into no-go areas / adjacent properties;
- Unauthorised damage to natural vegetation;
- Stockpiling, hazardous chemical storage in no go areas;
- Hydrocarbons / hazardous material: negligent spills / leaks and insufficient storage;
- Ablution facilities: non-use, insufficient facilities, insufficient maintenance;
- Insufficient solid waste management (including clean-up of litter, unauthorised dumping etc.);
- Erosion due to negligence / non-performance;
- Excessive cement / concrete spillage / contamination'
- Insufficient fire control and unauthorised fires;

- Preventable damage to adjacent water courses or pollution of waterbodies; and
- Non-induction of staff.

	RANDS
Excessive litter on the site or in the site camp;	500 – 2000
Water wastage or water contamination;	500 – 4000
Spillage of fuels on site;	500 – 4000
Inadequate provision of waste bins and toilets;	500 – 2000
The non provision of eating areas;	500 – 1000
Unnecessary dust generation and inadequate control;	500 – 3000
Unnecessary noise generation;	500 – 3000
Non provision of hydrocarbon fuel absorbents;	1000 – 3000
Inadequate erosion controls and prevention;	500 – 4000

The issuing of a penalty will usually be preceded by a verbal warning by the ECO, during which a time frame for rectifying the situation, as well as the penalty to be implemented should this not be done within the time frame, will be agreed on. The value of the penalty will depend on the seriousness of the contravention, and thus the Project Manager/Engineer must use his/her judgement in determining the value of the penalty. In addition to penalties, the Project Manager/Engineer has the power to remove from Site any person who is in contravention of the EMPr, and if necessary, the Project Manager/Engineer can suspend the relevant part or all of the works, as required. Note that penalties can be issued over and above costs that are incurred for the repair or rehabilitation of any environmental damage caused by the Contractor and all the parties over which they have responsibility. In this regard costs incurred by the Contractor in repairing or rehabilitating any environmental damage caused by non-compliance with the EMPr cannot be claimed in the Contract Bill, nor can any extension of time be claimed for such works.

Penalty amounts should be deducted from Certificate payments made to the Contractor. As an example, these funds can be kept separately and donated to a non-profit organisation that works in the environmental or conservation field, or used as a reward system/incentive for employees doing a good job.

The applicant or project Engineer at their own discretion, or on recommendation from the ECO, may also order the Contractor to place on hold or suspend part or all the works if the Contractor repeatedly causes damage to the environment by not adhering to the EMPr (i.e., more than 3 cases of infringements). The suspension will be enforced until such time as the offending actions, procedure or equipment is corrected. No extension of time will be granted for such delays and all costs will be borne by the Contractor. Work may also be placed on hold if a heritage artefact or feature or grave is uncovered or to prevent a potential significant incident from occurring or spreading.

9.4 Emergency Preparedness

The contractor must develop environmental emergency response procedures to ensure that there will be an appropriate response to unexpected or accidental actions or unforeseeable incidents that will cause environmental impacts during the construction period. Such activities may include, *inter alia*:

- Accidental fires.
- Accidental spillage of hazardous substances.
- Accidental injury to staff.

The contractor and sub-contractors shall comply with the emergency preparedness incident reporting requirements that must be developed prior to construction.

10. LIMITATIONS AND ASSUMPTIONS REGARDING ASSESSMENT AND MITIGATING OF IMPACTS

The assumption for the development of this EMPr is that all significant issues have been identified. Environmental issues, concerns and development constraints were identified using professional judgement, project information (all technical and present biophysical specialist reports), experience of the professional team, a review of available literature, site visits and consultation with the authorities.

The significance of the environmental issues has been evaluated, and mitigation and management measures have been identified as part of the EMPr development. The effectiveness of the EMPr is limited by the level of adherence to the conditions detailed in this report by the applicant, and the various contractors and agents acting on behalf of the Client. It is further assumed that compliance with the EMPr will be monitored and audited on a regular basis as set out in the EMPr. This EMPr is a dynamic document that must be continually updated, as and when required.

11. SUMMARY OF ACTIVITIES AND ASPECTS CAUSING IMPACTS

The construction of the LIA MRO facility and associated activities will result in negative impacts on the receiving environment. These negative impacts have been identified and summarised by Seedcracker Environmental Consulting as follows:

- Geotechnical suitability
- Impacts to the artificial Wetlands
- Soil erosion
- Loss of vegetation and habitat
- Soil pollution
- Surface water quality
- Ground water quality
- Waste Management
- Noise and disturbance
- Visual impact
- Impact on Archaeological and/or Paleontological Resources

- Air quality
- Traffic Impact
- Infrastructure and services
- Employment, safety and security

The above-mentioned aspects can potentially cause negative impacts that may occur during the planning, construction, and operational phases of the proposed project. To prevent and/or minimise these impacts, care must be taken where practical and feasible, for the disposal of waste, spillage, storage, noise, dust control, sediment management, the rehabilitation of disturbed areas and management of the different phases of construction and operation. This can be achieved by effective implementation of the necessary mitigation measures as stipulated in this EMPr. With adequate management, the associated risks and significant negative impacts of much of the proposed project can be minimised and/or entirely negated. These are dealt with in this EMPr.

12.THE ENVIRONMENTAL MANAGEMENT PROGRAMME

The Environmental Management Requirements are designed to address the issues and impacts raised through the environmental assessment process. Each of the Environmental Management Requirements is presented in table format.

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
PLANNING AND DESIGN: MANAGEMENT ACTIONS THAT MUST BE COMPLETED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL (LICT) STRUCTURES: ADMINISTRATIVE AND LEGAL REQUIREMENTS				
Planning and Design requirements	• Environmental Authorisation Conditions must be incorporated into this EMPr to ensure that all conditions and requirements of the Environmental Authorisation and the EMPr stipulated as pre-requisites for construction are met. • Secure perimeter fencing, lighting, and signage must be installed before works begin. • Develop a phased construction plan in consultation with the airport. • Ensure aviation safety buffers and airspace restrictions are always respected. • Ensure all licenses and authorizations (e.g., environmental authorisation, water use licence if applicable) are granted and conditions integrated into the Environmental Management Program (EMPr).	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. **During design and prior to, construction**	Ensure that all requirements of the Environmental Authorisation are in place and that any approval is obtained in writing prior to commencing any construction activities. Prevent potential pollution and /or environmental degradation during the operational phase of the project	**Applicant, Project Engineer, ESO, ECO**
Stormwater Management and Artificial Wetland Replacement	• Design the stormwater system to replicate the hydrological attenuation function currently provided by the artificial wetland, ensuring equal or improved peak-flow reduction and stormwater storage capacity. • Attenuation ponds must be engineered in accordance with municipal and national stormwater standards (GN 704 where applicable, urban drainage best practice, and SANS codes). • Pre-treatment features (such as silt traps, oil-grit		Clean stormwater is effectively diverted around all construction zones using berms, silt socks, cut-off drains, or channels. Dirty water runoff from construction areas is captured, detained, and treated in sediment traps or settling sumps.	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	separators and stilling chambers) must be incorporated to prevent sediment accumulation and contamination within the pond system. • Include engineered inflow structures to manage catchment runoff volumes entering the new pond system. • Design outflow structures to ensure gradual release, preventing downstream erosion and reducing peak discharge rates. • Install maintenance access points to allow periodic clearing of debris, sediment and vegetation. • Confirm subsurface infiltration characteristics to determine suitable lining requirements (e.g., clay liners, geomembranes) to avoid unwanted seepage. • Ensure stormwater attenuation capacity aligns with the post-development hydrological modelling and accommodates climate-change-adjusted rainfall intensities. • Reduce wetland-like habitat features within the airport precinct to comply with aviation safety requirements. • The attenuation ponds must be designed not to attract waterfowl or other large birds, including steep or rip-rap embankments instead of gentle wetland-style slopes, limited emergent vegetation, deeper water or fluctuating levels that discourage nesting and avoidance of shallow areas • The design must ensure that the current unintended wetland system (created through impounding of stormwater) does not reform.		No uncontrolled mixing of clean and dirty water occurs on site. No temporary standing water or shallow pooled areas remain for longer than 24–48 hours. Artificial wetland footprints are progressively dewatered and stabilised during construction. No sediment-laden water leaves the site. Intact silt traps, silt socks, inlet protection. Dewatering (if needed) is conducted into settling basins, not directly to soil or stormwater drains. Water discharged after settling is visibly free of turbidity and debris. No wildlife-attractant vegetation is allowed in, or near, stormwater infrastructure. No shallow ponding or vegetated wet areas exist within the precinct.	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY

	• Prevent prolonged ponding in unintended areas through careful earth shaping, stormwater channel design and cut-off drains.
	• Plan earthworks to ensure that wetland transition areas are stabilised rapidly, avoiding erosion or uncontrolled water accumulation during construction.
	• Maintain temporary sediment controls (silt fences, sediment traps) until the engineered system is fully operational.
	• Incorporate erosion-control stabilisation measures into the design (e.g., geotextiles, gabions, reno mattresses) particularly along temporary diversions or compacted construction access routes.
	• Include a construction staging plan to prevent exposure of large bare areas during the wet season.
	• Ensure that the new attenuation system provides the same or improved hydrological functionality as the current artificial wetland—specifically:
	  ○ peak flow attenuation
	  ○ sediment trapping
	  ○ water-quality protection
	  ○ controlled release to downstream systems
	• All attenuation ponds and related stormwater infrastructure must incorporate permanent access routes for maintenance vehicles.
	• Provide stable working areas for desilting, vegetation removal and inspection activities.
	• Access must remain functional year-round, including during wet weather.
			Attenuation ponds are kept free of reeds, sedges or emergent plants.	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• Include monitoring points (staff gauges, sediment depth markers, inlet/outlet inspection chambers) to support long-term functionality checks. • Ensure adaptive management provisions for future modifications if aviation safety requirements change. • Conduct pre-clearing inspections to ensure no protected species occur on site. • Strip and store topsoil separately from subsoil, in low-compaction berms under 2m high. • Identify and designate haulage and delivery routes in advance to avoid random vehicle movement. • Use geotextile mats or crushed stone for temporary access to reduce soil compaction. • Install stormwater diversion berms to direct runoff away from sensitive areas. • Secure perimeter fencing, lighting, and signage must be installed before works begin. • If contamination is found, implement a remediation plan before construction begins.			
Lanseria Airport Security Access Control and Security Measures	• Before commencing any maintenance, renovation, or construction work, contractors are required to complete and submit specific documentation to the airport's administrative offices. This process ensures that all activities align with the necessary safety and compliance standards. • Contractors must comply with all security, health, safety, and emergency measures instituted by the airport. These measures are in accordance with the		All access points to the construction site are controlled, monitored and secured. Only authorised personnel (with approved identification, permits or access cards) may enter the construction area.	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	standards set by the South African Civil Aviation Authority (SACAA), the International Civil Aviation Organization (ICAO), and the International Air Transport Association (IATA). • For airside access, contractors may need to obtain a permit. • Lanseria International Airport maintains 24/7 emergency and medical services, including Category 7 Fire & Rescue vehicles. These services comply with all Civil Aviation Authority (CAA) and International Civil Aviation Organization (ICAO) requirements.		A contractor register of all workers must be maintained and reconciled daily. Access points must remain locked or guarded when not in use. If the construction site intersects airside zones, the contractor must comply with: ○ airside permit requirements, ○ safety inductions, ○ escort protocols, ○ restricted-zone procedures. All airside access points must meet airport security standards and remain under security supervision. Perimeter fencing around the construction site must remain intact, upright and secure at all times. All site staff must undergo an airport security induction covering: ○ restricted areas; ○ access protocols;	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
			○ emergency response routes; ○ prohibited items; ○ wildlife-hazard reporting. The contractor must be familiar with airport emergency procedures and evacuation protocols. Any incident involving security breaches, suspicious activity, or unauthorised access must be reported to: ○ the Airport Security Department, ○ the ECO, and ○ the Applicant. Incident reports must be logged and corrective actions taken within 24–48 hours. Construction activities must not obstruct emergency access routes. Signage must be visible, compliant, and hazard-specific (restricted area, PPE, no access, etc.)	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Site Planning for Construction	• Prior to construction commencing on site, the Project Engineer in consultation with the ECO and other project staff must compile a detailed Environmental Management site plan indicating where the various infrastructures will be located and which areas of the site will be utilised for construction and associated operations. The plan should include items such as the location of stockpile sites. Plans for the location of construction roads / tracks, turning circles, working areas and facilities should seek to minimise the total area that is to be disturbed at any given point. Plans for the removal and disposal of wastes and any hazardous or contaminated materials (such as; fuel drums, soil which has been contaminated with leaked fuel or oil, and alien weed infested soil) should be described, as appropriate for the scale of the operation. The construction camp site should also be located on this plan. The issues listed in Appendix 3 must be shown on the Site Plan. • Method statements for the above activities is required from the contractor. • Indicate details of the access and internal roads and track. • Indicate all “no go” areas. • Fence off the site to prevent edge effects into the adjacent vacant land portions.		Approved site plan before commencing with construction	**Applicant, Project Engineer, ESO, ECO**
Construction Camp establishment	• The site selected for a construction camp must ensure potential negative impacts on the biophysical environment are kept to a minimum. All ancillary	Actions and method statements are to be completed by the PE	Approved site plan before commencing with construction	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	infrastructure including site offices, ablutions, storage facilities, vehicle parking facilities and any other infrastructure must be placed within transformed areas, avoiding areas of indigenous vegetation. • The construction site must be defined, fenced off and limited to authorised contractors only. • The construction site camp must comprise of: - Site office; - Ablution facilities; - Designated first aid area; - Eating areas; - Storage areas; • Development must be kept within the footprint and may not extend into any areas outside of the footprint design/project area. • The footprint of the construction camp must be kept to a minimum. • Enough parking must be provided for site staff and visitors at the construction camp. • Drainage from the site must be planned to prevent standing water and erosion occurring from run-off. • No abstraction from aquatic sources is permitted without the required authorisations from DWS. • Chemical toilets must be used as ablution facilities during the construction period by all contractors. • Chemical waste from the toilets may under no circumstances be disposed via a septic tank system but must be disposed of by a reputable waste disposal company. Safe disposal certificates must be kept on	prior to the commencement of the relevant construction activity. During design and prior to, construction		

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	site, for record keeping purposes. • Bins and / or skips must be provided at frequent intervals for disposal of waste at the construction area and construction camp • The excavation and use of rubbish pits on site are forbidden. All waste must be reused, recycled or disposed of by registered companies or at a registered waste disposal site. • Fuel must be stored in closed drums within a secondary containment facility or bowsers with pollution prevention measures in the event of spillage. • Fuel tanks must meet relevant specifications and be elevated to provide for the early detection of leaks. • Staff dealing with these materials / substances must be aware of their potential impacts and follow the proper safety measures. • Appropriate safety signs (in accordance with SABS 1186) must be erected at storage facilities and tank capacities must be clearly indicated (in accordance with SABS 0232).			
Roles and Responsibilities	• The overall responsibility for ensuring the implementation of this environmental management plan rests with the Applicant, Project Engineer, Contractor, ESO and ECO. • Responsibility for on-site implementation of environmental management as well as the associated cost with the implementation of the EMPr rests with all appointed contractors, sub-contractors and suppliers. • Appointed contractors must ensure that all permanent	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior	All team members are aware of their daily roles and responsibilities	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	and temporary staff, sub-contractors and suppliers adhere to this EMPr. • **The Project Engineer and main contractor must appoint a senior staff member directly involved in the site construction activities as the Environmental Site Officer (ESO). This person must ensure the implementation of and adherence to the EMPr in the contractor's execution of the day-to-day construction activities.** • **The environmental responsibility of the ESO must be specified in this person's duties, which must also include:** - **Liaison with the appointed ECO;** - **Ensuring environmental awareness among members of the workforce;** - **Ensuring that the Contractor/s and members of the construction workforce are aware of the requirements of the EMPr;** - **The on-site implementation of the EMPr;** - **Monitoring inappropriate behaviour, environmental impacts, including pollution and environmental incidents; and** - **The implementation of corrective action.** • The independent ECO must be the responsible person for monitoring and reporting on compliance in respect of the implementation of the EMPr. • **The contractor and Environmental Site Officer must inform the ECO prior to the commencement of any significant construction activity.**	to, construction		

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Compliance	• All persons appointed / employed by the PE and their contractors on this project must abide by the requirements of the EMPr. • The applicant, PE or contractors may not direct a person to undertake any activity which would place them in contravention of the specifications contained within the EMPr. • Any member of the construction, operation or maintenance workforce found to be in blatant disregard of any of the specifications contained within the EMPr may be ordered to leave the site. • If a contractor is in breach of any of the specifications contained in the EMPr, the applicant, PE / ECO / ESO must, verbally or in writing, instruct the responsible Contractor regarding corrective and/or remedial action required, specify a timeframe for implementation of these actions, and/or indicate that work must be suspended in the event non-compliance continues. Contractors must be responsible and will bear the cost of any delays, corrective or remedial actions required because of non-compliance with the specifications and clauses of the EMPr. • A fine will be issued by the GDEnv for willful negligence or non-compliance resulting in environmental degradation or pollution. The fine will be determined by the GDEnv based on the severity of the incident. These costs will not be recoverable from the project & will be utilised to rectify the environmental degradation caused • Monthly monitoring, auditing must be conducted by the	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior to, construction	All team members are aware of their daily roles and responsibilities	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	independent ECO. • The appointed ECO must submit audit reports to the contractor and applicant on a monthly basis. • The ECO, ESO and Engineer must consult and review compliance and performance against the EMPr and resolve the identified environmental concerns, non-compliance (including environmental incidents) and any complaints.			
Environmental Awareness	• Prior to the commencement of construction, proper signage must be erected along the roads warning both pedestrians and motorists of earthworks being undertaken on site. • All members of the construction workforce working on the site must be provided with proper high visibility clothing to ensure that they can be distinguished from the general public.	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. The actions must be implemented daily by the entire construction team	Approved Training and Environmental Awareness programme before commencing with construction	**Applicant, Project Engineer, ESO, ECO**
Environmental Training and Induction	• The contractor has the responsibility to ensure all personnel involved in the project are aware of, and familiar with, the EMPr, the key environmental issues and consequences of non-compliance to the EMPr. • To ensure compliance to the EMPr by contractors, sub-contractors and employees, the applicant, PE and Main Contractor must ensure that the EMPr forms part of the formal site induction for all contractors, sub-contractors and casual labourers. The main contractor/ESO must prepare and submit the training material to the ECO for approval. The training must, as a minimum, include the	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior to, construction	Approved Training and Environmental Awareness programme before commencing with construction	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	following: - Why the environment needs to be protected; - Their roles and responsibilities in achieving compliance with the EMPr, including emergency preparedness and response requirements; and - The potential consequences of departure from specified operating procedures.			
Restriction of Working Areas	• Access to the site must be restricted at any one time, to reduce the potential for accidents, dust generation, soil and water pollution, fires, noise, and unnecessary environmental damage. • Prior to any construction beginning, the actual site to be worked must be clearly defined and demarcated by means of highly visible durable materials, e.g. orange netting, no danger tape is to be used. • All construction material and machinery required for construction to be located within the demarcated activity zone. Vegetation within the demarcated zone may be cleared while vegetation outside of the zone must be left intact until construction reaches that area. • The markings of the site must be maintained throughout the construction period, as and where determined by the Resident Engineer and ECO. • No activities or dumping may take place outside of the demarcated activity zone. This is to ensure that unnecessary damage is not done to the surrounding areas. It will also ensure the safety of people working on site and people moving in the vicinity of the site.	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior to, construction	Controlled access to the site for the contractors, work crews, sub-contractors.	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• Construction workers may not be allowed to stay on-site overnight.			
Water management	• Stormwater control measures must be designed and implemented in such a manner that ponding, soil saturation, and erosion are prevented. • **Storage areas that contain liquids, that could be hazardous to the environment, must be bunded with an approved impermeable liner. Bunds must have the capacity to hold 110% of the quantity of liquid stored** • A spill contingency plan must be compiled and implemented. The following must be considered in the event of a spill: - Stop the source of the spill; - Contain the spill; - All significant spills must be reported to the relevant authorities; - Remove the spilled product for treatment of authorised disposal; - Determine if there are soil, water, environmental or any other impact; - The incident must be documented; • Silt fences, geotextile barriers, and sediment basins should be installed downslope of disturbance areas. • Temporary diversion channels or berms should be used to direct clean runoff away from exposed soils. • Stabilize disturbed areas (e.g., hydroseeding, mulch, erosion blankets) as soon as possible. • Clearly demarcate construction boundaries and limit disturbance only to essential areas.	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior to, construction	Approved Water management programme before commencing with construction	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• Avoid clearing vegetation near artificial wetlands unless absolutely necessary. • Use temporary retention or detention ponds to control peak flows and reduce runoff velocity. • Designate and maintain stabilized construction access roads to prevent soil tracking onto roads. • Prohibit concrete washout near any stormwater drainage lines. • Conduct weekly inspections of all stormwater controls • Direct discharges of runoff from developed/ disturbed areas to receiving waters must be avoided wherever possible • Water discharged into the environment must be done so in a manner that is not conducive to erosion and does not result in negative impacts to any watercourse.			
Site security and safety considerations	• Align all plans with Lanseria Airport's internal environmental protocols, and consult with ATNS and Airport Operations for any constraints related to aerodrome safety. • The camp site must be secured with a fence to ensure the safety and security of the site and infrastructure as well as the safety of the general public. • Details identifying what safety precautions must be adhered to must be ensured for the safety of all staff, on site during the construction period. This must include protective clothing requirements for all types of construction activities on site, e.g., protection against dust, noise, operation of heavy machinery. • No persons may stay overnight at the construction site	During design and prior to, construction	No incidents on site	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	camp.			
Fauna and Flora Management	• Vegetation clearing must be done at the development footprint. Large areas must not be cleared unless they are surfaced or used immediately • Vegetation must be cleared independently of the topsoil to allow for topsoil collection and stockpiling • Use of herbicides must not be allowed for vegetation clearing unless required for specific application to invasive species. • Exposed areas of soil must be stabilised as soon as possible such as through landscaping • No small animals should be intentionally killed or destroyed on the site. • Alien invasive plants which establish on site, must be removed and eradicated throughout all stages of the project.	Actions and method statements are to be completed by the PE prior to the commencement of the relevant construction activity. During design and prior to, construction	No unnecessary or negligent impacts to fauna and flora on site	**Applicant, Project Engineer, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
CONSTRUCTION: THIS SECTION PRESENTS THE ENVIRONMENTAL REQUIREMENTS FOR THE CONSTRUCTION ACTIVITIES FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3 & LICT4 BUILDINGS AND ASSOCIATED ACTIVITIES. DETAILS OF THE ACTIONS TO BE UNDERTAKEN MUST BE PRESENTED IN THE METHOD STATEMENT FOR EACH ASPECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES. METHOD STATEMENTS MUST BE COMPILED BY THE CONTRACTORS OR THEIR SUB-CONTRACTORS AND APPROVED BY THE PROJECT ENGINEER, ESO AND THE ECO.				
Construction camp site	• Chemical toilets must be maintained in a clean state. Portable chemical toilets must be provided to the ratio of at least 1 toilet per 10 workers. All temporary/portable toilets must be secured to the ground to the satisfaction of the PM to prevent them from toppling over or being blown over by wind. • No spillage must occur when the toilets are cleaned or emptied and that the contents are removed from the site. The contractor/service provider is to provide proof that the toilets contents are disposed of at a registered facility. • Under no circumstances may open areas or the surrounding properties be used as a toilet facility • Temporary toilet facilities and sanitation facilities must be serviced weekly • Storage of material, chemicals, fuels etc. must not pose a risk to the surrounding environment and this includes	During construction	Full compliance with EMPr requirements	**Contractor, ESO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	surface and groundwater. Temporary bunds must also be constructed around chemical or fuel storage areas to contain possible spillages • No construction or storing of materials must be located outside of the defined layout area. These areas must be demarcated prior to any activities commencing and personnel instructed of the rules to stay out of these areas (unless clearing alien invasive plants). • Storage areas must be on level ground. • Plant and equipment must be maintained to prevent spillage of oil, diesel, fuel or hydraulic fluid. The Contractor must repair or withdraw equipment or machinery from use if they consider these to be polluting and irreparable. • Suitably covered receptacles must always be available and frequently placed for the disposal of waste oils and greases. All used oils, grease or hydraulic fluids must be placed therein, and these receptacles must be removed on a consistent basis for recycling. • No smoking may be allowed in the vicinity of storage or dispensing areas. • Fuel decanting and refuelling must take place within the construction camp only. Oil spill kits must be placed at the construction camp for the handling of accidental spillage • All temporary offices, equipment laydown areas, storage areas, stockpile areas, etc., must be located at on flat surfaces, to minimise the probability of impacts related to increased stormwater run-off intensity and			

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	spills of hazardous substances during construction activities.			
Access to the construction site	• Align all plans with Lanseria Airport's internal environmental protocols, and consult with ATNS and Airport Operations for any constraints related to aerodrome safety.	During construction	Full compliance with EMPr requirements	**Contractor, ESO**
Vegetation clearing	• All ancillary infrastructure including site offices, ablutions, storage facilities, vehicle parking facilities and any other infrastructure must be placed within transformed areas, preferably the runway Charlie apron that is used for fire fighting training and the storage of old planes. • No burning on site is allowed under any circumstances • All manually cleared Alien invasive Plant species must be disposed of carefully and must not be dumped in any areas of indigenous vegetation, even temporarily • No mass clearing of vegetation must be done, but rather vegetation should be cleared as work progresses. No large areas must be cleared unless surfacing occurs immediately after	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**
Development over artificial wetlands	Allowing wetlands within airport operational boundaries conflicts directly with aviation safety protocols and would be non-compliant with international and national aviation standards. Wetlands attract birds and wildlife, increase flooding risks, and interfere with aircraft operations and infrastructure,	During construction	• No sediment-laden water enters downstream drainage lines or wetland areas outside the approved footprint.	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	posing a clear and significant hazard to life and property. During construction activities for the MRO3 & LICT4 activities, the following mitigation measures can be implemented: • Install temporary berms, silt socks, sandbags, and geotextile barriers to keep clean upslope water away from construction footprints. • Divert dirty water from excavations to temporary sediment traps or settling sumps to avoid uncontrolled release. • Provide a temporary bypass channel for stormwater so that heavy rainfall does not re-form standing water in the old wetland footprint or flood construction works. • No contaminated water (cement wash water, hydrocarbon-polluted water, dirty runoff) may enter the artificial wetland area. • Use portable concrete washout containers and closed-loop wash stations. • Install perimeter silt fences or hay bales around the wetland footprint before excavation begins. • Use geotextiles, mulch, hydroseed, or temporary cover material to stabilise exposed wet soil between work phases. • If the artificial wetland contains standing water, pump and dewater into a temporary settling basin before allowing release. • Dewatering must occur slowly to avoid large sediment pulses downstream.		• Temporary clean/dirty water separation systems (berms, silt socks, swales, silt fences) function effectively. • All downstream stormwater inlets protected with silt socks, gravel bags or geotextile covers. • No temporary ponding or shallow depressions are allowed to persist for longer than 24–48 hours. • No new wetland-like conditions (standing water, saturated soils, emergent vegetation) may form. • Dewatering of saturated soils (if required) occurs into settling tanks or sumps, not directly into soil or stormwater. • Discharged water must be visually clear and free of suspended solids. • All artificial wetland hydrological functionality is	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• All stormwater inlets downstream of the construction area must be fitted with inlet protection (geotextile covers, gravel bags, or silt socks). • If temporary stormwater must be released, route it through a lined channel (rip-rap, reno mattress, geo-cell) to prevent erosion. • Shape earthworks to prevent new depressions from forming temporary puddles. • Refueling must occur in designated, bunded areas away from the artificial wetland footprint. • Maintain spill kits at all high-risk locations and train workers on emergency response. • Any hydrocarbon-impacted soils must be excavated, stored in sealed containers, and removed to a licensed hazardous waste facility. • Maintain vehicular access around the artificial wetland footprint so that safety personnel can respond if animals or birds congregate. • Plan major earthworks outside peak rainfall periods to reduce sedimentation risk. • Monitor sediment control integrity, erosion, runoff pathways, and standing water. • Maintain photo records before, during, and after construction. • Maintain pre-development flow volumes and durations as part of Sustainable Drainage System (SuDS) designs.		successfully transitioned to engineered SUDS/attenuation systems. • Engineered SUDS structures fully functional before decommissioning temporary systems.	

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Flora and Fauna	• Environmental impacts, such as erosion caused by storm water run-off and weed invasion, increase proportionally with the increasing area of disturbance. Weed invasion can be minimised by taking measures to ensure that construction operations do not introduce exotic species to an area, and also by adopting measures to manage weed infestations at the site until such time as native species have become established after rehabilitation. • Any existing and new alien species must be removed as soon as possible after emergence • Alien vegetation that proliferates onsite during construction activities should be immediately removed on discovery. • Topsoil from cleared areas must be stripped, stored separately, and protected for future rehabilitation. • Minimize soil compaction by restricting movement of heavy machinery to designated haul roads. • Schedule progressive rehabilitation of disturbed areas with locally indigenous species, especially those suited for wetland edges. • Install temporary exclusion fencing to prevent wildlife from entering high-risk areas (e.g., trenches, hazardous materials zones). • All open trenches or pits must be covered overnight or fitted with escape ramps for fauna. • Any injured or trapped animals must be reported to the ECO and taken to a licensed rehabilitation facility. • Keep a register of all fauna interactions, injuries, or	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	rescues. • Prevent any polluted runoff, sediment, or construction debris from entering the artificial wetland through use of silt fences, bunds, and vegetative buffers. • Avoid the use of herbicides/pesticides near the wetland or buffer area. • Train all personnel on basic environmental awareness, including fauna sightings, incident reporting, and no-harassment policies for wildlife.			
Erosion	• Soil stockpiles must be secured with sand bags / silt fences around the base of the stockpile should an erosion risk be observed • Temporary soil stockpiles must only be placed within the construction site boundaries. Soil not utilised during construction activities must be stored in a designated soil stockpile area within the construction site camp • Temporary erosion controls must be implemented at areas that are sensitive to erosive processes such as steep slopes; • Erosion and sediment controls must be regularly monitored and maintained to ensure functionality throughout the construction phase. Maintenance checks must be prioritised after high rainfall events and observed damage must be immediately repaired. • Stormwater run-off controls must be implemented across the site in order to reduce the risk of erosion.	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Cultural Historic, Archaeological and Palaeontological Features	• The Project Engineer must ensure that all staff are trained to recognise potential cultural historic, archaeological and palaeontological artefacts and sites. The Resident Engineer must also ensure that a system is in place to cease activities if such a site is identified. • Should any heritage artefacts be exposed during excavation, work on the area where the artefacts were discovered, shall cease immediately and the find brought to the immediate attention of the Resident Engineer who will report it to the Gauteng SAHRA. The area will be fenced off with a radius of 20m around the unearthed item, demarcated as a no-go area and access will be prohibited. • The Project Engineer must then arrange for the appointment of a qualified archaeologist to examine the site and recommend further action. • Following consultation with the archaeologist and SAHRA, the PE will be responsible for approving the Contractor‟s resumption of normal activities. • Under no circumstances shall any artefacts be removed, destroyed or interfered with by anyone on the site. • Contractors and workers shall be advised of the penalties associated with the unlawful removal of cultural, historical, archaeological or palaeontological artefacts, as set out in the National Heritage Resources Act (Act No. 25 of 1999), Section 51.(1). • A Cultural Historic, Archaeological and Palaeontological Method Statement incorporating the above procedures and the site clearance Programme, including timing,	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	physical boundaries, the maximum depth of excavations and programming of these excavations, must be submitted by the appropriate contractor(s) to the Resident Engineer for approval. • Human remains confirmed younger than 60 years (to be confirmed by the police forensic unit or archaeologist) are to be reported directly to the nearest police station.			
Air Quality Management	• Using environmentally acceptable suppression methods where appropriate. • Covering long-term stockpiles or temporarily re-vegetating them. • Halting dust generating activities when wind speed exceeds 35 km/h. • Imposing a 25 km/h speed limit on access roads. • Re-vegetating exposed areas during the operating phase. • Prompt rehabilitation and wetting down of recently cleared areas to minimize dust creation. • Stockpiles (e.g. soil) should be maintained for as short a time as possible and should be enclosed by wind breaking enclosures of similar height to the stockpile. Stockpiles should be situated away from the site boundary, access roads. • Until vegetation used in rehabilitation efforts has established, temporary stabilization methods must be used (e.g. protecting exposed soils with coarse granular materials, mulches, or straw). • Construction should be undertaken in a phased manner, to limit the size of the area to be exposed at any one	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	time. • The Contractor will be responsible for the continued control of dust arising from his operations. Should a dust control method prove to be ineffective by the Project Manager and ECO, alternative methods will need to be conducted by the Contractor. Any changes in the dust control methods shall be for the cost of the Contractor. • Any complaints about dust recorded in the complaints register must be immediately investigated by the Resident Engineer and addressed. Contact details (e.g. telephone number) should be located at the entrance of the site for reporting of excessive dust after hours. • No waste, vegetation or any other material may be burnt on site, in compliance with smoke control regulations issued in accordance with the Air Quality Act (Act 39 of 2004). • Trucks transporting any form of soil or waste should be covered with a tarpaulin. • The speed of the traffic on the access roads needs to be kept slow (25 km/h) to curb any unnecessary dust. • No waste may be buried on site. • Approved Air Quality Method Statements. • Excessive dust generation as determined visually by the ECO, Resident Engineer or his representative is not permitted.			

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Noise Management	• Where possible the contractors must use equipment, which limits excessive noise generation. • Within reason, any complaints pertaining to excessive noise and vibrations as recorded in the complaint register must be investigated by the Resident Engineer and addressed. • Construction activities to be limited to weekdays between 08:00 and 17:00. No work is to be undertaken on Sundays or public holidays. • Vehicles and machinery to be kept in good working order with the prescribed mufflers and silencers. • A Noise and Vibration Method Statement must be submitted by the appropriate contractors to the Resident Engineer for approval.	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**
Water use	• Opportunities to reduce consumption of, or re-use water must be adopted wherever possible. • Methods must be employed to ensure that water is not wasted. Environmental awareness training must ensure that staff is aware of the need to conserve water and to minimise the pollution of water. • A Water Consumption Method Statement must be submitted by the appropriate contractor(s) to the Resident Engineer or his representative for approval. • Potable water tanks must be installed at the construction site for human consumption and sanitation purposes. The contractor will ensure safe drinkable water for the labourers during the construction phase.	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
Water Quality and Stormwater Management	• Minimise the potential contamination of ground and surface water, and to minimise soil erosion, the Project Engineer must ensure that all precautions are taken to ensure that no surface or ground water becomes polluted. • Ensure all construction machinery is in sound working order and free of leaks from oil, fuel or hydraulic and excessive exhaust fume emissions. • Establish a dedicated area for construction vehicles, machinery or equipment to refuel and where cement can be mixed. Vehicle re-fuelling and cement mixing must only take place on impervious surfaces. • No vehicle must be refuelled, serviced or repaired on the construction site, except in designated areas. Only emergency repairs to be conducted on site, all regular service maintenance to be conducted off site. • Temporary storm-water runoff basins and drainage ditches may have to be constructed on site, in order to capture storm-water. • Wherever possible, drainage works should seek to mimic natural drainage patterns and utilise natural drainage lines with retained vegetation. • Anti-erosion measures must disperse run-off to reduce the volume and velocity of surface water flow and vulnerable areas to be stabilised. • Sedimentation into downstream drainage lines must be minimised through the effective stabilisation (e.g. gabions and Reno mattresses) and the re-vegetation of cleared areas.	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• Details of storage of all chemicals must be submitted to the Project Engineer, ESO and ECO for approval. • Emergency plans must be in place in case of spillages onto road surfaces and/or open areas. Spill kits for small spills to be kept on site. • Contaminated soil (e.g. in vehicle parking areas, under generators) must be removed to an appropriate permitted solid waste disposal facility. Waste manifests to be kept by contractors to prove legal disposal of contaminated soil. • Environmental awareness training must ensure that staff is aware of the need to prevent water pollution.			
Waste Management	• Good housekeeping to be always undertaken. No illegal dumping or burning of waste allowed. Waste may not be buried. • Environmental awareness training to be undertaken with the construction workers regarding health and environmental impacts from illegal dumping. • Toilet facilities must be made available to construction staff. If portable chemical toilets are used, these are to be secured to the ground and cleaned weekly. Water should be provided for washing and sanitary bins for women. Waste to be disposed of at a wastewater treatment works. • A system for identifying, classifying and disposing of solid waste must be devised. • Waste should be classified as domestic (including litter), hazardous, or recyclable. • Waste materials (e.g. paper and glass) must be sorted	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	and sent for recycling, where the quantity allows this and if the facilities are available. • No littering is permitted on site; litterbins with secured lids must be provided throughout the site. • Centralised eating facilities must be provided for workers to facilitate litter control. • All non-hazardous solid waste must be removed on a regular basis and disposed of off-site at suitably permitted waste facilities. This includes any building rubble left after construction. • The Contractor may utilise the municipal waste collection services for disposal of waste. • Hazardous materials must only be disposed of at an approved hazardous waste disposal facility. No hazardous waste material to be disposed of as general waste. • A register of waste disposal (including waste manifests) and sorting records must be retained by the contractors and submitted to the Resident Engineer for auditing purposes. • Appropriate temporary disposal areas must be covered and be on an impermeable floor. • Excess soil and stone removed during the excavations should be used in site levelling or contouring. • Excess material not being reused, should be removed from the site and disposed of at a registered waste site landfill site. • A Waste Management Method Statement must be submitted by the appropriate contractor to the Resident			

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	Engineer for approval. • The requirements of the Waste Act (Act 59 of 2008), Health Act (Act 50 of 1992) and the National Environment Management Act (Act 107 of 1998) are applicable to waste management.			
Hazardous Material Management	• Fuel, solvents and other hazardous or toxic substances must be securely stored in a restricted, locked facility approved by the Resident Engineer. • Fuel and hazardous materials containers must be properly labelled. • Chemicals must be stored safely on site, on an impermeable lined surface and surrounded by lined bunds. Chemical storage containers must be inspected daily so that any leaks are detected early. • Storage facilities must be maintained and fire-fighting equipment is to be available and kept in good operating order at all times. • An emergency response plan (ERP) for fire and to manage the capture and treatment of polluted water, must be prepared by the applicant. These ERP's must be made known to the Contractors, and RE, and all staff at the env awareness presentations. • Generators and fuel supply needed for equipment during the construction phase must be placed on trays, which rest on clean river sand. This is to prevent any oil or fuel spills. The river sand (clean or contaminated) must be removed from the site once construction has been completed. All contaminated material must be disposed of at a registered hazardous waste disposal	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	facility. Vehicles are also to be parked over drip trays. • No cement or concrete should be mixed on the soil surface or on plastic sheeting. • A Fuels and Hazardous Materials Storage Method Statement must be submitted by the appropriate contractor to the Resident Engineer for approval.			
Traffic Management	• Signage is to be displayed regarding construction activities. • Construction vehicles are to keep to the speed limits. • Regular maintenance of roads during construction phase.	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**
Socio-Economic, Health, Safety and Security	• Adequate ablution facilities and chemical toilet facilities must be placed on site and maintained in good order for the duration of the construction phase. Toilets must be secured to the ground. Toilets should be removed from site when construction is completed. Waste must be disposed of at a registered waste site. • Adequate clean drinking water must be available to construction staff at all times during the construction period. • An area must be demarcated for staff to conduct all necessary cooking activities. The site must be selected to ensure that there is no risk of fires. • Work crews are not to be housed on site. • Awareness training to be undertaken with the construction workers regarding health and environmental impacts from illegal dumping. • Security to be provided after hours to protect	During construction	Full compliance with EMPr requirements	**Contractor, ESO, ECO**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	equipment in the construction camp. • Excavations to be demarcated with orange netting. Excavations are to be checked daily, prior to work commencing, for any animals. • Shoring of excavations to ensure the safe workings of site staff. • The construction area must be demarcated and access controlled for the duration of the construction period. • Signage is to be displayed regarding construction activities. • Construction vehicles must adhere to speed limits and must be acutely aware of people walking and living in and around the construction activities. • A health and safety method statement/program is essential. • General risks associated with the construction activities should be addressed through compliance with the relevant health and safety procedures and regulations. • Access to and from the construction site(s) should be closely monitored and contractors should be required to make the necessary arrangements for the transport of workers to and from the site on a daily basis. • Visitors to report to the Site Office, and appropriate Protective Personal Equipment (PPE) to be worn by visitors. • Discuss the safety and security issues, as well as construction schedule with the local community policing forum and local SAPS. • Adjacent landowners are to be notified 14 days prior to			

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	construction commencement. • Fire-fighting equipment in proportion to the fire risk that is presented by the type of construction and other on-site activities and materials used on site is to be available and kept in good operating order at all times. • Any welding or other sources of heating of materials must be done in a controlled environment, under appropriate supervision, in such a manner as to minimise the risk of fires and/or injury to staff. • Smoking is not permitted on site. • A policy of employing local people should be implemented wherever possible. This will ensure that benefits of the construction are provided to local communities and will prevent an influx of job seekers to the site. This policy must be finalised before the hiring of sub-contractors. • Local sub-contractors should be employed wherever possible to maximise the localised economic benefits of the project. • A mechanism must be established to receive and address complaints from the staff.			
Site clean-up	Clear and completely remove all construction plant, equipment, storage containers, temporary fencing, temporary services, fixtures, waste and any other temporary construction works, from the site.	End of construction phase, beginning of operational phase	No waste or litter left on site	**Contractor and developer. ECO and landscape architect**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
OPERATION: THIS SECTION PRESENTS THE ENVIRONMENTAL REQUIREMENTS FOR THE OPERATIONAL ACTIVITIES OF THE NEW LANSERIA INTERNATIONAL CARGO TERMINAL MRO3 & LICT 4 ACTIVITIES WITHIN THE LANSERIA AIRPORT.				
Stormwater management	• Use permeable paving where possible, bioretention areas, and gravel infiltration trenches to promote infiltration instead of runoff, where possible. • Regularly clean and maintain oil/water separators, catch pits, and silt traps.	Operational Township	No hydrocarbon contamination at discharge points	**Applicant, project engineer, landscape architect, facility manager**
Vegetation and landscaping management	• Landscaping should be environmentally sensitive • Progressive reinstatement of disturbed areas on an ongoing basis, immediately after the specified construction activities for that area are concluded, must be implemented on site. • All topsoil removed for any reason during construction must be used for landscaping or to rehabilitate any areas disturbed by construction works, that will form a part of landscaping plans. • Indigenous grass and shrubs should be planted in areas which are devoid of vegetation and within the landscaped gardens • Landscaping of gardens, and all open areas must be undertaken by qualified landscapers, and only indigenous trees, grasses and other plants are to be used for landscaping purposes and must be water-wise Indigenous plant species. • Hydroseed any open areas devoid of vegetation. • Remove all exotic and invasive plants in the area (as required), as well as within the road reserves.		A well-designed landscaping strategy in the operational township which contributes to improving the biodiversity of the site, climate resilience, water efficiency, and overall environmental sustainability. Integrating green infrastructure and sustainable land management to reduce environmental impacts.	**Applicant and landscape architect**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	• Rainwater harvesting should be undertaken and used for garden watering			
Pollution and Waste Management	• All waste will be disposed of by the municipality, as agreed by the service agreements and bulk service contributions. • General waste generated by the development will be disposed of at a registered landfill site as agreed by the municipality • General waste must be sorted on site into the various waste types and recycled accordingly	Operational phase	• A well-implemented waste management strategy • Improve public health • Reduce pollution • Conserve resources • Create economic opportunities through recycling and reuse initiatives. By adopting sustainable waste practices, the township can move towards a circular, low-waste economy that benefits both the environment and the community.	**Applicant** **Development Manager** **Local Municipality**
Energy and water consumption	• Energy saving methods as per the BAR must be implemented over a long-term period for the operational cargo warehouses. • Alternative energy sources such as gas and solar panels must be considered for the long-term operation of the township. • Install low flow faucets, smaller toilets, and low flow showerheads in all office areas of the developments • Install Geysers timers • Install Solar geysers • Installation of Solar panels with battery backup and inverter systems to run a lights and other operations	Operational phase	Incorporation of alternative energy sources and low water use into all buildings.	**Applicant, PE** **Development Manager** **Architect**

ASPECT	ENVIRONMENTAL ACTIONS	TIMING	TARGET	RESPONSIBILITY
	within the various warehouses and for the various industries. • Install Sky lights, to enhance natural light use in the core of the building. • Install LED lighting around and inside all buildings. LED's use less energy and last longer than traditional incandescent bulbs. • Planting of trees in road reserves and garden areas to lessen the effect of creating a heat island within the development footprint.			
Erosion and stormwater management	• Attenuation ponds must be maintained and desilted as and when required.	Operational phase	• Manage runoff to prevent flooding • Reduce pollution • Support groundwater recharge • Water quality improvement sustainable drainage • Biodiversity enhancement	**Applicant, PE Development / facilities Manager**
Fire and Hazardous Incident Management	• Maintain clear emergency response plans and ensure fire-fighting equipment is accessible. • Prohibit burning of waste on-site. • Conduct fire drills and maintain safe setbacks between structures and vegetation.	Operational phase	• No fire incidents linked to operational activities • 100% fire equipment inspection compliance • 100% staff trained annually in emergency response	**Applicant, project engineer, landscape architect, facility manager**
Final ECO Audit and sign-off	• **A close-out audit must be conducted by the ECO following the post-construction and rehabilitation activities.**	**Once all construction activities on site are completed**	**Full compliance with the EMPr**	**ESO, ECO**

10. FINAL CLEAN UP AND CLOSE OF CONSTRUCTION

At the completion of construction, the Contractor must undertake a comprehensive final clean-up and close-out process to ensure that the site is left in a safe, stable, and environmentally compliant condition, prior to handover. All construction waste, surplus materials, packaging, rubble, and temporary structures must be removed from site and disposed of at licensed facilities, with all corresponding waste manifests filed in the Environmental File. Disturbed areas must be restored and stabilised to prevent erosion, sediment movement or the re-establishment of unintended ponding. The engineered SUDS and attenuation infrastructure must be fully operational, clear of sediment and debris, and capable of performing the hydrological functions intended to replace the artificial wetlands. All stormwater channels, inlets and outflow structures must be cleared of obstructions, with energy-dissipation and erosion-control measures verified for integrity.

All temporary stormwater diversions, berms, silt fences, and sediment traps must be removed once the permanent stormwater system is functional, and all exposed soils must be stabilised through vegetation, armouring or geotextile placement as appropriate. Inspection and maintenance access routes to the SUDS must remain unobstructed. The site must be inspected for any residual hydrocarbon or cement contamination; where found, such areas must be excavated, removed and disposed of as hazardous waste, with remediation confirmed by the ECO. All equipment, laydown areas, batching zones and wash-out containers must be dismantled, cleaned and rehabilitated.

Given the airport context, all potential wildlife-attractant features including shallow depressions, pooled water, stockpiled soils, organic debris, or vegetating damp patches—must be eliminated to maintain compliance with aviation wildlife-hazard management requirements. Barriers, fencing and security controls must be reinstated to airport standards, ensuring the clear delineation between construction and operational zones. A final walk-through inspection must be undertaken by the ECO, Resident Engineer and Airport Operations to confirm that the area is clean, safe, compliant and ready for operational use, and a Close-Out Report must be submitted to the Competent Authority documenting the completion of all EMPr requirements and corrective actions.

11. DECLARATION OF ADHERENCE TO THE ENVIRONMENTAL MANAGEMENT PLAN

All persons involved must be made aware of the environmental goals and policy of the Applicant, and of the appointed project contractors, and must be encouraged to develop a commitment to compliance with the environmental legislation.

The appointed Contractor must sign declarations of adherence to the EMPr, stating the following:

- That the conditions of the authorisation were brought under their attention and that they have read and understood the contents of the Environmental Management Programme, all its contents, and agree to adhere to all the specified requirements.

- That they understand their responsibilities in terms of enforcing and implementing the Environmental Specifications as set out in the various documents for the project site.

- That they also undertake to inform all persons under their supervision of such specifications.

See Appendix 7

APPENDIX 1: PREFERRED SITE PLAN OF PROPOSED DEVELOPMENT

APPENDIX 2: EAP PROFILE, CV AND DECLARATION OF INDEPENDENCE

1. DECLARATION BY THE EAP

I, _____, declare that –

- I act as the independent environmental assessment practitioner in this application;
- I have expertise in conducting environmental impact assessments, including knowledge of the Act, Regulations and any guidelines that have relevance to the proposed activity;
- I will comply with the Act, Regulations and all other applicable legislation;
- I will perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the applicant;
- I will take into account, to the extent possible, the matters listed in Regulation 13 of the Regulations when preparing the application and any report relating to the application;
- I undertake to disclose to the applicant and the Competent Authority all material information in my possession that reasonably has or may have the potential of influencing - any decision to be taken with respect to the application by the Competent Authority; and - the objectivity of any report, plan or document to be prepared by myself for submission to the Competent Authority, unless access to that information is protected by law, in which case it will be indicated that such information exists and will be provided to the Competent Authority;
- I will perform all obligations as expected from an environmental assessment practitioner in terms of the Regulations; and
- I am aware of what constitutes an offence in terms of Regulation 48 and that a person convicted of an offence in terms of Regulation 48(1) is liable to the penalties as contemplated in Section 49B of the Act.

Disclosure of Vested Interest (delete whichever is not applicable)

- I do not have and will not have any vested interest (either business, financial, personal or other) in the proposed activity proceeding other than remuneration for work performed in terms of the Regulations;

- I have a vested interest in the proposed activity proceeding, such vested interest being:

_____

_____

_____

_____

Signature of the Environmental Assessment Practitioner

Name of Company:

Date

2. UNDERTAKING UNDER OATH/ AFFIRMATION

I, _____, swear under oath / affirm that all the information submitted or to be submitted for the purposes of this application is true and correct.

Signature of the Environmental Assessment Practitioner

Name of Company

Date

Signature of the Commissioner of Oaths

Date

APPENDIX 3: METHOD STATEMENT REQUIREMENTS FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES

The MS should be submitted at least 7 working days prior to the commencement of work to the ECO.

For each instance where it is requested that the Contractor submit a MS to the satisfaction of the ECO, the format should clearly indicate as a minimum the following:

- Responsible person (Name and Identity Number) and an alternative (Name and Identity Number);
- The applicable requirements provided in all legislation and policies which have a bearing on the proposed activities;
- Training Requirements;
- Timing of activities as per the Project / Construction Schedule;
- Materials, plant and equipment to be used;
- Proposed construction procedure, including the order in which the activities making up the procedure will be carried out, designed to implement the relevant environmental specifications;
- The system to be implemented to ensure compliance with the above;
- Personal Protection Equipment (PPE) required;
- A detailed description of the process of work, methods and materials;
- Emergency Procedures;
- Response in the case of a non-compliance; and
- Other information deemed necessary by the ECO.

All MS must be signed by the Engineer; and works may not commence until the MS has been approved by the ECO. All MS will form part of the CEMPr documentation and are subject to all terms and conditions contained within the CEMPr main document.

The following MS must as a minimum be prepared by the Contractor for approval:

1. **Site Layout**: The graphical representation with detailed notes of the location, layout and method of establishment of the construction camp must be provided and must include the following:
   - All Contractor's buildings, and/or offices;
   - Lay down areas;
   - Vehicle and plant storage areas;
   - Workshops, if required and approved by ECO;
   - Fuel storage and dispensing areas, if required and approved by ECO;
   - Cement/concrete batching areas, if required and approved by ECO (including
   - the methods employed for the mixing of concrete and particularly the
   - containment of runoff water from such areas and the method of transportation
   - of concrete);
   - Other infrastructure required for the running of the project.

2. **Access Routes**: Details, including a drawing, showing where and how the access points and routes will be located and managed must be provided in a MS. Details of fences and gates affected or used during the construction activities, including a drawing showing the location of fences and access gates must be provided.

3. **Pollution control**: Expected solid waste types, quantities, methods and frequency of collection and disposal as well as location of disposal sites must be identified and stated in a MS. The MS shall further include methods of minimising, controlling, collecting and disposing of contaminated water, and details of any hazardous substances/materials to be used, together with the transport, storage, handling and disposal procedures for the substances.

4. **Safety considerations**: The Contractor shall provide details identifying what safety precautions will be implemented to ensure the safety of all staff, and the general public at large, on site during the life of the project. This will include protective clothing requirements for all types of construction activities on site, including protection against dust, noise, falling objects, and work associated with electricity and working at heights.

5. **Emergency procedures**: The Contractor shall provide details regarding all relevant emergency procedures that will be implemented for fire control and accidental leaks and spillages of hazardous substances (including fuel and oil). The Contractor shall further include details of risk reduction measures to be implemented including firefighting equipment, fire prevention procedures and spill kits.

6. **Waste management control**: The Contractor shall provide details regarding how solid and liquid waste generated on the construction site and site camp will be collected, stored, transported and disposed of. Details of any service provider(s) appointed to manage this task must also be provided.

7. **Storm water and erosion control**: The Contractor shall provide details of how storm water emanating within or adjacent to the construction site may impact on construction activities. Details on how the Contractor will deal with storm water runoff on site, must be provided. Details of any service provider(s) appointed to manage this task must also be provided.

Description of the Activity:				
Project Name	**LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES**		**Project Ref:**	
Site address / location			**Start Date / Time:**	
			Finish Date / Time:	
	Name		**Responsibility**	
Personnel Involved				
Works Supervisor:			Contact Details:	
WHAT work is to be undertaken				
WHERE are the works to be conducted				
HOW are the works to be undertaken				
Specific identified impacts to be avoided on site				

Note: **please give too much information rather than too little. Please ensure that issues such as emergency procedures, hydrocarbon management, wastewater management, access, individual responsibilities, materials, plant used, maintenance of plant, protection of natural features etc. are covered where relevant**.

APPENDIX 4: DECLARATION OF ADHERENCE TO THE METHOD STATEMENT FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES: *CONTRACTOR*

I, _____, in my capacity as

_____ 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 and with approval by the Engineer, and that the SHE Coordinator, Construction Manager and ECO will audit my compliance with the contents of this Method Statement, pertaining to the **LANSERIA INTERNATIONAL CARGO TERMINAL AND ASSOCIATED ACTIVITIES , TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1,**

Signed:_____

Date:_____

APPENDIX 5: ENVIRONMENTAL MANAGEMENT SITE PLAN FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1

The following issues must be addressed and shown on the **annotated Environmental Management Site Plan**, *prior to construction activities commencing on site:*

PLANNING ISSUE	DESCRIPTION	RESPONSIBLE PARTY
Sequence of events	Description of the nature of the process required. Briefly describe the sequence of events that will take place from the time that the contractor moves onto site to the time when the site is handed over to the Project Developer.	Applicant, Contractor, Resident Engineer
Health and safety	• Potential risks and hazards and precautions that will be taken. • Cooking area, hazardous materials site, first aid kit, fuel store, security issues, fire control. • Safety of surrounding sensitive receptors (e.g. residents and road • users).	Applicant, Contractor, Resident Engineer
On site toilets	• How many required for the particular development? • How long are the toilets required on site? • Location of toilets (Site Plan)	Contractor, Resident Engineer
Workforce	• Number of on-site workers • Training of workforce in terms of environmental awareness • Management of workforce, particularly sub-contractors	Contractor, Resident Engineer
Transport and traffic	• Transport required for site workers • Routes to be used by construction vehicles	Applicant, Contractor, Resident Engineer
Infrastructure and associated equipment	• Nature and extent of infrastructure construction	Contractor, Resident Engineer
Earthworks/cleaning	• Volume of material to be excavated/cleaned • Duration of operations • Where stocks to be kept on site (Site Plan) • How long to be kept on site	Contractor, Resident Engineer

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	• Where, when and how to be disposed of	
Equipment needed for construction activities	• Area required for material and equipment storage • Duration of works • Nature of equipment and necessary materials	Contractor, Resident Engineer
Drinking water	• Quantity required • Duration of period in which required • Source of water • Location of potable water (Site Plan)	Applicant, Contractor, Resident Engineer
Cooking/Eating/Rest areas	• Area required • Equipment required e.g. gas stoves, matches etc. • Location - must take into consideration the vegetation conditions • (Site Plan)	Applicant, Contractor, Resident Engineer
Existing structures	Indication of location of any structures that need to be removed and/or protected	Applicant, Contractor, Resident Engineer
Life of project	• Working hours • Time frame	Applicant, Contractor, Resident Engineer
Construction site	• Work area required • Location of construction site and work area (Site Plan)	Applicant, Contractor, Resident Engineer
Environmentally sensitive areas and possible environmental risks associated with construction activities	A training programme on possible environmental risks that may result from construction activities and how to deal with these (including a reporting structure) must be made available prior to construction commencing	Applicant, Contractor, Resident Engineer
Waste management	• Litter drums - number, type, size, location (Site Plan) • Construction of a waste transfer station within the site boundaries • Closest registered waste disposal site (Location map) • Waste management plan • Recycling / material re-use options	Applicant, Contractor, Resident Engineer

APPENDIX 6: ENVIRONMENTAL COMPLAINTS RECORD SHEET: FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1
COMPLAINT RAISED BY:
COMPLAINT:
PROPOSED REMEDIAL ACTION:
Signature: _____ Date: _____
NOTES BY ESO:
ECO: _____ Date: _____ Site Manager: _____ Date: _____
NOTES BY ECO:
ECO: _____ Date: _____ Site Manager: _____ Date: _____

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APPENDIX 7: DECLARATION OF ADHERENCE TO THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1: *APPLICANT*

I, _____, in my capacity as **applicant and land owner,** hereby declare my adherence to the contents of the EMPr compiled for the **LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES , TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1,** Construction Activities.

I declare that:

- I have read and understood the contents of the Construction Environmental Management Programme and agree to adhere to all the specified requirements.
- I understand my responsibilities in terms of enforcing and implementing the Environmental Specifications as set out in the various documents for the project site.
- I undertake to inform all persons under their supervision of such specifications.

Signed: Date:

APPENDIX 8: DECLARATION OF ADHERENCE TO THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1: *CONTRACTOR*

I, _____, in my capacity as the **appointed contractor,** hereby declare my adherence to the contents of the EMPr compiled for the **LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1,** Construction Activities.

I declare that:

- I have read and understood the contents of the Construction Environmental Management Programme and agree to adhere to all the specified requirements.
- 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 undertake to inform all persons under their supervision of such specifications.

Signed: Date:

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APPENDIX 9: DECLARATION OF ADHERENCE TO THE CONSTRUCTION ENVIRONMENTAL MANAGEMENT PLAN FOR THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1: ***RESIDENT ENGINEER***

I, _____, in my capacity as the **appointed Resident Engineer** (RE), hereby declare my adherence to the contents of the EMPr compiled for the **LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1,** Construction Activities. I declare that:

- I have read and understood the contents of the Construction Environmental Management Programme and agree to adhere to all the specified requirements.
- 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 undertake to inform all persons under their supervision of such specifications.

Signed: Date:

APPENDIX 10: DECLARATION OF ADHERENCE TO THE FOLLOWING DUTIES FOR *THE LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1: ENVIRONMENTAL SITE OFFICER (ESO)*

I, _____, in my capacity as

_____ hereby declare my understanding and adherence to my duties as follows: Liaison with the appointed ECO; Ensuring environmental awareness among members of the workforce; ensuring that the Contractor/s and members of the construction workforce are aware of the requirements of the CEMPr; the daily on-site implementation of the CEMPr; monitoring inappropriate behaviour from the work force that will cause negative environmental impacts, including pollution and environmental incidents; and the implementation of corrective action, pertaining to **LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X 1**

.

Signed:_____

Date:_____

ANNEXURE 11: WASTE MANAGEMENT PLAN

A Waste Management Plan (WMP) outlines measures and procedures for the appropriate handling, storage and disposal of wastes generated during the entire project lifecycle (pre-construction, construction and operational phases).

The objectives of the WMP are to:

- Formalise waste handling, transfer and disposal activities associated with waste from the Industrial township;
- To prevent inappropriate management of waste and associated risk of pollution of the environment;
- To facilitate waste minimisation entailing avoidance, reduction, reuse, recycling or treatment before disposal;
- To streamline waste segregation, storage, and disposal and promote resource recovery from waste;
- To contain, control and dispose of waste in accordance with the required waste management practices (e.g. waste segregation);
- To define responsibilities for waste management at the various levels of operation associated with the development;
- To provide a framework for the selection of waste management service providers in line with cradle to grave principles.
- To provide actions and guidelines to ensure that waste management is undertaken in line with Existing South African waste management legislation, waste management guidelines and policies; and international best practise (Waste Hierarchy).

In accordance with international trends, the management of all waste streams that will be generated at the warehouse should demonstrate support for the Hierarchy of Waste Management (HWM), which aims to promote the re-use and recycling of wastes, giving effect to the concept of 'cradle-to-cradle' waste management. The aim of the Waste Management Plan is to minimize the amount of waste disposed of, and as such, a waste hierarchy is followed:
Prevent → Minimise → Reuse → Recycle → Recover, and only then, → Dispose.

As this section forms part of the CEMPr, the overall responsibility of ensuring compliance with the Waste Management Plan ultimately lies with the Applicant.

Planning phase*: Permits and permissions*

- In order to comply with legislation, the following storage volumes may not be exceeded without a Waste Management License
  - General Waste: -100m3
  - Hazardous Waste: 35m3
- Finalize agreements and programmes with the Local Municipality regarding the disposal of domestic waste at the nearest landfill, particularly in terms of initial cleanup volumes (existing dumping) required for this rehabilitation project.

Construction Phase:

Good management practices

- Ensure that all personnel are familiar with waste management requirements on site;
- An adequate number of refuse bins must be provided at the construction sites. refuse bins must be equipped with a closing mechanism to prevent their contents from blowing out and from scavenging animals.
- Ensure that personnel make use of the refuse bins provided;
- Empty refuse bins for disposal at least once per week, but more often if required;
- Ensure that rubble, litter, and disused construction materials are appropriately stored (if not removed daily) and then disposed regularly at licensed waste facilities.
- If there is a shortage of space and not enough room for multiple skips the principal contractor should employ a licensed waste management company to deal with waste,
- Onsite recycling containers and/or areas must be clearly marked.
- The working areas and storage sites must be cleared of litter on daily basis. The contractor will maintain 'good housekeeping' practises as ensure that all work sites and construction camp are kept tidy and litter free.
- Dispose of solid waste at the nearest, applicably licensed recycling centre, salvage yard or landfill site;
- All waste must be transported in an appropriate manner (e.g. plastic rubbish bags) to the approved waste site.
- The contactor may not dispose of any waste and / or construction debris by burning, or by burying.
- Safe disposal waybills for all waste and material loads removed from the site must be kept on file.
- Complete waste transfer notes before any waste leaves the site.
- Ensure all waste service providers have a valid waste carrier's registration certificate.

Non-hazardous construction waste

- Segregate different types of waste as they are generated using different skips where possible (General wastes, non-hazardous wastes and hazardous wastes). At a minimum there should be skips for wood, metals, inert and mixed materials,
- Collect maintenance and domestic refuse (scrap metal, packaging materials etc.) in appropriate bins for recycling or send to landfill for disposal in an approved manner.
- Recycle suitable spoil, demolition materials, all pruning, and surplus construction material arising from the works on site to avoid the need to transport materials.
- Metal waste has commercial value and is to be sold on to a scrap metal contractor for recycling purposes.
- Wood waste includes oversized cable reels, wooden packaging boxes, palettes and other wood materials. Palettes in good condition may be reused and are to be returned to materials suppliers on a return system – this will need to be negotiated with the relevant suppliers. Damaged wood waste is to be donated to local communities.

Hazardous construction waste

Hazardous waste can be defined as waste, which can, even in low concentrations, have significant adverse effects on public health and/ or the environment.

- The disposal of hazardous waste must comply with all relevant Regulations, Norms and Standards pertaining to waste classification in order to ensure disposal at the correct landfill class.
- Avoid the generation of hazardous waste wherever possible through procurement processes e.g. purchasing of less toxic / environmentally friendly products.
- Petroleum, chemical, harmful and hazardous waste must be stored in enclosed, bunded areas. The bunded areas shall be clearly marked. Such waste shall be disposed of off-site at a licensed hazardous waste disposal site.
- Forecast and prevent potential situations in which accidents and spills can mitigate against unwarranted waste emissions.
- Hazardous waste may be temporarily stored on site in vessels equipped with secondary containment structures to prevent contamination of soil, groundwater and surface waters due to accidental spills or releases.
- Hazardous waste must be separated at source from the general waste stream. Where possible, all hazardous wastes, including hydrocarbon wastes such as oils, should be recycled either by a recognized recycling company or returned to the supplier.
- All hazardous wastes that cannot be reused or recycled should be labelled correctly and stored in the designated waste storage area until collected for correct disposal.
- Load and unload any solid hazardous materials in a manner that reduces potential spills.
- Ensure that a spills containment kit is available on site and that personnel are trained in spills clean up procedures.
- No spills may be hosed down into a storm water drain or sewer, or into the surrounding natural environment.
- Immediately clean leaks and spills of hazardous substances and dispose of as hazardous waste. The ESO and ECO should be notified immediately if a hazardous waste spill occurs, to ensure proper clean-up and disposal.
- Any contaminated soil / substrate must be removed and stored in a skip until it can be disposed of at a permitted disposal site.
- Report major spills to the regional DWS office.
- Hazardous waste disposal must be undertaken by an approved waste contractor, and waste must be disposed of at a permitted hazardous waste disposal facility on a regular basis (H:H or H:h – landfill operator to be contacted for verification). Ensure that all transportation and disposal / recovery permits and licenses are held by the service provider.
- All hazardous waste transported from the site must be reconciled with safe disposal certificates to be issued by the waste management service provider. These should be kept on file for inspection by the environmental authorities if required.

Sewage and effluent

- Ensure that sufficient numbers of mobile toilets are available on site and that these are located beyond the buffer zones.
- The location of chemical toilets or soak-aways should be put as far as possible from any wetland, watercourse or drainage line.
- Ensure that mobile toilets are maintained in a sanitary and operational state. Service slips need to be kept on file for verification
- Waste from ablution facilities must be regularly removed and care must be taken to ensure that there is no spillage.

Operational Phase

Waste management areas

- Waste must be transported from the point of generation directly to the centralised waste storage area where it can be safely stored prior to offsite disposal.
- The operator must obtain consent / confirmation from the nearest landfill (or similar) to dispose their non-recyclable waste at the facility.
- Duty of care obligations should be adopted and enforced, meaning that only reputable waste transport companies and permitted waste disposal facilities are used.
- Recordkeeping of the waste types and quantities must be as accurate as possible. Landfill waybills must be obtained and kept on file.
- Arrangements must be in place for the regular maintenance and cleaning of waste/recycling storage areas.

Landscape and organic waste

- Develop a comprehensive system for waste separation at the relevant generation points.
- Separate waste into items, which can be reused, composted, or recycled, and send the remaining portion to the general waste stream for disposal at landfill.

General waste

- Adopt waste reduction procurement philosophy, also known as "Greener purchasing", "Pre-cycling", or "eco/green procurement".
- Staff should be made aware of the aim to recycle waste by means of posters, training and staff meetings.
- Visitors/residents should be made aware of the recycling programmes by means of recycling in strategic locations.
- Implement a 'sort-at-source' approach to waste management, and separate recyclable waste from non-recyclable waste;
- Separate viable recyclable components from the general waste stream prior to disposal. Recyclables that are typically recovered from general waste include metals, plastics, glass, and paper / cardboard.
- Waste storage receptacles must be covered or lidded to prevent scavenging by wild animals and vermin, and to prevent waste from being windblown into the adjacent open areas.
- Undertake regular clean-ups and litter removal across the entire site;

- Skips / receptacles should be emptied on a weekly basis to prevent the formation of odour.
- Ensure that the waste is removed by a suitably qualified waste service provider and that the relevant documentation with proof of proper waste disposal is available.

- A manifest indicating the volume (monthly) of disposed general waste should be kept on file.

APPENDIX 12: ENVIRONMENTAL AWARENESS PLAN

1. Purpose of the Environmental Awareness Plan

The purpose of this Environmental Awareness Plan is to ensure that all personnel working on the construction of the International Cargo Terminal and MRO facilities at Lanseria International Airport (LIA) fully understand the environmental sensitivities of the site, comply with applicable legislation, and actively avoid causing pollution or degradation of downstream watercourses. The plan aims to promote environmentally responsible behaviour, effective communication, and adherence to best-practice construction environmental management.

2. Objectives

- To ensure all staff are aware of environmental risks associated with the construction of aviation-related infrastructure.
- To highlight the importance of protecting downstream drainage lines, stormwater systems, and watercourses.
- To communicate the necessary environmental controls, legal obligations, and site-specific mitigation measures.
- To ensure all workers understand their personal responsibilities for environmental protection.
- To support compliance with the EMPr and WUL requirements (if applicable).

3. Induction Training

All personnel must receive site-specific environmental induction before starting work. The induction must include:

- Description of downstream watercourses and why they must be protected.
- Explanation of artificial wetland removal and engineered SUDS replacement.
- Clean/dirty water separation principles.
- Spill management and emergency procedures.
- Cement batching and wash-water controls.
- Waste segregation and disposal requirements.
- Airport safety constraints.

4. Toolbox Talks (Weekly Minimum)

Toolbox talks must reinforce:

- Preventing pollution of stormwater.
- Importance of silt fences, berms, and erosion control.
- Reporting spills or leaks immediately.
- Keeping the site clean to prevent wildlife attraction.
- Correct use of portable toilets (to avoid contamination of soil/water).
- Safe storage of materials near drainage lines.

5. Signage

Clear signage must be displayed:

- At stormwater inlets.

ENVIRONMENTAL AWARENESS FOR THE LANSERIA INTERNATIONAL AIRPORT – CARGO TERMINAL & MRO CONSTRUCTION SITE

PROTECT OUR ENVIRONMENT.
PROTECT THE AIRPORT.
EVERY WORKER IS RESPONSIBLE

PROTECT DOWNSTREAM WATERCOURSES

- Keep stormwater clean at all times.

No wastewater, cement slurry, oil or chemicals may enter drains, channels or wet areas.

- Use silt fences, berms, socks and sediment traps—don't damage or remove them.
- Report any muddy water flowing off-site.

PREVENT POLLUTION

- No cement washing on soil — use the designated lined washout container.

Store fuel and chemicals only in bunded, secure areas.

- Clean up spills immediately using spill kits.
- Report hydrocarbon leaks from vehicles and machinery.

MANAGE STORMWATER CORRECTLY

- Do not block stormwater channels or drains.

Keep temporary stormwater controls intact, especially after rain.

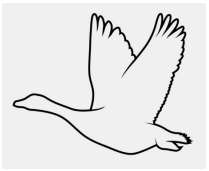
- Prevent ponding—standing water attracts birds and is a flight safety hazard.

CONTROL EROSION & SEDIMENT

Keep stockpiles stable and away from water flow paths.

- **Replace damaged silt fences immediately.**
- **Avoid driving over erosion-control structures.**

WILDLIFE HAZARD PREVENTION



- **Remove food waste daily—no feeding wildlife.**
- **Prevent ponding, pooling and wet patches.**

Report any bird activity or wildlife immediately.

- **Keep site tidy—loose debris attracts animals.**

WASTE MANAGEMENT

- **Place all waste in designated bins.**
- **No littering anywhere on site.**

Hazardous waste (oily rags, contaminated soil, paint waste) goes to special marked containers.

- **Do not burn or bury waste.**

PERSONAL RESPONSIBILITY

- **Attend all environmental inductions and toolbox talks.**
- **Follow instructions from the ECO and Site Supervisor.**
- **Report environmental issues immediately.**
- **Stay within approved construction boundaries.**

REPORT INCIDENTS IMMEDIATELY

Site Manager: _____

ECO: _____

- At cement batching areas.
- At spill-kit stations.
- At hazardous material storage zones.

6. Roles and Responsibilities

6.1 Contractor and ESO

- Implement environmental controls at all times.
- Ensure all staff receive training and follow EMPr requirements.
- Maintain spill kits, washout areas, bunds, and erosion-control devices.
- Immediately correct any non-compliance identified by the ECO.

6.2 Environmental Control Officer (ECO)

- Conduct environmental inductions where necessary.
- Audit compliance with watercourse protection measures.
- Report and follow up on non-conformances.
- Verify that stormwater controls are maintained.

6.3 Workers

- Follow training instructions and environmental rules.
- Report spills, leaks or damaged erosion controls.
- Use toilets, washout areas, and waste bins responsibly.
- Avoid interference with stormwater controls.

7. Environmental Do's and Don'ts (for Site Display)

Do

- Keep all stormwater clean.
- Report spills immediately.
- Use designated washout areas.
- Keep stockpiles covered and away from drainage lines.
- Maintain erosion control structures.
- Keep site clean to avoid wildlife attraction.
- Stay within approved construction boundaries.

Don't

- Wash tools or equipment on bare soil.
- Dump waste or slurry into drains.
- Create or leave standing water.
- Damage silt fences, berms or stormwater controls.
- Drive over rehabilitating or wetland-transition areas.
- Store hazardous materials outside bunded areas.

8. Emergency Procedures Awareness

All personnel must know:

- Location of spill kits.
- Who to notify in case of pollution or a breach of stormwater controls.
- How to isolate and contain a spill.
- Emergency contact details for:
    - Contractor Site Manager
    - ECO
    - Airport Operations / Safety Office
    - Spill response contractors

9. Monitoring and Continuous Improvement

- Daily visual inspections by site supervisors.
- Weekly inspections by the Contractor's Environmental Officer.
- Monthly ECO audits.
- Corrective actions must be logged and resolved.
- Recurring issues must trigger refresher training.

ENVIRONMENTAL AWARENESS TRAINING REGISTER:
LANSERIA INTERNATIONAL CARGO TERMINAL MRO3&LICT 4, AND ASSOCIATED ACTIVITIES, TO BE LOCATED ON A PORTION OF ERF 183 LANSERIA AIRPORT X1

DATE:_____

NAME / ATTENDEE	COMPANY REPRESENTED	CONTACT NUMBER	SIGNATURE