DRAFT BASIC ASSESSMENT REPORT

COMPILED FOR
NTT MOTORS 384 (PTY) LTD.:
WITWATER AIRSTRIP ON THE FARM RIMARUMI RANCH NO. K.R. 948, LIMPOPO PROVINCE

NEAS REFERENCE NUMBER: LIM/EIA/0001794/2023

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REPORT DETAILS

Report Title	Draft Basic Assessment Report_Witwater Airfield September 2023
Report Number	Witwater_BAR_22_2023
Ledet Ref. No.	LIM/E1IJ00017941202
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Report Revision	Draft Basic Assessment Report
Date of Report	October 2023

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LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF
ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM
BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

Basic Assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

File Reference Number:	
	(For official use only)
NEAS Reference Number:	
Date Received:	
Due date for acknowledgement:	
Due date for acceptance:	
Due date for decision	

Kindly note that:

1. The report must be compiled by an independent Environmental Assessment Practitioner.

2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.

3. Where applicable **tick** the boxes that are applicable in the report.

4. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.

5. An incomplete report may be returned to the applicant for revision.

6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.

8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2014.

9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.

10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

Postal Address:	**Physical Address**:
Central Administration Office Environmental Impact Management P. O. Box 55464 **POLOKWANE** 0700	Central Administration Office Environmental Affairs Building 20 Hans Van Rensburg Street / 19 Biccard Street **POLOKWANE** 0699
Queries should be directed to the Central Administration Office: Environmental Impact Management:- **For attention:** Mr E. V. Maluleke **Mobile:** 082 947 7755 **Email:** malulekeev@ledet.gov.za	

View the Department's website at http://www.ledet.gov.za/ for the latest version of the documents.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?	YES	

If YES, please complete the form entitled "Details of specialist and declaration of interest" or appointment of a specialist for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail[1]:

NTT Motors 384 (Pty) Ltd is proposing to develop a runway on the Farm Rimarumi Ranch NO K.R. 948.The proposed project is located within a privately owned game farm named Witwater Conservation Area Game Farm.

Elemental Sustainability (Pty) Ltd. was appointed as the independent Environmental Assessment Practitioner to assist NTT Motors with the environmental authorisation application process.

The proposed development comprises the following:

- An approximately 1 400 m long, asphalt paved runway and 100 m gravel surfacing either end.
- 25 m x 25 m aircraft hangar,
- Concrete hardstand in front of the hangar.

The selected layer and fill material on the northern side of the runway will come from the cut and blasted material at the top of the runway (southern side). The clearings either side of the surfaced runway will only be cleared from trees and gradually shaped, if required, to tie in with the surfaced runway. The veld grass will be reinstated where removed and kept short. All topsoil removed where required will be stockpiled and reinstated/ respread on site. The veld grass will be reinstated where removed and kept short. All topsoil removed where required will be stockpiled and reinstated/ respread on site.

Stormwater will be managed via stormwater canals either side of the runway and diverted into the veld at 50m intervals to follow normal over land flow. The existing gravel dam at the boom (northern side) of the runway will be used to retain any additional flow generated from the runway and not to increase or impact the existing flow in the natural stream further down the property during storm events.

Site Location

The proposed runway will be located on Farm Rimarumi Ranch NO K.R. 948 located within the Modimolle/Mookgophong Local Municipality and the Waterberg District Municipality, Limpopo Province. The proposed site is located 50km WNE of Mokopane and 10km SW of Road R518 in the Limpopo Province. Access to the farm and the development is from the R518 which connects Mokopane and Marken.

[1] Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.

Land Uses

The land is currently used as a private game farm. It has been named as the Witwater Conservation Area Game Farm.

Socio Economic Aspects

The proposed development will promote job creation for the surrounding community during the construction phase. It will boost the local economy as it will attract tourism within the area.

2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

(a) the property on which or location where it is proposed to undertake the activity;

(b) the type of activity to be undertaken;

(c) the design or layout of the activity;

(d) the technology to be used in the activity;

(e) the operational aspects of the activity; and

(f) the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the Department may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Site alternative

There is only one preferred site alternative for the proposed project. This section of land is big enough to accommodate the proposed runway and hanger. The proposed site is privately own and the applicant does not have other site for the development.

No Go alternative

Development of the runway and hanger will not commence, therefore, there will be no disruption to the existing vegetation. The proposed site will remain undeveloped, therefore, there will be no job creation.

Paragraphs 3 – 13 below should be completed for each alternative.

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the Hartebeeshoek 94 WGS84 spheroid in a national or local projection.
List alternative sites, if applicable.

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1[2] (preferred or only site alternative)	24˚	3'	54.78"	28˚	31'	16.58"
Alternative S2 (if any)	°	'	"	°	'	"
Alternative S3 (if any)	°	'	"	°	'	"

In the case of linear activities:

Alternative:	**Latitude (S):**			**Longitude (E):**		
Alternative S1 (preferred or only route alternative)						
• Starting point of the activity	24˚	3'	28.04"	28˚	31'	10.25"
• Middle/Additional point of the activity	24˚	3'	54.78"	28˚	31'	16.58"
• End point of the activity	24˚	4'	20.29"	28˚	31'	23.23"
Alternative S2 (if any)						
• Starting point of the activity	°	'	"	°	'	"
• Middle/Additional point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"
Alternative S3 (if any)						
• Starting point of the activity	°	'	"	°	'	"
• Middle/Additional point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

Refer to Appendix G.

4. Physical size of the activity

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:	**Size of the activity:**

[2] "Alternative S.." refer to site alternatives.

Alternative A1[3] (preferred activity alternative)	32 635m^2
Alternative A2 (if any)	
Alternative A3 (if any)	

or,

for linear activities:

	Length of the activity:
Alternative:	
Alternative A1 (preferred activity alternative)	1400m airstrip 100m gravel at each end of the airstrip
Alternative A2 (if any)	
Alternative A3 (if any)	

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

	Size of the site/servitude:
Alternative:	
Alternative A1 (preferred activity alternative)	32 635m^2
Alternative A2 (if any)	
Alternative A3 (if any)	

5. Site Access

Does ready access to the site exist?	**YES** **X**
If NO, what is the distance over which a new access road will be built	N/A m

Describe the type of access road planned:

The development will be accessed through the existing road R518 (Mokopane to Marken).There is an existing access track on the farm to the proposed runway and hanger site site.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

[3] "Alternative A.." refer to activity, process, technology or other alternatives.

6. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

Refer to Appendix A.

The site or route plans must indicate the following:

6.1 the scale of the plan which must be at least a scale of 1:500;
6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
6.4 the exact position of each element of the application as well as any other structures on the site;
6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;
6.6 all trees and shrubs taller than 1.8 metres;
6.7 walls and fencing including details of the height and construction material;
6.8 servitudes indicating the purpose of the servitude;
6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
- rivers;
- the 1:100 year flood line (where available or where it is required by Department of Water Affairs);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or invested with alien species);

6.10 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
6.11 the positions from where photographs of the site were taken.

7. Site PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form**.** It must be supplemented with additional photographs of relevant features on the site, if applicable.

Refer to Appendix B for site photographs.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

Refer to Appendix C for the layouts.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?	R6 000 000
What is the expected yearly income that will be generated by or as a result of the activity?	R 0
Will the activity contribute to service infrastructure?	YES
Is the activity a public amenity?	NO
How many new employment opportunities will be created in the development phase of the activity?	26
What is the expected value of the employment opportunities during the development phase?	R3 000 000
What percentage of this will accrue to previously disadvantaged individuals?	77%
How many permanent new employment opportunities will be created during the operational phase of the activity?	0
What is the expected current value of the employment opportunities during the first 10 years?	R0
What percentage of this will accrue to previously disadvantaged individuals?	0%

9(b) Need and desirability of the activity

The accessibility for landowners to their private property is needed in order to bring investments to the protected area. In addition, the private runway can play an important role in improving medical response as well as set down areas for aircraft currently located in the game farm area.

Motivate and explain the need and desirability of the activity (including demand for the activity):

NEED:			
i.	Was the relevant municipality involved in the application?	YES	
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	YES	
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

DESIRABILITY:			
i.	Does the proposed land use / development fit the surrounding area?		NO
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?	YES	
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		

	The proposed airstrip is located within an area classified as a game farm which is mainly natural. The propose airstrip and associated infrastructure is a manmade structure.		
v.	Will the proposed land use / development impact on the sense of place?		NO
vi.	Will the proposed land use / development set a precedent?		NO
vii.	Will any person's rights be affected by the proposed land use / development?		NO
viii.	Will the proposed land use / development compromise the "urban edge"?		NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		

BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES	
ii.	Explain:		
	The proposed airstrip and associated helipad can be used for medical evacuations if needed. Furthermore, due to its location close to protected areas it could be used for environmental management.		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
iv.	Explain:		
	The airstrip can lead to increased tourism within the area which will result in economic development within the project area		

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:
National Environmental Management Act (No 107 of 1998)	National Department of Forestry Fisheries and Environment (DFFE) and provincial Authorities (LEDET)	1998
GNR.982 of 4 December 2014: Environmental Impact Assessment Regulations, 2014 (*Government Gazette* No. 38282)	DFFE and LEDET	11 June 2021
GNR.983 of 4 December 2014: Environmental Impact Assessment Regulations Listing Notice 1 of 2014	DFFE and LEDET	11 June 2021

(*Government Gazette* No. 38282)		
GNR.985 of 4 December 2014: Environmental Impact Assessment Regulations Listing Notice 3 of 2014 (*Government Gazette* No. 38282)	DFFE and LEDET	11 June 2021
National Heritage Resources Act (No 25 of 1999, Section 38)	South African Heritage Resources Agency (SAHRA)	1999
National Water Act (No 36 of 1998)	Department of Water and Sanitation	1998
National Environmental Management: Biodiversity Act, (Act 10 of 2004)	National	2004
Promotion of Access to Information Act (No 2 of 2000)		2000
Municipal By-laws	Local Municipality	-

These legislative components will be incorporated into the report where they are applicable.

The Constitution, The PAJA and PAIA deals with people's rights – the right to be heard, obtain information, have an environment that is not harmful and the right to receive fair treatment in the process. This is dealt with in the public participation process in Section C below.

The NEMA, NEM:PAA, NEM:BA, NEM:WA, CARA, ECA and NVFA deal with people's responsibility to take due care of the environment. This is covered in various sections of this report, the environmental management plan (EMPr) and specialist reports.

11. Waste, effluent, emission and noise management

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?	YES	
If yes, what estimated quantity will be produced per month?		+-10m^3

How will the construction solid waste be disposed of (describe)?

Solid waste that will be generated during the construction phase, which will be stored on site in skips/bins. The skips will be transported by licenced contractors to the landfill site. Construction waste will be collected in a skip and disposed of at a registered landfill site by the appointed construction contractor or by a certified waste contractor.

Any domestic type waste generated should be sorted into recyclable fractions. This waste should enter the waste removal service which will be used for the game farm. It is critical that the waste is stored inaccessible to scavengers at all times.

Building rubble and any other non-compactable rubble should be stored to be transported as appropriate. There must be no mixing of domestic and building waste. Rubble should be kept clean from other wastes such as pipes, electrical fittings, wood, glass thatch etc.

Where will the construction solid waste be disposed of (describe)?

Unwanted garbage will be stored on site and appointed waste registered company will collect and dispose waste to the nearest registered landfill site.

Will the activity produce solid waste during its operational phase?	YES	
If yes, what estimated quantity will be produced per month?		+-1m^3

How will the solid waste be disposed of (describe)?

Unwanted waste generated during operational phase will be removed by the private registered waste company and disposed at the closest registered landfill site.

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the department to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?		NO

If yes, inform the department and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?		NO

If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?		NO
If yes, what estimated quantity will be produced per month?		m^3

Will the activity produce any effluent that will be treated and/or disposed of on site?		NO

If yes, the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?		NO

If yes, provide the particulars of the facility:

Facility name:	N/A		
Contact person:			
Postal address:			
Postal code:			
Telephone:		Cell:	
E-mail:		Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

N/A

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	YES	
If yes, is it controlled by any legislation of any sphere of government?		NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

During construction, there will be localized liberation of dust due to excavations and the hauling of cars and working machines on the site. Localized exhaust emissions will also occur, however a significant increase in concentrations of hydrocarbons, nitrogen oxides and carbon monoxide are not anticipated.

11(d) Generation of noise

Will the activity generate noise?	YES	
If yes, is it controlled by any legislation of any sphere of government?		NO

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

Noise will be generated by the construction vehicles during construction and it will be temporal impact. The following mitigation measures will ensure that noise created during construction is managed adequately:

- Ensure that vehicles and equipment used on site are in good working order and are serviced properly.
- Limit construction activities to daylight hours from 7am to 5pm;
- Apply applicable municipal by-laws with regards to noise control;
- The staff involved in the construction will not be housed on site and will also be informed as to how they can avoid any unnecessary noise pollution during working hours.

The operational phase of the development will only have noise impacts when there is a plane landing or taking off.

12. WATER USE

During the construction phase water will be required. The existing boreholes will be utilized for the water volumes required.
Due to the location of the proposed runway within 500m from a watercourse, a general authorization is required for the development and is in the process of being applied for.

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

municipal	water board	groundwater	river, stream, dam or lake	other	the activity will not use water

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate
the volume that will be extracted per month: ± 25 000 litres per day

Does the activity require a water use permit from the Department of Water Affairs? YES

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

Refer to Appendix H.

13. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The application is for an airstrip with minimal infrastructure and therefore does not require energy efficient measures to be implemented.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

No alternative energy sources have been taken into account due to the nature of the infrastructure.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section C Copy No. (e.g. A):	**A**

2. Paragraphs 1 - 6 below must be completed for each alternative.

3. Has a specialist been consulted to assist with the completion of this section? YES

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address:	Farm Rimarumi Ranch No K.R. 948 located 50 km WNE of Mokopane and 10km SW of the Road R518 in the Limpopo Province.
	(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.
	Farm Rimarumi Ranch No K.R. 948
	TOKR00000000094800000
	In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.
Current land-use zoning:	Game Farm
	In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to , to this application.

Is a change of land-use or a consent use application required?	NO
Must a building plan be submitted to the local authority?	NO

Locality map:

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.) The map must indicate the following:

- an indication of the project site position as well as the positions of the alternative sites, if any;
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

Alternative S2 (if any): Not Applicable

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

Alternative S3 (if any): Not Applicable

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

2.1 Ridgeline		2.6 Plain	X
2.2 Plateau		2.7 Undulating plain / low hills	
2.3 Side slope of hill/mountain		2.8 Dune	
2.4 Closed valley		2.9 Seafront	
2.5 Open valley			

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)? Only Alternative S 1 is being considered.

	Alternative S1:	**Alternative S2 (if any):**	**Alternative S3 (if any):**

Shallow water table (less than 1.5m deep)	YES	NO		YES	NO		YES	NO
Dolomite, sinkhole or doline areas	YES	NO		YES	NO		YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO		YES	NO		YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO		YES	NO		YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO		YES	NO		YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO		YES	NO		YES	NO
Any other unstable soil or geological feature	YES	NO		YES	NO		YES	NO
An area sensitive to erosion	YES	NO		YES	NO		YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition[E]	Natural veld with scattered aliens[E]	Natural veld with heavy alien infestation[E]	Veld dominated by alien species[E]	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "[E] "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

Floral Assessment Results

A site survey was undertaken on 25th of July 2023.

Land uses, on and adjacent to the project area, currently consist of game farming, eco-tourism / hospitality lodges and related activities.

The following broad classification of vegetation were found to occur on the proposed project footprint and delineated as a Vegetation Unit (VU):

- Natural Bushveld (VU1)

Vegetation Unit 1 (VU1) is associated with bushveld habitat and based on the site visit is representative of natural veld with mostly indigenous trees, grasses and forbs observed. Very little signs of overgrazing and trampling were visible. Some of the older trees in the study area show signs of veldfires. This is corroborated by the fact that the study area is not cluttered with excessive dead plant material.

81 plant species were identified in VU1 (refer to **Error! Reference source not found.**), which is considered to be moderate to high species diversity. The VU is dominated by woody species, with a lower grass layer and forb diversity.

The dominant tree and shrub species include: *Burkea Africana* (Wild seringa), *Combretum molle* (Velvet Bushwillow), *Faurea saligna* (Willow Beechwood), *Combretum zeyheri* (Large fruited Bushwillow), *Protea caffra* (Common sugarbush), *Terminalia sericea* (Silver cluster leaf), *Englerophytum magalismontanum* (Stamvrug) and *Combretum apiculatum* (Red bush willow).

The dominant grass species include: *Aristida congesta* (Tassle three-awn), *Eragrostis lehmanniana* (Lehmann's love grass), *Eragrostis tricophora* (Hairy love grass), *Aristida stipitata* (Long awned Aristida), *Eragrostis racemosa* (Narrow Heart Love Grass), and *Hyparrhenia filipendula* (Fine Thatching Grass).

Only one geophyte was observed during the site visit namely a *Hypoxis* sp.

Two succulents were observed during the site visit namely the common Kalanchoe (*Kalanchoe rotundifolia*) and the pachycaul succulent *Adenia spinosa* (spiny greenstem).

Two species of xeric ferns were observed within the study area namely *Pellaea calomelanos* (Hard Fern), and *Pellaea viridis* (Green Cliff Brake).
Forbs observed during the site visit included *Geigeria burkei* (Knoppiesvermeerbos) (Dominant), *Felicia mossamedensis* (Yellow felicia), *Helichrysum callicomum*, *Oldenlandia herbacea,* and *Parapolydora fastigiata* (Narrow leaved Vernonia).

Of all the species recorded, at least 15 are known to be edible to humans and animals.

Only one exotic species namely. *Seriphium plumosum* (Bankrupt bush) was observed within the VU. Only one individual was observed on the footprint, but many of these were observed in the adjacent areas, specifically to the north of the footprint, indicating that overgrazing or impacts might be present and focused near the drainage area.

Four species observed within the VU are listed in CARA as being possible encroacher plants (Category 2), these include the abovementioned *Seriphium plumosum* (Bankrupt bush), *Euclea crispa* (Blue guarri)*, Grewia flavescens* (Donkey berry), *Lopholaena coriifolia* (small leaved fluff bush) and *Dichrostachys cinerea* (Sickle Bush). Although indicators of possible bush encroachment, it should be noted that all the abovementioned species were observed as small populations or single individuals, not as monocultural stands. Also, three of these species are indigenous, they are merely pioneer species, and form part of a healthy succession of floral ecology. *Seriphium plumosum* does not enjoy the status of being indigenous and is a common weed in disturbed places, thus if activities are to continue, the disturbance will make it more beneficial for this species to spread.

13 of the recorded plant species in the study area are to some extent used for medicinal purposes.

No floral SCC were identified to occur on the project footprint during the site survey. However, due to the late winter conditions during the site visit, it is easy to miss geophytes as well as other deciduous forbs due to their ecology.

Due to the vegetation being fairly natural and that the vegetation composition is representative of the Waterberg Mountain Bushveld, VU1 has been rated as having Moderate sensitivity.

Refer to the Terrestrial Biodiversity Specialist Assessment attached in Appendix D.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

5.1 Natural area	**X**	5.22 School	
5.2 Low density residential		5.23 Tertiary education facility	
5.3 Medium density residential		5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial [AN]		5.26 Museum	
5.6 Office/consulting room		5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam [A]		5.29 Sewage treatment plant [A]	
5.9 Light industrial		5.30 Train station or shunting yard [N]	
5.10 Heavy industrial [AN]		5.31 Railway line [N]	
5.11 Power station		5.32 Major road (4 lanes or more)	
5.12 Sport facilities		5.33 Airport [N]	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station [H]		5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	**X**
5.17 Plantation		5.38 Nature conservation area	**X***
5.18 Agriculture		5.39 Mountain, koppie or ridge	
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	
5.21 Dam or Reservoir		5.42 Other land uses (describe)	

*Although not formally protected the farm on which the Witwater Airstrip will be located is classified as a game farm.

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity?

No boxes marked with "N" ticked.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity?

If YES, specify and explain:	
If NO, specify:	

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:	
If NO, specify:	

Faunal Assessment Results and Habitat integrity

As indicated in Section 4 above a terrestrial ecological assessment was taken. The faunal assessment results and habitat integrity are summarized in this section. The full terrestrial ecological assessment is included as Appendix D.

The area surveyed occurred within the private property named Witwater Conservation Area Game Farm and the site has been evaluated and found to be largely natural and habitat intact. The regional habitat availability is also ideal since the study area, as well as the Witwater property is surrounded by vast expanse natural landscape utilised as game farms and conservation land uses.

Most of the footprint under investigation consisted of natural bushveld. The faunal investigation provides a description of the ecological diversity in terms of species identification as well as the occurrence of threatened/sensitive species that is dependent on available habitat. During the desktop analysis, it was determined that several Red Data species were listed on the South African National Biodiversity database (SANBI) for the QDS that encompass the specific area and based on the field assessment findings, these constitute the game kept by the applicant and those present in the surrounding area.

Fifty-three (53) faunal species were sighted and/or reported to occur and may be relevant to the development footprint, with three SCC, of which two is SA national SCC. Sevel provincially protected species were sighted (or signs confirmed) and these species are kept as game on the farm and within the regional area.

No additional sensitive species (that do not already occur as part of the game kept) are expected to be impacted, as it was found that the general area is completely natural representing ample available habitat for the species present in the area.

Collision risk with birds is a risk for any airfield development, but will likely be minimal since the airfield will not support large-scale nor regular air traffic, but this could still occur and from literature and risk assessments conducted on airport and airfield developments, it seems that the White-backed Vulture *Gyps africanus* and Helmeted Guineafowl *Numida meleagris* were the highest risk species after the Crowned Lapwing *Vanellus coronatus*, the species most often observed by pilots (Journal of African Ornithology (AJOL), 2016).

The SCC, namely the Mountain Reedbuck, Zebra Burchelis (both kept as game) and Leopard species that occur within the regional area, will not be negatively impacted outside of the project footprint or by the activity if it is ensured that the airfield footprint is fenced to keep game and other animals out of this zone at all times.

Watercourse Assessment

The field survey for the proposed development was conducted on the 25th of July 2023 within the South African National Biodiversity Institute (SANBI) prescribed dry season for the region. However, on conducting the site visit, it was noted that soil was utilised as a primary measure to identify watercourses in the absence of vegetation indicators.

Delineated, classification and at-risk watercourses

It was determined during the initial delineation process that a total of two (2) watercourses were identified within the study area. These watercourses were classified as one (1) drainage line and one (1) seepage wetland.

Present Ecological State (PES), Ecological Importance and Sensitivity (EIS), Recommended Ecological Category (REC)

The PES of the drainage line and seepage wetland were scored at C (moderately modified) and D (largely modified), whereas the EIS for the drainage line and seepage wetland were low and moderately low, respectively. The aforementioned systems REC were to maintain their integrity, given the changes to the catchment and watercourses at other reaches.

Drainage Line				
System	Overall Instream Habitat PES	Overall Riparian Habitat PES	**Overall Score**	**EIS**
DL01	67 (C)	N/A	67 (C)	Low

Wetlands						
HGM Unit	Hydrology	Geomorphology	Water Quality	Vegetation	**Overall Score**	**EIS**
Seep01	4.2 (D) →	3.3 (C) →	1.2 (B)	6.3 (E) →	**3.8 (C)**	Moderately Low

Key: DL – Drainage line, Seep – Seepage Wetland, B – Slightly Modified, C – Moderately Modified, D – Largely Modified, E – Seriously Modified.

Ecosystem Services (ESS):

The ESS of these systems was predominantly regulatory and supporting services ranging from low supply scored for the drainage lines and moderate supply for the seepage wetland. It must be noted that these watercourses fall within desktop sensitivities (e.g: critical Wetveg unit, CBA's and IBA's).

Buffer Zone Assessment

Buffer zones for the 'at risk' watercourses within the study area were determined by utilising the Buffer Zone Guideline Tool by Macfarlane and Bredin (2016), which was drafted for the Water Research Commission and the national DWS.

The table below presents the calculated buffer zones that must be applied to the at risk watercourses. The buffer zone calculations were conducted using the 'Transport Infrastructure – Airport Runways and Taxiways' activity based on the proposed construction and operation activities of the proposed development. The calculated buffers must be pegged and implemented during the aforementioned phase. Furthermore, to be in line with the RMO, the mitigation measures and monitoring requirements outlined in this report must be strictly adhered too.

The non-essential activities (e.g. laydown areas, stockpiling of soils and any additional activities which may be detrimental to the health and functionality of the freshwater resources) must be strictly prohibited within the delineated watercourses and buffer zones. Any unauthorised or potentially detrimental activities which occur in the

direct vicinity or upstream of the freshwater resources should be rehabilitated according to the site EMPr and preventative or mitigation strategies.

At-Risk Watercourse	Calculated No-Go Buffer Zones	
	Construction Phase	Operational Phase
DL01	25	25
Seep01	25	25

6. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including		NO
Archaeological or palaeontological sites, on or close (within 20m) to the site?	Uncertain	
If YES, explain:		

If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.

Briefly explain the findings of the specialist:	Agri Civil Geotech and Heritage undertook a heritage Phase 1 assessment. Refer to Appendix D. The area inspected for the proposed NTT Witwater Airfield measures approximately 9.6 ha. The majority of the northern half of the demarcated area used to be cultivated, while the entire area currently consists of open land. Also, the demarcated area is located within 500 m of a non-perennial river, an area generally considered to be potentially sensitive from a heritage perspective. No potential heritage sites, however, were observed on historical aerial images, topographical maps, or during the pedestrian survey. The demarcated area is therefore considered to be partially disturbed and not sensitive from a heritage perspective.

Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

(a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the department) at a place conspicuous to the public at the boundary or on the fence of—

(i) the site where the activity to which the application relates is or is to be undertaken; and

(ii) any alternative site mentioned in the application;

(b) giving written notice to—

(i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;

(ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;

(iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;

(v) the municipality which has jurisdiction in the area;

(vi) any organ of state having jurisdiction in respect of any aspect of the activity; and

(vii) any other party as required by the department;

(c) placing an advertisement in—

(i) one local newspaper; or

(ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;

(d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and

(e) using reasonable alternative methods, as agreed to by the department, in those instances where a person is desiring of but unable to participate in the process due to—

(i) illiteracy;

(ii) disability; or

(iii) any other disadvantage.

Proof of the advertisement, site notices and BID and direct notification of identified I&APs will be included in the final BAR to be submitted to the LEDET.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation; and

(b) state—

(i) that the application has been submitted to the department in terms of these Regulations, as the case may be;

(ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;

(iii) the nature and location of the activity to which the application relates;

(iv) where further information on the application or activity can be obtained; and

(v) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

As indicated proof of advertisement and notices will be included in the Final BAR to be submitted to the LEDET.

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the department in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of these Regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the department to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

An Interested and Affected Parties database is attached in Appendix E and this will be updated during the environmental authorisation process.

5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in these Regulations and be attached to this application. The comments and response report must be attached under Appendix E.

The comments and response report will be included in the Final BAR to be submitted to the LEDET in Appendix E.

6. AUTHORITY PARTICIPATION

The authority participation information will be included in the Final BAR as an appendix.

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input.

Name of Authority informed:	Comments received (Yes or No)
Department of Water and Sanitation	Not to date
Department of Mineral Resources and Energy	Not to date
Modimolle/Mookgophong Local MunicipalityLocal Municipality	Not to date
Waterberg District Municipality	Not to date
Limpopo Department of Agriculture Forestry and Fisheries	No
Road Agency Limpopo	No

7. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the department.

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?	**YES**	**NO**

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

To date no comments have been received. This section will be updated for the final BAR to be submitted to the LEDET for decision-making.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

To date no issues have been raised by Interested an Affected Parties. This will be updated following public participation for the final BAR to be submitted to the Department for decision-making.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report as Annexure E):

Refer to the above paragraph. This section will be updated once the BAR has been placed out for public review and the public participation process has been undertaken.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Alternative (preferred alternative)

Methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks;
(Describe how the significance, probability, and duration of the aforesaid identified impacts that were identified through the consultation process was determined in order to decide the extent to which the initial site layout needs revision).

The impact assessment methodology used to determine the significance of impacts prior and after mitigation is presented below.

Extent of the impact

The EXTENT of an impact is the physical extent/area of impact or influence.

Score	Extent	Description
1	Footprint	The impacted area extends only as far as the actual footprint of the activity.
2	Site	The impact will affect the entire or substantial portion of the site/property.
3	Local	The impact could affect the area including neighbouring properties and transport routes.
4	Region	Impact could be widespread with regional implication.
5	National	Impact could have a widespread national level implication.

Duration of the impact

The DURATION of an impact is the expected period of time the impact will have an effect.

Score	Duration	Description
1	Short term	The impact is quickly reversible within a period of less than 2 years, or limited to the

		construction phase, or immediate upon the commencement of floods.
2	Short to medium term	The impact will have a short term lifespan (2–5 years).
3	Medium term	The impact will have a medium term lifespan (6 – 10 years)
4	Long term	The impact will have a medium term lifespan (10 – 25 years)
5	Permanent	The impact will be permanent beyond the lifespan of the development

Intensity of the impact

The INTENSITY of an impact is the expected amplitude of the impact.

Score	Intensity	Description
1	Minor	The activity will only have a minor impact on the affected environment in such a way that the natural processes or functions are not affected.
2	Low	The activity will have a low impact on the affected environment.
3	Medium	The activity will have a medium impact on the affected environment, but function and process continue, albeit in a modified way.
4	High	The activity will have a high impact on the affected environment which may be disturbed to the extent where it temporarily or permanently ceases.
5	Very High	The activity will have a very high impact on the affected environment which may be disturbed to the extent where it temporarily or permanently ceases.

Reversibility of the impact

The REVERSIBILITY of an impact is the severity of the impact on the ecosystem structure

Score	Reversibility	Description
1	Completely reversible	The impact is reversible without any mitigation measures and management measures
2	Nearly completely reversible	The impact is reversible without any significant mitigation and management measures. Some time and resources required.
3	Partly reversible	The impact is only reversible with the implantation of mitigation and management measures. Substantial time and resources required.
4	Nearly irreversible	The impact is can only marginally be reversed with the implantation of significant mitigation and management measures. Significant time and resources required to ensure impact is on a controllable level.
5	Irreversible	The impact is irreversible.

Probability of the impact

The PROBABILITY of an impact is the severity of the impact on the ecosystem structure

Score	Probability	Description
1	Improbable	The possibility of the impact occurring is highly improbable (less than 5% of impact occurring).
2	Low	The possibility of the impact occurring is very low, due either to the circumstances, design or experience (5% to 30% of impact occurring).
3	Medium	There is a possibility that the impact will occur to the extent that provision must be made therefore (30% to 60% of impact occurring).
4	High	There is a high possibility that the impact will occur to the extent that provision must be made therefore (60% to 90% of impact occurring).
5	Definite	The impact will definitely take place regardless of any prevention plans, and there can only be relied on migratory actions or contingency plans to contain the effect (90% to 100% of impact occurring).

Calculation of Impacts – Significance Rating of Impact

Significance is determined through a synthesis of the various impact characteristics and represents the combined effect of the Irreplaceability (Magnitude, Extent, Duration, and Intensity) multiplied by the Probability of the impact. The significance of an impact is rated according the scores a presented below:

Significance = Irreplaceability (Reversibility + Intensity + Duration + Extent) X Probability

Significance Rating

Score	Significance	Colour Code
1 to 20	Very low	
21 to 40	Low	
41 to 60	Medium	
61 to 80	High	
81 to 100	Very high	

Degree to which the impact can be mitigated: *The effect of mitigation measures on the impact and its degree of effectiveness.*

- High (Impact 100% mitigated)
- Medium (Impact >50% mitigated)
- Low (Impact <50% mitigated)

Confidence rating: *Level of certainty of the impact occurring*.

- **Certain**
- **Sure**
- **Unsure**

Cumulative impacts: *The effect the combination of past, present and "reasonably foreseeable" future actions have on aspects.*

- Very Low cumulative impact
- Low cumulative impact
- Medium cumulative impact
- High cumulative impact

Table 1: Significance of Impacts before and after Mitigation Measures are Implemented

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Site preparation (foundations for all proposed activities)	Geology and Soils	Soil erosion and soil compaction.	Low	40	Reduce the amount of exposed soil by mean of selective soil stripping. Implementation of correct stormwater channels. Monitor drainage channels to ensure erosion does not occur, Clearing of minimal vegetation.	Low	32
Site preparation	Geology and Soils	Loss of topsoil.	Medium	50	Keep construction to development site. Minimal vegetation should be cleared.	Low	20
Site preparation and construction activities	Geology and Soils	Contamination of soils through disposal of waste; and spillage of hydrocarbon-based fuels and oils or lubricants spilled from vehicles and paints.	Low	40	Maintain and machinery must be maintained. Should maintenance take place on site, these should be taken to a designated area that is paved.	Very low	16
Site preparation	Archaeology and Heritage	No heritage found on site	Very low	14	Implementation of chance find protocol.	Very low	5,6
Site preparation (excavations for landing strip and hanger.)	Palaeontology	It is unlikely that any fossils would be preserved in the sands and alluvium of the area.	Very low	14	Implementation of chance find protocol.	Very low	5,6
Site preparation	Topography	Modification of the landscape.	Medium	44	Ensure minimal disturbance to topography by keeping development to the site.	Low	30

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Site preparation	Terrestrial Biodiversity	Development related activities will lead to damage or degradation of moderately sensitive habitats (VU1) and overall loss of biodiversity and ecosystem function within the clearance area. As a result of the construction activities additional fragmentation, degradation or compression may occur. The vegetation on the footprint will be stripped and all vegetation and habitat within this stretch proposed for development will be lost. A linear section perpendicular to the existing road will be utilised for the airfield development, which means the area of influence is expected to be limited in size.	Medium	55	Remain clear of other areas where activities are not necessary. Adhere to all management and mitigation measures as prescribed within other specialist reports and Environmental Management Programme (EMPr). To minimize potential impacts to animal species, animals (wildlife and domestic animals) may under no circumstances be handled, removed, killed or interfered with by the Contractor, his employees, his Sub-Contractors or his Sub-Contractors' employees. Vegetation clearance should be specific and controlled to include only the development footprint and no other natural areas should be impacted. The footprint should be fenced immediately prior to construction onset and no animals should be contained or allowed within this footprint to avoid injuries and impact	Low	33

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Activities during construction phase and infrastructure during operational phase	Terrestrial Biodiversity	Development related activities may lead to the loss of floral sensitive species. Animal SCC identified to occur are kept as game by the applicant on the property and these should be restricted access to the construction site and during all phases of the development.	High	65	All footprint areas should remain as small as possible. This can be achieved by fencing footprint areas to contain all activities within designated areas. If any SCC are encountered within the subject property in the future, the following should be ensured: o If any threatened species will be disturbed, ensure effective relocation of individuals to suitable offset areas or within designated open space on the subject property. o All rescue and relocation plans should be overseen by a suitably qualified specialist. o Obtain relevant permits/consent, if applicable, for each protected or endangered floral species identified within the proposed development area that will be destroyed. All vehicles and equipment must be regularly maintained to avoid any oil/fuel leaks or spills. If any spill or leak does occur, it must be ensured that it is properly cleaned up as soon as possible to avoid significant effects.	Low	26
Activities during construction phase and infrastructure during operational phase	Terrestrial Biodiversity	Fragmentation of habitat areas due to possible fencing or the placement of boundary structures could lead to increased edge effects. Remaining natural habitat that is not to be cleared, needs to be protected unless authorised otherwise. Edge effects could occur around the linear footprint if not managed well.	Medium	56	Demarcate specific areas to be developed and remain clear of other areas where activities are not necessary. Adhere to all management and mitigation measures as prescribed within other specialist reports and Environmental Management Programme (EMPr). Keep the footprints as small as possible and clear only the designated approved areas. During the construction phase control of access should be implemented for all remaining natural areas to prevent unnecessary destruction of habitats or disturbance of species. It is also important that no additional fragmentation occurs and that all roads are clearly demarcated and kept to. No vehicles or personnel should be permitted outside of these demarcated roads.	Low	33,6
Construction activities	Terrestrial Biodiversity	Sensitive aquatic habitat needs to be protected. The dam to the north, the wetland delineated and the drainage line (ephemeral), could be impacted if impacts occur outside of the footprint. .	Medium	48	Demarcate specific areas to be developed and remain clear of other areas where activities are not necessary. Adhere to all management and mitigation measures as prescribed within other specialist reports and Environmental Management Programme (EMPr). Keep the footprints as small as possible and clear only the designated approved areas. During the construction phase control of access should be implemented for all remaining natural areas to prevent unnecessary destruction of habitats or disturbance of species. It is also important that no additional fragmentation occurs and that all roads are clearly demarcated and kept to. No vehicles or personnel should be permitted outside of these demarcated roads.	Low	39

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Construction and operational activities (earthworks and establish ment of infrastructure) an operation of airstrip	Terrestrial Biodiversity	Impacts may lead to the increase of invasive species from the surrounding areas and may change the vegetation structure and composition of adjacent areas over time. It may also result in the spread of the invaders to other surrounding areas. The condition of the area is largely natural and minimal invasives were sighted to occur on the footprint, but this could change due to clearance activities within the footprint, leading to invasive species getting a foothold within this section and these plants will spread into the surrounding natural areas if not carefully managed and eradicated.	Medium	45	Implement an Alien and Invasive Management Programme, which will aim to remove and manage any invasive as listed within the Alien and Invasive Species list as published in 2020. Ensure awareness amongst all staff, contractors and visitors to site to not needlessly damage flora. To minimize potential impacts to animal species, animals (wildlife and domestic animals) may under no circumstances be handled, removed, killed or interfered with by the Contractor, his employees, his Sub-Contractors or his Sub-Contractors' employees.	Low	39
Use of airstrip by planes /helicopter	Terrestrial Biodiversity	Collisions to avifaunal and potentially bat species (flying species) during the operational stage of the airfield could occur. Animal SCC identified to occur are kept as game by the applicant on the property and these should be restricted access to the construction site and during all phases of the development.	High	75	All footprint areas should remain as small as possible. This can be achieved by fencing footprint areas to contain all activities within designated areas. If large birds or flocks of birds are reported or observed near the runway, the flight crew should consider: ○ Delaying the take-off or landing when fuel permits. Advise the tower and wait for airfield action/instruction before continuing. Unfortunately, bird strikes are difficult to manage and prevent, but effective wildlife management involves controlling attractants, often species-specific, including food, foraging, roosting, and nesting opportunities. It should be ensured that feeding opportunities are not created near the airfield and the airfield should regularly be maintained and checked for nests and inhabitants that could be killed in collision. All collisions should be reported to the applicant and strategies or reporting structures should be in place to enable this. If any SCC is killed during a collision, an avifaunal specialist should be consulted to assess the situation, provide suggestions to prevent possible repeat scenarios.	Medium	45
Closure (Closure will need to be re-evaluated should the airstrip be decommissioned)	Terrestrial Biodiversity	Impacts during and after closure and demolition. The results may be positive as a result of rehabilitation, if invaders have been kept under control during the operational phase of the project, the site may be rehabilitated back to a natural landscape. Areas should be rehabilitated back to its original land capability to ensure the natural habitat of the sensitive species are recovered to its original characteristics.	Medium Positive	52	A management plan for control of invasive/exotic plant species needs to be implemented for all footprint and surrounding areas. Removal of alien and invasive species must continue for a two-year maintenance period after/during the decommissioning phase, on a biannual basis. Rehabilitation plan should be implemented. This includes the process of reprofiling, topsoil distribution and replanting the vegetation. Rehabilitation plans should be compiled with the use of a specialist and the correct seeding techniques and mixtures should be applied. Close monitoring of plant communities during and after the decommissioning phase to ensure that ecology is restored and self-sustaining. The monitoring of the flora should be conducted annually by the environmental practitioner, until a suitably qualified specialist deems the monitoring to no longer be necessary.	Medium Positive	52

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Construction and operation including compaction of soil, removal of vegetation	Watercourses (wetlands and drainage line)	Changing the quantity and fluctuation properties of the at risk watercourses by for example restricting water flow or increasing flood flows. Permanent changes to water flows and loss of important habitat may occur.	Low	44	Construction possibly affecting watercourses should be restricted to the drier winter months, where practically possible. All construction and operation activities should occur outside of the construction and operation buffers provided in this report, where practically possible. Demarcate the watercourses and associated buffer zones to limit disturbance, clearly mark these areas as no-go areas. All bare areas due to construction and operation activities must be rehabilitated by adding topsoil where required and revegetated with indigenous vegetation. Effective stormwater management should be put into place and be a priority during all phases of the project. This should be monitored as part of the EMPr. The at risk watercourses should be monitored for any degradation and changes to the functionality of the system. Ensure that erosion management and sediment controls are strictly implemented from the beginning of site clearing activities. Monitor the occurrence of erosion during the rainy season and take immediate corrective action where needed. As far as possible the existing road network should be utilised, minimising the need to develop new access routes resulting in an increased impact on the local environment. All temporary access and service roads must contain mitre drains every 20 m or less depending on the topography to control the stormwater wash down the roads. All stormwater infrastructure must contain flow dissipation structures/measures, as the reduced groundcover within the study area is prone to high velocity surface wash that may encourage preferential flow-paths to form, and thus rill/gully erosion occurring. No stormwater infrastructure must be directed into a watercourses, but instead towards a section of vegetated land, or flow dissipators, adjacent to the watercourses. Watercourse road crossings should be minimised as far as practically possible and crossings of important systems should be avoided to avoid or minimize direct habitat impacts, hydrological impacts and ecological fragmentation impacts. Erosion protection and energy dissipation measures should be established at all road crossing outlets e.g. stilling basins and reno-mattresses.	Very Low	17,6
Use of hazardous substances and incorrect use of vehicles	Watercourses (wetlands and drainage line)	Changes in water quality due to pollution can result in the loss of sensitive biota in the watercourses and a reduction in functionality.	Medium	44	Implementation of appropriate stormwater management around the proposed development areas and associated infrastructure to prevent contaminated runoff into the watercourses. Maintenance of construction and operation vehicles / equipment should not take place within the watercourses and associated buffers. All vehicles must be regularly inspected for leaks. Re-fuelling must take place on a sealed surface area to prevent hydrocarbon pollution. All spills should be cleaned up immediately and disposed of. Littering must be prevented by effective site management and the provision of bins. Control of waste discharges and do not allow dirty water from operational activities to enter the watercourses. Fuel, chemicals and other hazardous substances should preferably be stored offsite, or in suitable secure weather-proof containers with impermeable and bunded floors onsite to limit pilferage, spillage into the environment, flooding or storm damage. No contaminated runoff or grey water is allowed to be discharged from the	Very Low	17,6

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
					construction site camp. The proper storage and handling of hazardous substances (e.g. fuel, oil, cement, etc.) needs to be administered. Mixing and/or decanting of all chemicals and hazardous substances must take place on a tray, shutter boards or on an impermeable surface and must be protected from the ingress and egress of stormwater. Drip trays should be utilised at all dispensing areas. No vehicles transporting concrete, asphalt or any other bituminous product may be washed on site. Vehicle maintenance should not take place on site unless a specific bunded area is constructed for such a purpose. Hazardous storage and refuelling areas must be bunded prior to their use on site during the construction period following the appropriate SANS codes. The bund wall should be high enough to contain at least 110% of any stored volume. The surface of the bunded surface should be graded to the centre so that spillage may be collected and satisfactorily disposed of. All necessary equipment for dealing with spills of fuels/chemicals must be available at the site. Spills must be cleaned up immediately and contaminated soil/material disposed of appropriately at a registered site. Contaminated water containing fuel, oil or other hazardous substances must never be released into the environment. It must be disposed of at a registered hazardous landfill site. Spills must be cleaned up immediately and contaminated soil/material disposed of appropriately at a registered site. The digging of pit latrines is not allowed under any circumstances. None of the open areas or the surrounding environment may be used as ablution facilities. No open fires are permitted on site.		
Indirect activities	Watercourses (wetlands and drainage line)	Loss and disturbance of watercourse habitats and watercourse fauna fatalities. Owing to the nature of the impact of the proposed development where both the soil profile and the underlying stratigraphy are for all intents and purposes permanently altered, impacts on the watercourses and their associated function are loss.	Medium	44	Demarcate the watercourses and associated buffer zones to limit disturbance, clearly mark these areas as no-go areas. Locate site camps, laydown areas, stockpile areas, construction material, equipment storage areas, vehicle parking areas, bunded vehicle servicing areas and re-fuelling areas in designated areas of already hardened surface or disturbed areas on site. These areas should preferably be located on level ground in a previously disturbed area of vegetation approved by the Environmental Control Officer (ECO). Cut and fill must be avoided where possible during the set-up of the construction site camp. No temporary infrastructure must be situated within delineated watercourses and their associated no-go buffer zones. No service roads or other unauthorized activities to take place within the delineated watercourses and associated buffer zones. Monitor the occurrence of erosion during the rainy season and take immediate corrective action where needed. The handling and/or killing of any animal species present is strictly prohibited and all staff/personnel must be notified of such incidents. Watercourse fauna (e.g. snakes, frogs, small mammals) that are encountered during the construction phase must be relocated to other parts of the watercourse	Very Low	17,6

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
					under the guidance of the ECO and relevant handling specialist. Poaching/snaring is strictly prohibited.		
Construction and operation of airstrip The moving of soil and vegetation resulting in opportunistic invasions of alien vegetation after disturbance and the introduction of seeds in building materials and on vehicles. Invasions of alien plants can impact on hydrology, by reducing the quantity of water entering the watercourses, and outcompete natural vegetation, decreasing the natural biodiversity. Once in a system, alien invasive plants can spread through the catchment. If allowed to seed before control measures are implemented alien plants can easily colonise and impact on downstream users.	Watercourses (wetlands and drainage line)	Introduction and spread of alien species	Medium	60	Relocate conservation-worthy species under the supervision of a botanist or horticultural specialist and ensure the relevant permits to conduct such an activity are in place. Proliferation of alien and invasive species is expected within any disturbed areas particularly as there are extensive alien and invasive species present within the study site. These species should be eradicated and controlled to prevent further spread beyond. Alien and invasive vegetation control should take place throughout all phases to prevent loss of floral habitat. Footprint areas should be kept as small as possible when removing alien plant species. All bare surfaces across the construction site must be checked for AIPS every two (2) weeks and AIPS removed by hand pulling/uprooting and adequately disposed. Herbicides should be utilised where hand pulling/uprooting is not possible. Where possible, herbicides should not be utilised in watercourses. However, only those herbicides which have been certified safe for use in watercourses by independent testing authority are to be used. The ECO must be consulted in this regard. The herbicide contractor must be certified to apply/utilise the herbicide in question. A suitably qualified ECO/botanist/horticulturist must supervise the handling, maintenance and planting of the plant/trees if any site requires rehabilitation after construction or during operational phase. No AIPS may be utilised during the rehabilitation process. Rapidly germinating native indigenous species (e.g. fast growing, deep rooting, rhizomatous, stoloniferous) known to bind soils in terrestrial, riparian and/or wetland areas must be utilised where there is a strong motivation for stabilisation over reinstating similar plant communities to that being disturbed. This should be informed by a suitably qualified specialist. Exposure of plant root systems to drying winds, high temperatures or water logging must be avoided. Where possible, revegetation must take place at the start of the spring rains to maximise water availability and minimise the need for irrigation. This will ensure optimal conditions for germination and rapid vegetation establishment. If this is not possible, watering of planted areas may be necessary during dry periods (external sources of water must be utilised e.g. Joe-Joe tanks). Water utilised for irrigation must be free of any chlorine or contaminants that may negatively affect the plant species. The control of AIPS must be guided by a AIPS control plan to ensure compliance with the NEM:BA	Low	25,6
Construction activities consisting of earthworks and soil disturbances, may result in the loss of topsoil, sedimentation and increase in turbidity of the at risk watercourses.	Watercourses (wetlands and drainage line)	Changes in sediment entering and exiting the systems may result in smothering of vegetation and habitats and lead to the loss of niche habitats. Furthermore, increased turbidity affects the oxygen concentration and temperature of the water. Sedimentation and erosion will lead to the degradation of the	Medium	44	Construction in close proximity to watercourses must be restricted to the dryer winter months where reasonably possible. Remove only the vegetation where essential and do not allow any disturbance to the adjoining natural vegetation cover. Stockpiling of soils and materials should take place outside of preferential flow paths, delineated watercourses and associated calculated buffer zones. All bare areas due to construction and operation activities must be rehabilitated by adding topsoil where required and revegetated with indigenous native vegetation. Ensure that erosion management and sediment controls are strictly implemented from the beginning of site clearing activities.	Low	26,4

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
		watercourses			Monitor the occurrence of erosion during the rainy season and take immediate corrective action where needed. Erosion control measures including silt fences, low vegetated soil berms and/or shutter boards should be put in place around the temporary site camp and laydown areas to limit sediment ladened runoff and contaminants traveling into the surrounding environment. Sediment barriers (e.g.: silt fences/sandbags/hay bales) must be installed immediately downstream of active work areas (including soil stockpiles) as necessary to trap any excessive sediments generated during construction. If revegetation of exposed surfaces cannot be established immediately due to phasing issues, temporary erosion and sediment control measures must be maintained until such a time that revegetation can commence. All temporary erosion and sediment control measures must be monitored for the duration of the construction phase and repaired immediately when damaged. All temporary erosion and sediment control structures must only be removed once vegetation cover has successfully recolonised the affected areas. After every rainfall event, the contractor must check the site for erosion damage and rehabilitate this damage immediately. Erosion rills and gullies must be filled-in with appropriate material and silt fences or fascine work must be established along the gulley for additional protection until vegetation has recolonised the rehabilitated area.		
Removal of vegetation for site clearing / preparation for all proposed infrastructure	Visual	Negative impacts on aesthetics	Low	36	Limit the amount of vegetation to be cleared to the site where construction will take placed. Ensure construction camps is kept neat and during operation the airstrip and hanger area should be kept neat and maintained.	Low	28,8
Removal of vegetation for site clearing / preparation for all proposed infrastructure	Visual	Negative impact on visibility from sensitive receptors/Viewpoints	Medium	44	Limit the amount of vegetation to be cleared to the site where construction will take placed. Ensure construction camps is kept neat and during operation the airstrip and hanger area should be kept neat and maintained.	Low	35,2
Movement of construction vehicles and heavy machinery for site clearance	Visual	Change of visual character from a natural landscape to a built landscape	Medium	44	Keep construction area to development area. Ensure neatness at site at all times.	Low	26,4
Site preparation and construction activities	Noise	Residents in the vicinity of the proposed development site will be subjected to increased noise nuisance (noise and vibration caused by construction machinery and equipment)d	Low	30	Construction activities should be restricted to 07h00 to 17h00 during weekdays and 08h00 to 13h00 during weekends. Equipment should be well maintained and serviced.	Low	24
Use of airstrip by planes /helicopter	Noise	Residents in the vicinity of the proposed development site will be subjected to increased noise nuisance caused by aeroplanes and helicopters landing or taking off.	Medium	48	Landing and taking off should be restricted to 07h00 to 17h00 during weekdays and 08h00 to 13h00 during weekends.	Low	28,8

ACTIVITY	ASPECTS AFFECTED	POTENTIAL IMPACT	Significance without mitigation		Mitigation Measures	Significance with mitigation	
Movement of construction vehicles and heavy machinery for site clearance	Air Pollution	The proposed construction phase activities will affect air quality as a result of emissions caused by exhaust fumes and dust generation.	Medium	40	The speed of vehicles within the site should be controlled to between 30 to 45 km/h. Areas generating dust should be sprinkled with water to reduce dust blowing over the area. The clearing of vegetation should be limited to the development area and should be undertaken prior to commencement of the construction activities.	Low	24
Use of airstrip by planes /helicopter	Air Pollution	The use of the airstrip will affect air quality as a result of emissions caused by fuels.	Medium	52	Ensure planes/ helicopters are well maintained.	Low	31,2
Construction of airstrip and related infrastructure	Waste	Waste generation and disposal	Low	32	Develop and implement a waste management plan for the construction site. All domestic waste must be disposed of in a proper manner off site. No solid waste should be dumped on site.	Very low	19,2
Construction of airstrip and related infrastructure	Socio-Economic	New recruitment might take place (Construction workers) and all new labour will preferably be local.	Low Positive	27	Offer employment to locals especially where non-skilled labour is required. Comply with the applicable Labour legislation in terms of minimum wages.	Low Positive	27
Construction of airstrip and related infrastructure	Socio-Economic	During construction heavy machinery may be employed which can result in accidents.	Low	32	Safety equipment must be provided to all employees to prevent personal injury during construction. Staff need to be appropriately trained in assigned activities. Implement safety procedure on site.	Low	31,2
Construction of the residential units and associated infrastructure	Traffic	Increased traffic volumes from construction vehicles entering and exiting the site increasing risk for accidents, nuisance and noise	Medium	52	Limit the number of construction vehicles through proper planning for materials to be delivered. Implement speed limits on site. Ensure signage is erected for construction phase.	Low	31,2
No-Go Option	Socio-economic	Reduced benefits on the economic environment, by job provision and obtaining supplies for and from local residents and businesses.	Medium	60	No mitigation required.	Medium	60
No-Go Option	Socio-economic	No negative impacts imposed by the development on I&APs or surrounding land users	Positive Medium	70	No mitigation required.	Positive Medium	70
No-Go Option	Surrounding natural environment and water bodies	No negative impacts imposed by the airstrip on the environment	Positive Medium	45	No mitigation required.	Positive Medium	45

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Alternative A (preferred alternative)

Alternative A is adjacent to the R518 and, therefore, easily accessible. A large portion of the runway is located on previously cultivated land which lowers the severity of environmental impacts.

No-go alternative (compulsory)

The no-go alternative is the option of not undertaking the proposed activity or any of its alternatives. The no-go alternative also provides the baseline against which the impacts of other alternatives should be compared.
As the facility is desirable, the need established and the potential negative impacts minimal (with mitigation), the no-go option is not recommended for the development of the airstrip and hangar.

Alternative B

[redacted]

Alternative C

[redacted]

For more alternatives please continue as alternative D, E, etc.

SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?	YES	

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

[redacted]

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the department in respect of the application:

The EAP recommends the authorization of this application: However, the following conditions and mitigation measures are recommended and should be considered in any authorization that may be granted by the competent authority in respect of the application:

- Contractor must show Compliance with the EMPr for construction and operational phase.
- Contractor must appoint an Environmental Control Officer (ECO) to oversee compliance with the EMPr and to advise on any mitigation measures necessary to negate any environmental degradation.
- The ECO must compile monthly ECO Audit Reports on the state of the environment and areas of compliance and non-compliance with the EMPr.
- These reports must be made available to LEDET should the department request to review and conduct departmental audits.
- All landscaping must include indigenous and water wise vegetation.
- An Environmental Control Officer (ECO) must inspect the site during the construction phase on a weekly basis.
- Working areas must be clearly demarcated by the ECO prior to commencement of the construction and no access is to be allowed in sensitive areas.
- Machinery that generates noise must be regularly maintained in order to ensure that no unnecessary additional noise is produced equipment with lower sound levels should be selected where feasible.
- Employ dust suppression measures such as wetting of the project area during dry, windy periods (Only water from a licensed source will be used); where practical, do not leave large, cleared areas exposed for longer than necessary.
- Vehicle speed should be limited to the lowest possible and should not exceed 40km/h on the construction site.
- Construction vehicles must be regularly maintained in order to ensure that no unnecessary exhaust fumes are being emitted. Construction activities must remain within the footprint of the development.
- Construction machinery must be maintained by a suitably qualified mechanic, at an appropriately lined site, during working hours, so that diesel and /or oil leaks are avoided.
- New erosion features that develop in close proximity of storm water outlets must be stabilized once observed.
- Spills shall be cleared up immediately; no hazardous substances must be disposed on site or into the surrounding environment.
- Incidents spills must be reported to the Project Manager/ECO immediately and shall be cleaned up by the Contractor or a nominated clean-up organization at the expense of the contractor.
- The contaminated soils and the spilled material shall be taken to the nearest registered landfill site capable of receiving such spills.
- A registered of all incidents shall be kept on site showing measures taken to clear up the spillage.
- All alien species must be removed from developed and undeveloped areas of the site once construction is completed.
- Follow-up alien control must be conducted on annual bases.
- Rehabilitation of the site must commence once construction has been completed.
- Disturbed areas must be stabilized to prevent erosion and sedimentation; all removed topsoil must be stockpiled and used for rehabilitation of disturbed areas.
- Monitoring of vegetation growth should be employed to reduce alien invasion and increase the presence of natural dispersed indigenous species.
- During construction, if heritage findings are encountered (graves, archaeological objects, etc), LHIRA

should be contacted and works to be stopped immediate.

- Traffic signage shall be erected to advice people of machinery/ construction vehicles, driving in the area.
- Pollution that could be detrimental to humans, flora and fauna shall be prevented as much as possible.
- Construction employees must be restricted to the development area; they must be warned not to trespass on the neighboring properties.
- Emergency contact numbers must be available on site, and an emergency kit to assist if someone get injured before help arrives.
- Should uncertainty regarding the presence of heritage remains exist, or if heritage resources are discovered by chance, it is advised that the potential site be avoided and that a qualified archaeologist be contacted as soon as possible.
- Since archaeological artefacts generally occur below surface, the possibility exists that culturally significant material may be exposed during the proposed development, in which case all activities must be suspended pending further archaeological investigations by a qualified archaeologist. Also, should skeletal remains be exposed during the project, all activities must be suspended and the relevant heritage resources authority must be contacted (See National Heritage Resources Act, 25 of 1999 section 36 (6)).
- In terms of terrestrial biodiversity, a follow up ECO site walkover (before onset of activity) is prescribed to ensure no SCC was missed due to seasonal constraints.
- If any SCC are encountered within the subject property in the future, the following should be ensured:
  - If any threatened species will be disturbed, ensure effective relocation of individuals to suitable offset areas or within designated open space on the subject property.
  - All rescue and relocation plans should be overseen by a suitably qualified specialist.
  - Obtain relevant permits/consent, if applicable, for each protected or endangered floral species identified within the proposed development area that will be destroyed.
- All vehicles and equipment must be regularly maintained to avoid any oil/fuel leaks or spills.
- If any spill or leak does occur, it must be ensured that it is properly cleaned up as soon as possible to avoid significant effects.
- Keep construction footprint as small as possible and demarcate areas to be developed.
- Implement an Alien and Invasive Management Programme, which will aim to remove and manage any invasive as listed within the Alien and Invasive Species list as published in 2020.
- If large birds or flocks of birds are reported or observed near the runway, the flight crew should consider:
  - Delaying the take-off or landing when fuel permits. Advise the tower and wait for airfield action/instruction before continuing.
- Unfortunately, bird strikes are difficult to manage and prevent, but effective wildlife management involves controlling attractants, often species-specific, including food, foraging, roosting, and nesting opportunities. It should be ensured that feeding opportunities are not created near the airfield and the airfield should regularly be maintained and checked for nests and inhabitants that could be killed in collision.
- All collisions should be reported to the applicant and strategies or reporting structures should be in place to enable this.
- If any SCC is killed during a collision, an avifaunal specialist should be consulted to assess the situation, provide suggestions to prevent possible repeat scenarios.
- Construction should be restricted to drier months if possible.
- Demarcate watercourses and buffer zones to limit impacts.
- Rehabilitate any bare areas.
- Implementation of proper stormwater management on site.
- Monitor erosion and take corrective action as needed.

- Minimise watercourse crossings.
- Maintenance of all vehicles should not take place on site.
- All necessary equipment for dealing with spills of fuels/chemicals must be available at the site. Spills must be cleaned up immediately and contaminated soil/material disposed of appropriately at a registered site.
- Implementation of erosion measures
- The handling and/or killing of any animal species present is strictly prohibited and all staff/personnel must be notified of such incidents.
- Watercourse fauna (e.g. snakes, frogs, small mammals) that are encountered during the construction phase must be relocated to other parts of the watercourse under the guidance of the ECO and relevant handling specialist.
- Poaching/snaring is strictly prohibited.
- The handling and/or killing of any animal species present is strictly prohibited and all staff/personnel must be notified of such incidents.
- Watercourse fauna (e.g. snakes, frogs, small mammals) that are encountered during the construction phase must be relocated to other parts of the watercourse under the guidance of the ECO and relevant handling specialist.
- Poaching/snaring is strictly prohibited.
- The open runway provides new habitat for some animals and care should be taken that these are cleared from the runway prior to landing and take-off (eg impala, warthog etc.). In any event all landings should be preceded by a runway inspection. The runway should not be fenced.
- The actual runway should not be used as a vehicle roadway so as to reduce vehicle tracks and ruts, which could become a safety issue to for aircraft.
- To reduce soil contamination - any concrete mixed for hangar construction to be done in a designated place on a temporary surface e.g. double layer thick plastic / steel sheet or inside the hangar space.
- Refuelling should not be undertaken at the airstrip unless exceptional circumstances arise. Any re-fuelling must only be done with a drip tray in place and spill kits available.
- The runway should be subjected to at least monthly checks to ensure foreign objects and material that could cause damage are removed.
- If grass is able to be established on the runway, it should be kept short through regular mowing to prevent grass tussocks forming.
- Due to the presence of wildlife on the unfenced runway and in the air, the pilot should remain especially vigilant.
- Any foundations / pits required for hangar construction must contain provide “exit points” for small vertebrates such as reptiles so that they don’t get trapped in the trench/pit. It is suggested that either a gradual slope at either end of trench or a branch is placed in the pit on which they can climb out.
- Solid waste is expected to be minimal, but should nevertheless be strictly controlled, so that it is inaccessible to scavengers or able to be spread by wind. No solid waste will be disposed (or buried) on site. It will be sorted into recyclable fractions and everything will be removed from the protected area.
- The environmental management programme (EMPr) should form part of the contract between any potential external contractor and the client. This will help ensure that the EMPr is adhered to.
- An Environmental Control Officer (ECO) should be appointed for the construction, to assist the contractor overcoming any unforeseen issues at the time of construction and be able to provide a level of assurance and oversight to stakeholders and shareholders that the site is being well managed.

Is an EMPr attached? The EMPr must be attached as Appendix F.	YES

SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports
- Annexure D1: Heritage Assessment Report
- Annexure D2: PIA Report
- Annexure D3: Terrestrial Ecology Report
- Annexure D4:Watercourse Impact Assessment Report
- Annexure D5: Geotechnical Assessment Report

Appendix E: Public Participation Process
- Annexure E1: Comments and Response Report
- Annexure E2: I&AP Database
- Annexure E3: Advertisement
- Annexure E4: Site Notice
- Annexure E5: Notification
- Annexure E6: Background Information Document

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Co-ordinates

Appendix H: Proof of Launch of General Authorisation

Appendix I: Sensitivity Map

Appendix J: EAP Details

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, **Sonja van de Giessen** declare that I –

(a) act as the independent environmental practitioner in this application;
(b) do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2014;
(c) do not have and will not have a vested interest in the proposed activity proceeding;
(d) have no, and will not engage in, conflicting interests in the undertaking of the activity;
(e) undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
(f) will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
(g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the Department may be attached to the report without further amendment to the report;
(h) will keep a register of all interested and affected parties that participated in a public participation process; and
(i) will provide the Department with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:

Elemental Sustainability (Pty) Ltd.
Name of company:

16 October 2023
Date:

REFERENCES

Agri Civils Geo-Tech & Heritage, September 2022. Phase 1 Heritage Impact Assessment for the Proposed NTT Witwater Airfield on the Farm 948 KR near Vaalwater, Limnpopo Province.

Bamford, M. 2023. Palaeontological Impact Assessment for the proposed NTT Witwater Airfield, northwest of Mokopane, Limpopo Province

Elemental Sustainability (Pty) Ltd. 2023. Watercourse Impact Assessment for the proposed Witwater Airfield, Limpopo Province

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Modimille-Mookgophong Local Municipality 2022-2026 Final IDP, Integrated Development Plan 2022/23 - 2026/27, May 2022.

Southern Geotechnical Engineering (Pty) Ltd. 2023. Witwater Airfield, Limpopo Province - Geotechnical Investigation Report.