

Submitted to: Waldeck (Pty) Ltd  
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# **FINAL SCOPING PLUS IMPACT ASSESSMENT REPORT: PROPOSED CONSTRUCTION AND DEVELOPMENT OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO.28, KHOMAS REGION, NAMIBIA**

PROJECT NUMBER: ECC-121-452-REP-10-D

REPORT VERSION: REV 01

DATE: 26 OCTOBER 2023

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**TITLE AND APPROVAL PAGE**

Project Name: Proposed construction and development of a tourism and hunting lodge on Farm Waldeck No.28, Khomas Region, Namibia

Client Company Name: Waldeck (Pty) Ltd

Client Name: Mr. Constatin Fugger

Ministry Reference: APP-001593

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Status of Report: Final for Government submission

Project Number: ECC-121-452-REP-10-D

Date of issue: 26 October 2023

Review Period NA

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## ABBREVIATIONS

Abbreviation	Description
%	percentage
>	greater than
°C	degree celcius
ARV	Antiretroviral therapy
BID	background information document
BoN	Bank of Namibia
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
COVID-19	coronavirus disease of 2019
dB	decibel
DEA	Directorate of Environmental Affairs
EAP	environmental assessment practitioner
ECC	Environmental Compliance Consultancy (Pty) Ltd
ECC	environmental clearance certificate
EIA	environmental impact assessment
EMP	environmental management plan
EMA	Environmental Management Act No. 7 of 2007
ENE	east northeast
ESIA	environmental and social impact assessment
GDP	gross domestic product
HIV/AIDS	Human immunodeficiency virus/ acquired immune deficiency syndrome
I&APs	interested and affected parties
IFC	International Finance Corporation
IPPR	Institute for Public Policy and Research
IUCN	International Union for Conservation of Nature
kWh	kilowatt per hour
km	kilometre

<b>Abbreviation</b>	<b>Description</b>
Km <sup>2</sup>	square kilometre
Km/h	Kilometre per hour
kV	kilovolts
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
mm	millimetre
NamPower	Namibia Power Corporation Ltd
NIHL	noise-induced hearing losses
NBRI	National Botanical Research Institute
NDP	National Development Plan
NPC	National Planning Commission
NNE	north northeast
NE	northeast
PPE	personnel protective equipment
PEPFAR	U.S. President's Emergency Plan for AIDS Relief
(Pty) Ltd	proprietary limited
PV	photovoltaic
SPLs	sound pressure levels
SNR	single number rating
TB	tuberculosis
UNCIEF	United Nations International Children's Emergency Fund
WHO	World Health Organisation

# 1 INTRODUCTION

## 1.1 COMPANY BACKGROUND

Environmental Compliance Consultancy (Pty) Ltd (ECC) has been contracted by Waldeck (Pty) Ltd to undertake an environmental assessment process and develop an environmental management plan (EMP) for the proposed development and construction of a tourism and hunting lodge and associated infrastructure on Farm Waldeck No.28 in terms of the Environmental Management Act, No 7 of 2007 (EMA) and its regulations of 2012.

Waldeck (Pty) Ltd propose to upgrade Farm Waldeck No.28 by developing a tourism and hunting lodge. The envisioned works include construction of 6 accommodation units, a main common core area, two PV solar plants and two battery rooms, grey water treatment system, demolition of the current dilapidated farmhouse and construction of a new 4-bedroom farmhouse and staff accommodation units (12) and construction of a cold storage room and butchery.

The Proponent purchased a portion of Farm Iturea (a portion south of Farm Waldeck No.28), hence the boundary fence currently dividing the two farms will be removed and extended to include the purchased portion which will additionally be fenced with a game proof fence. In addition to Farm Iturea, the Proponent signed purchase contracts agreement with the landowners of Farm Dornbaum No.74 and Bethlehem No.27/Rem 3. These portions are south and southeast of Farm Waldeck No.28. Once these portions have been procured, fully transferred and acquisitioned, an amendment to the environmental clearance certificate will be launched with the competent authority (Ministry of Environment, Forestry and Tourism) which will take into account the impact assessment of any potential land developments. Similarly, the Proponent propose to upgrade the farms boundary with a 2.5 meters game proof fence. This is additional scope of work to what was initially proposed; hence these project specifics were not scoped in the background information document (BID) issued to I&APs and stakeholders.

Farm Waldeck No. 28 is located approximately 36 km south of Windhoek in the Windhoek Rural Constituency, Khomas Region, Namibia. The Project site can be accessed by driving south of Windhoek along the B1 road, turning and driving onto the D1463 district road for approximately 9 km. The farm location is shown in Figure 1.



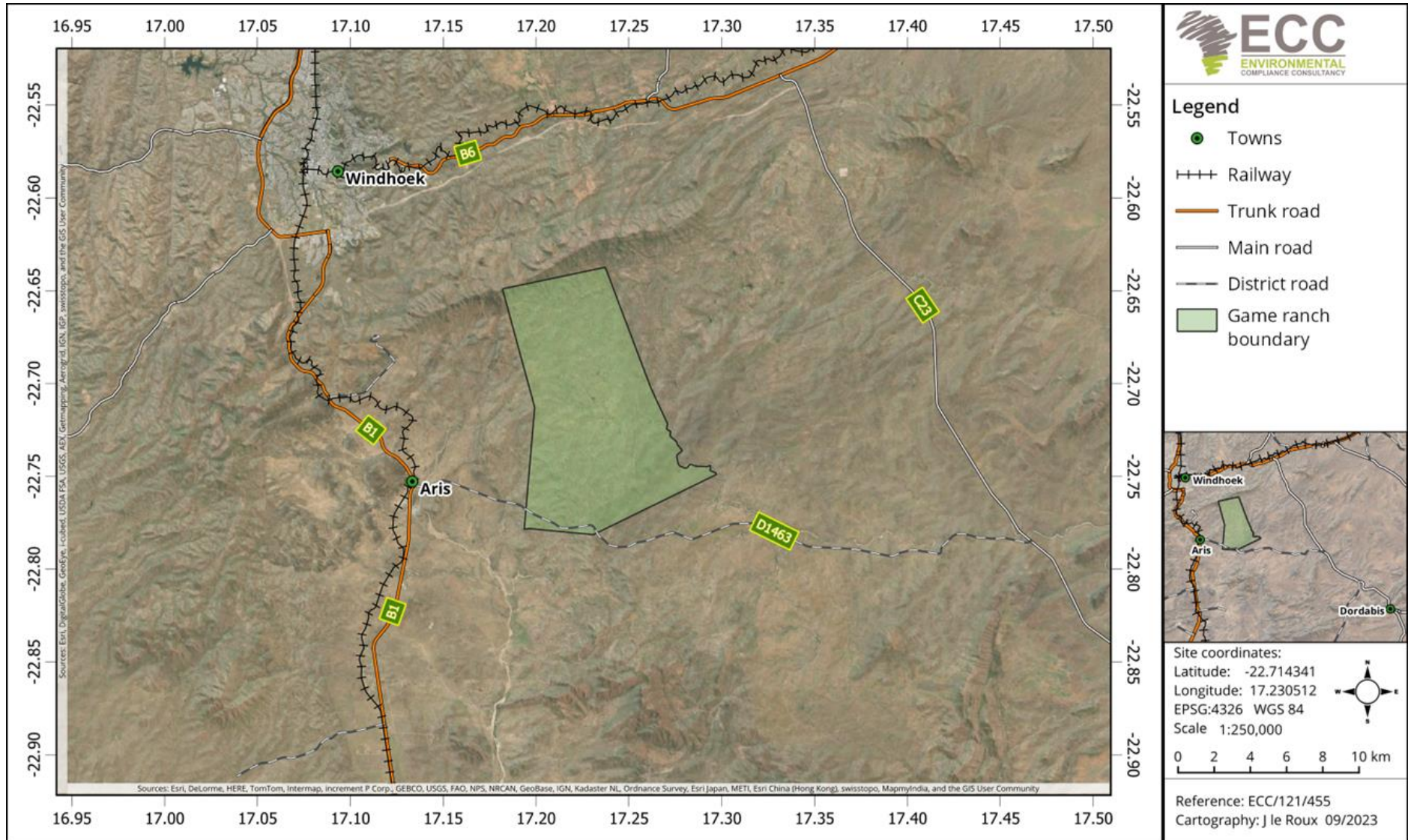


Figure 1 - Location of Farm Waldeck No.28

## 1.2 PURPOSE OF THE SCOPING REPORT

This report summarises the prescribed EIA process followed, provides a comprehensive project description, provides information on the baseline biophysical and socio-economic environments, identify the relevant laws and guidelines, provides details of the public consultation process, identify potential impacts and assess potential effects (whether positive or negative) and their relative significance, explore feasible and unfeasible alternatives that were considered for technical recommendations and identify appropriate mitigation measures.

The scoping report and impact assessment provide information to the public and stakeholders to aid in the decision- making process for the proposed Project by the competent authority.

The Ministry of Environment, Forestry and Tourism (MEFT) as the competent authority that deals with applications for environmental clearance has determined that an environmental management plan (EMP) (presented in Appendix A) be developed to provide a management framework for the planning and implementation of the development. The EMP provides development standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented, minimised and/or enhanced as far as reasonably practicable and that statutory requirements and other legal obligations are fulfilled.

The scoping and impact assessment report, inclusive of the public inputs and comments and all appendices, will be submitted to the Ministry of Environment, Forestry, and Tourism (MEFT) - Directorate of Environmental Affairs (DEA) for a record of decision.

## 1.3 THE PROPONENT DETAILS

Table 1 below provides the Proponent’s contact details.

**Table 1- Proponent's details**

Company Representative:	Contact Details:
Mr Constantin Fugger	Waldeck (Pty), Farm Waldeck No.28 Dordabis, Khomas Region, Namibia P. O. Box 21012, Olympia, Windhoek <a href="mailto:constantin.fugger@global-organics.com">constantin.fugger@global-organics.com</a> +26481 122 3233

## 1.4 ENVIRONMENTAL AND SOCIAL ASSESSMENT PRACTITIONER

Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) has prepared this report and the EMP on behalf of the Proponent.

This report has been authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the Project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the Project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

All compliance and regulatory requirements regarding this report should be forwarded by email or posted to the following address:

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P. O. Box 91193, Klein Windhoek, Namibia  
Tel: +264 81 669 7608  
Email: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)

## 1.5 ENVIRONMENTAL REQUIREMENTS

The Environmental Management Act, 2007, and its regulations, stipulates that an environmental clearance certificate is required before undertaking any of the listed activities that are identified in the Act and its regulations. Potential listed activities triggered by the Project are provided in Table 2.

**Table 2 - Listed activities triggered by the proposed Project in terms of the Environmental Management Act, 2007**

<b>Listed activity</b>	<b>As defined by the regulations of the Act</b>	<b>Relevance to the project</b>
Energy generation, transmission, and storage activities	The construction of facilities for:  (1a) The generation of electricity.  (1b) The transmission and supply of electricity.	- Two PV solar plants and 2 battery rooms will be constructed for the lodge and will cater for a peak demand of 400 kWh and 100kWh, respectively.
Waste management, treatment, handling, and disposal activities	2.1 The construction of facilities for waste sites, and the treatment and disposal of waste.  2.3 The importing, processing, use and recycling, temporary storage, transit, or exporting, of waste.	- Septic tanks will be installed on site, where effluent will be treated further in grey water treatment.  - Waste generated on-site, including construction waste will be removed from site and disposed of at the Kupferberg landfill site.
Forestry activities	4. The clearance of forest areas, deforestation, afforestation, timber harvesting, or any other related activity that requires authorisation in terms of the Forest Act, 2001 (No. 12 of 2001) or any other law.	- Construction of the lodge has already commenced. Thus, vegetation has been cleared for these areas. However, protected tree species and trees larger than 18 cm in diameter will not be cleared.  -Vegetation will be cleared for the construction of the lodge infrastructure, PV solar plants and activities areas.  - The Proponent contracted Namibia Landscapers to plant additional trees and rehabilitate the cleared areas under construction.
Water resource developments	8.1 The abstraction of ground or surface water for industrial or commercial purposes.  8.5 Construction of dams, reservoirs, levees, and weirs.	- Water required for the project will be sourced from existing boreholes and pumped to reservoir of roughly 60 000 litres.  - A waste treatment system will be constructed on site to treat wastewater to an acceptable /useable standard (greywater).

<b>Listed activity</b>	<b>As defined by the regulations of the Act</b>	<b>Relevance to the project</b>
Tourism development activities	6. Construction of resorts, lodges, hotels or other tourism and hospitality facilities.	<ul style="list-style-type: none"> <li>-The construction of 6 lodge units and a wellness centre, with a core area will consist of hard construction.</li> <li>-Construction of a staff village for employees who will be employed permanently during the lodge operation.</li> <li>- Construction of a new manager's house.</li> <li>- Demolition of current dilapidated farmhouse and construction of a new 4-bedroom farmhouse on same location.</li> </ul>
Other activities	11.2 Construction of cemeteries, camping, leisure and recreation sites.	<ul style="list-style-type: none"> <li>- Construction of the lodge to offer game (trophy) hunting activities.</li> </ul>

## **2 APPROACH TO THE ASSESSMENT**

### **2.1 PURPOSE AND SCOPE OF THE ASSESSMENT**

This assessment aimed at determining impacts that are likely to be significant. The available data is scoped to identify any gaps that need to be filled, enabling a determination of the spatial and temporal scope; and identify the assessment methodology.

The scope of the assessment was determined by undertaking a preliminary assessment of the proposed Project against the receiving environment, obtained through a desktop review and available site-specific literature.

### **2.2 THE ASSESSMENT PROCESS**

The ESIA methodology applied to this assessment has been developed using the International Finance Corporation (IFC) standards and models, in particular, Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012), which establishes the importance of:

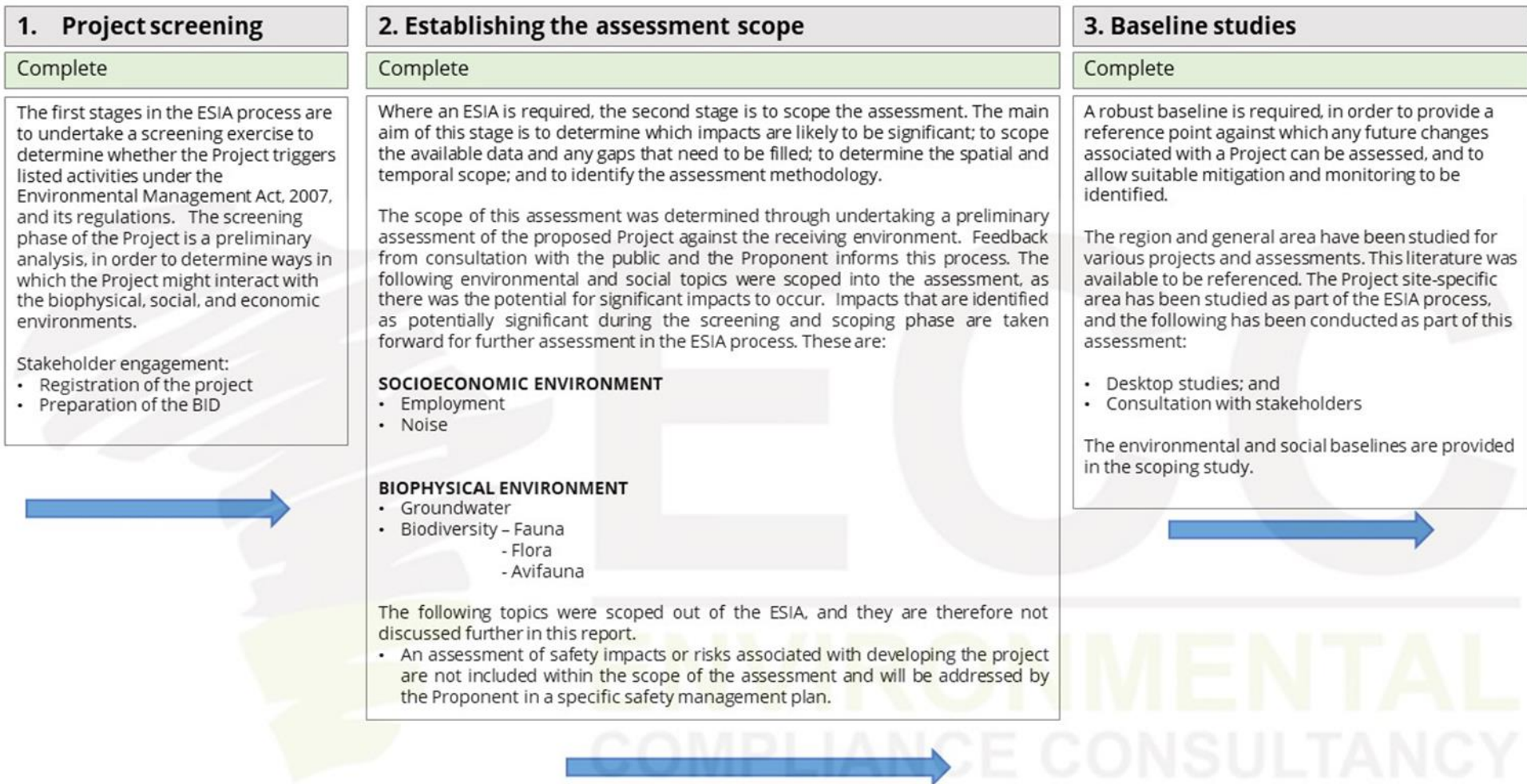
- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of Projects;
- Effective community engagement through disclosure of Project-related information and consultation with local communities on matters that directly affect them; and
- The proponent's management of environmental and social performance throughout the life of the Project.

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (Republic of Namibia, 2008), as well as international and national best practice, and over 25 years of combined EIA experience (EAPs CV's are presented in Appendix E), were also drawn upon in the assessment process. This impact assessment is a formal process in which the potential effects of the Project on the biophysical, social, and economic environments are identified, assessed, and reported so that the significance of potential impacts can be taken into account when considering whether to grant approval, consent, or support for the proposed Project. The process followed, through the assessment, is illustrated in Figure 2.

### **2.3 SCREENING OF THE PROJECT**

The first stages in the ESIA process are to register the Project with the DEA/MEFT and to undertake a screening exercise to determine triggered listed activity under the Environmental Management Act, No. 7 of 2007 and associated regulations. The location, scale, and duration of Project activities will be considered against the receiving environment.

The proposed Project is a listed activity and potential impacts could occur. Thus, it was concluded that a scoping report with impact assessment is required for project and that a preliminary EMP would be submitted with the scoping report as part of the application process for the environmental clearance certificate.





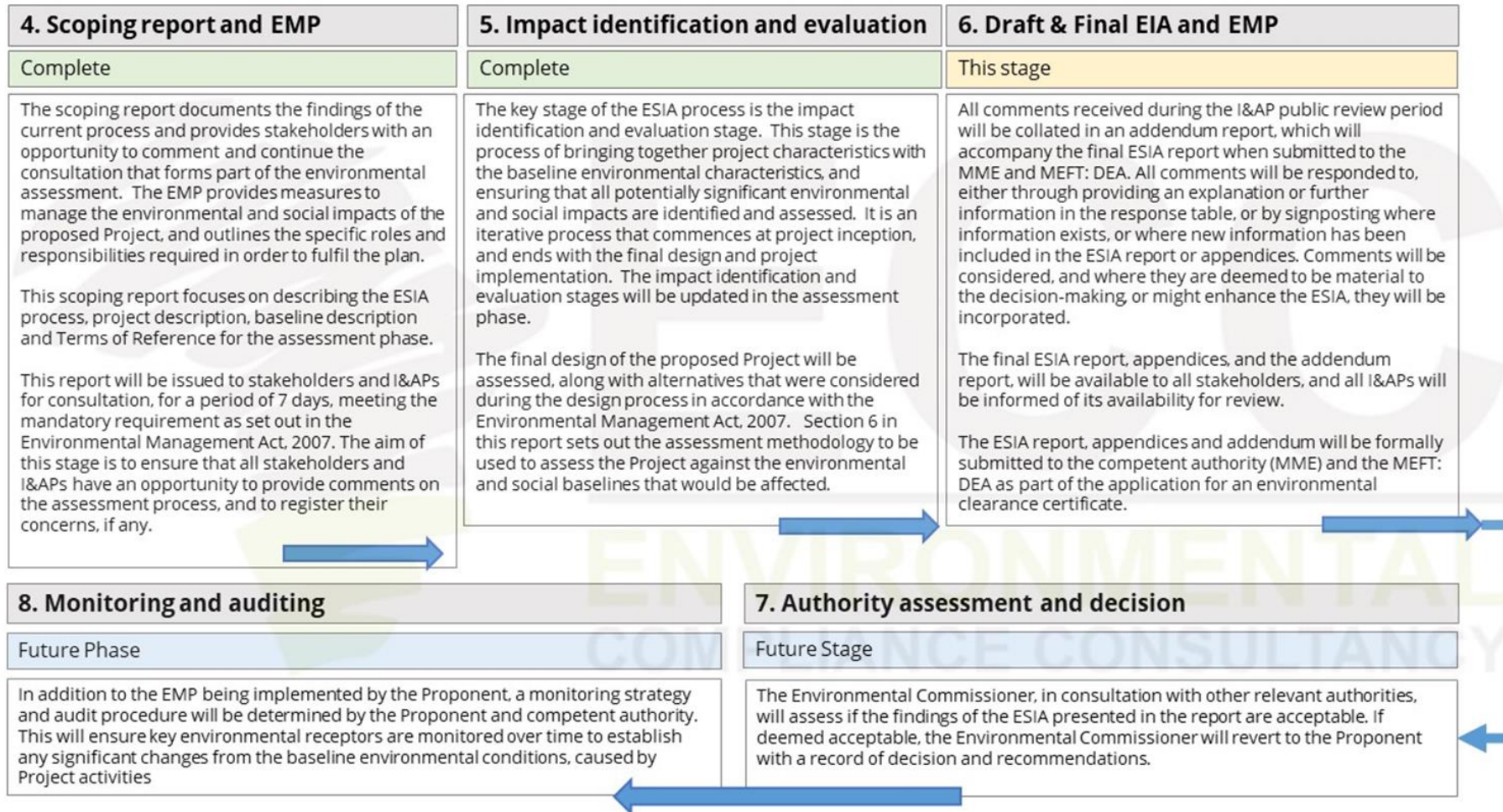


Figure 2 – EIA process and stages completed

## 2.4 SCOPING AND THE ENVIRONMENTAL ASSESSMENT

Where a detailed assessment is required, the second stage is to scope the assessment. The main aims of this stage are to determine which impacts are likely to be significant; scope the available data and any gaps which need to be filled; determine the spatial and temporal scope and identify the assessment methodology.

The scoping phase of the Project is a preliminary analysis to determine ways in which the Project interacts with the biophysical, social, and economic environment. Potential impacts are identified, and the significance is assessed during the screening and scoping phase. Feedback from consultation with the proponent informed the analysis of the impacts. The details and outcome of the impact assessment are discussed in sections 6 and 7 of this report. The following environmental and social aspects were considered in the impact assessment process:

### **BIOPHYSICAL ENVIRONMENT**

- Air quality;
- Ground water;
- Surface water;
- Soils and geology;
- Fauna;
- Avifauna;
- Flora; and
- Topography and landscape.

### **SOCIO-ECONOMIC ENVIRONMENT**

- Community health, safety and security on and off site;
- Ambient noise; and
- Employment opportunities.

## 2.5 BASELINE STUDY

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed Project can be measured. For the proposed Project, baseline information was obtained through a desktop study, focusing on environmental receptors that could be affected by the proposed Project, and verified through site-specific information. The baseline information is covered in Chapter 5.

## 2.6 PUBLIC CONSULTATION

Public participation and consultation are a requirement stipulated in Section 21 of the Environmental Management Act, 2007 and its regulations, for a project that requires an

environmental clearance certificate. Consultation is a compulsory and critical component of the ESIA process for achieving transparent decision-making and can provide many benefits. Consultation is ongoing during the EIA process.

The objectives of the public participation and consultation process are to:

- Provide information on the Project, and introduce the overall Project concept and plan in the form of a background information document (BID) (provided in Appendix B );
- Determine the relevant government, regional and local regulating authorities;
- Listen to and understand community issues, record concerns, and questions;
- Explain the process of the EIA and timeframes involved, and
- Establish a platform for ongoing consultation.

A summarised list of stakeholders that were engaged during the public consultation process is given below:

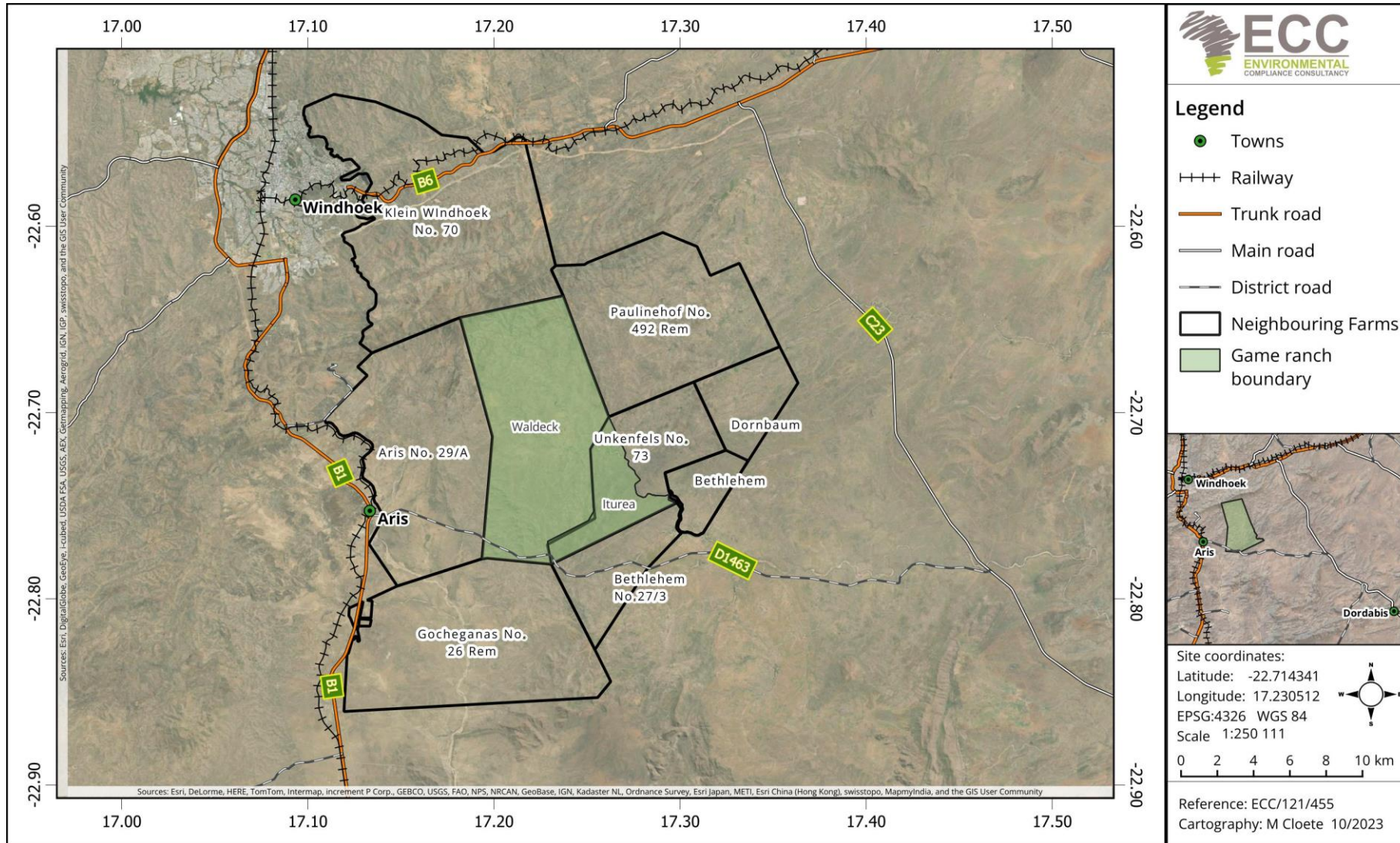
- The general public with an interest in the Project;
- Regional and local authorities;
- Relevant line Ministries (MEFT and MAWLR); and
- The neighbouring farming community.

A stakeholder mapping exercise was undertaken during the initial scoping phase to identify individual or groups of stakeholders, and the method in which they are to be engaged with during the EIA process. Stakeholders and potentially interested and affected parties were engaged with through direct communication (letters and phone calls), the national press, site notices, and directly by email Farms sharing borders with Farm Waldeck No.28 were identified as directly affected during the initial stakeholder mapping exercise. The following directly affected farmers were identified during the stakeholder mapping exercise:

- Farm Unkenfels No. 73;
- Farm Gocheganas No. 26 Rem;
- Farm Aris No. 29;
- Farm Klein Windhoek No. 70; and
- Farm Paulinehof No. 492 Rem.

Once the Proponent has procured, secured title deeds and property rights, additional scope of work entails extension of the Project footprint to include Farm Bethlehem No.27/Rem 3 and Farm Dornbaum No.74. This will entirely be subject to an ECC amendment application and impact assessment study.

Figure 3 provides a visual overview of farms sharing borders with Farm Waldeck No.28.



**Figure 3 - Farms surrounding Farm Waldeck No.28**

### 2.6.1 NON-TECHNICAL SUMMARY

The BID presents a high-level description of the proposed Project, sets out the EIA process, and outlines when and how consultation will be undertaken. It also provides contact details for further Project-specific inquiries to all registered I&APs. The BID was distributed to registered I&APs with exclusive additional project activities details that were proposed at a later stage (i.e., the expansion of the farm boundary to include the purchased portion of Farm Iturea and the contractual purchase agreement agreed between the Proponent and the landowners of Farm Bethlehem No.27/Rem 3 and Dornbaum No.74). The BID is provided in Appendix B

### 2.6.2 NEWSPAPER ADVERTISEMENTS

Public consultation and IAPs registration for the Project commenced on the 26<sup>th</sup> of June 2023. Upon publication of the first public notice, adverts were placed across three national newspapers (The Republikein, Namibian Sun and Allgemeine Zeitung). The second newspaper advert was published on the 3<sup>rd</sup> of July 2023. The purpose of this was to commence with the public engagement process by informing the public and potential I&APs to register with the project. Newspaper adverts records are provided in Appendix C.

### 2.6.3 SITE NOTICES

Neighbouring farms were notified about the proposed project. Records of site notices placed on site are presented in Appendix C.

### 2.6.4 PUBLIC MEETING

In terms of section 22 of the Environmental Impact Assessment Regulations of 2012, the EAP maintained a register for all potentially interested and affected parties (IAPs). The EAP engaged directly with stakeholders and invited all registered I&APs to raise their concerns and submit comments in writing.

### 2.6.5 SUMMARY OF ISSUES RAISED

The I&APs were encouraged to provide constructive inputs during the public consultation period. Comments and EAP responses received on the BID received during the initial public consultation process are provided in Table 3. To ensure that interested and affected parties can comment further on the scoping and impact assessment report, the report was circulated with potentially interested and affected parties and stakeholders for a 7-day review period in terms of section 23 (1) of the 2012 EMA regulations. Comments, questions, or areas of concern raised by registered IAPs during the scoping report and impact assessment report public review period are addressed in the addendum report (Appendix F).

**Table 3 - Feedback on concerns and comments raised by stakeholders and IAPs**

Stakeholder name and details	Comments or questions received	Response or clarification
<p>Gerhard Romeis  Farm Neu-Brack No.454</p>	<p>Our concern is that the natural flow of the Schaaprivier will be affected by building dams, which could result in a shortage of water to all the farmers downstream.</p>	<p>The Proponent is committed to engage in safe water management practises.</p> <ul style="list-style-type: none"> <li>- No new earth dams will be constructed. Instead, the Proponent propose to abstract water from two existing boreholes on pre-planned schedules to six 10 000 litres reservoir tanks. Abstraction rates and water level records will be monitored closely for irregular trends.</li> <li>- There are two dams on the farm, therefore overflow from the storage reservoir tanks will be pumped to the dams as top-up. No water will be pumped directly from the boreholes into the dams.</li> <li>- The water abstraction risks on lowering groundwater for downstream communities acknowledged and are discussed in detail in Chapter 7, section 7.5 , page 76-79.</li> <li>- Safe water management measures are provided in the EMP.</li> </ul>
<p>Liza Burmeister  Moltkeblick Game Farm</p>	<p>Our main concern is the Schaff-River in the area, which also feeds our Water Supply. This River should not be closed off at all, as this means we also get cut off</p>	<p>The Proponent is committed to engage in safe water management practises.</p> <ul style="list-style-type: none"> <li>-No new dams will be constructed.</li> </ul>

Stakeholder name and details	Comments or questions received	Response or clarification
	<p>should this happen. Should there be other concerns, we will bring it to your attention.</p>	<p>-Abstraction will be from two existing boreholes which will be monitored regularly as per the requirement of the EMP.</p> <p>-The potential risk of lowering groundwater for downstream communities due to abstraction is discussed in chapter 7, section 7.5, page 76-79.</p>
<p>Ms. Helmi Hitula  Farm Tew No. 84, and Manager of Carneba Trading Auas Safari Lodge</p>	<p>Our main concern is the Schaff-River in the area, which also feeds our Water Supply. This River should not be closed off at all, as this means we also get cut off should this happen. Should there be other concerns, we will bring it to your attention.</p>	<p>-Noted, thanks. The above comment refers.</p>
<p>Michael Adler  Carneba cc t/a Auas Safari Lodge (Owner)</p>	<p>The possibility of cutting off of the water supply to our farm from the Schaff River. This river is a critical source of water supply to our farm and we cannot afford to lose this vital resource.</p>	<p>-The Proponent is obligated to maintain abstraction records and water levels to closely monitor irregular trends. The mitigation management measures are discussed in detail in the EMP.</p> <p>-The Proponent will not construct new dams on the farm. Water will be sourced from two existing boreholes and excess water will be pumped to the two existing dams. Furthermore, water will only be abstracted as required.</p> <p>-The potential risk of lowering groundwater for downstream communities due to abstraction is discussed in chapter 7, section 7.5, page 76-79.</p>
<p>Sandra Rattay</p>	<p>Water Consumption and Dams</p>	<p>-The Project's water consumption specifications are discussed in chapter 4, section 4.5, page 38.</p>

Stakeholder name and details	Comments or questions received	Response or clarification
Private		<p>-No new dams will be constructed by the Proponent.</p> <p>-The potential risk associated with excessive abstractions on lowering groundwater for downstream communities is discussed in chapter 7, section 7.5, page 76-79 and the safe water management measures are discussed in the EMP.</p>



## **3 REVIEW OF LEGAL ENVIRONMENT**

### **3.1 RELEVANT NATIONAL LEGISLATION**

This chapter outlines the regulatory framework applicable to the proposed Project. A thorough review of relevant legislation has been conducted for the proposed Project. Table 4 below provides identified relevant legal requirements specific to the Project and Table 5 lists specific permits that will be required for the Project.

### 3.2 NATIONAL REGULATORY FRAMEWORK

**Table 4 - Details of the regulatory framework as it applies to the Project**

National regulatory framework	Summary	Applicability to the project
Constitution of the Republic of Namibia (1990)	<p>The constitution defines the country's position in relation to sustainable development and environmental management.</p> <p>The constitution refers that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at the following: <i>"Maintenance of ecosystems, essential ecological processes and biological diversity of Namibia, and the utilisation of living, natural resources on a sustainable basis for the benefit of all Namibians, both present, and future."</i></p>	<p>The Proponent is committed to the sustainable use of the environment and has aligned its corporate mission, vision, and objectives with the Constitution of the Republic of Namibia (1990).</p> <p>The Proponent is also committed to actively engage with the local community to promote and maintain the welfare of the people affected by the Project.</p>
Environmental Management Act, (No. 7 of 2007) and its regulations, including the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2012)	<p>The Act aims to promote sustainable management of the environment and use of natural resources. The Act requires certain activities to obtain an environmental clearance certificate prior to Project development.</p> <p>The Act states that an EIA should be undertaken and submitted as part of the environmental clearance certificate application process.</p>	<p>Tourism related developmental projects are listed activities which require an environmental clearance certificate prior to any developments.</p> <p>This environmental scoping report (and EMP) documents the findings of the environmental assessment undertaken for the proposed project.</p>

National regulatory framework	Summary	Applicability to the project
	<p>The MEFT is responsible for the protection and management of Namibia’s natural environment. The Department of Environmental Affairs, under the MEFT, is responsible for the administration of the EIA process.</p>	<p>The process has been undertaken in line with the requirements under the Act and its regulations.</p>
<p>Water Resources Management Act No.11 of 2013</p>	<p>The Water Resources Management Act No.11 of 2013 was promulgated in August 2023.</p> <p>The Act provide for the management, protection, development, use and conservation of water resources. The Act set water pollution control mitigation measures and regulations to provide for incidental matters.</p> <p>The Department of Water Affairs, within the Ministry of Agriculture, Water and Land Reform (MAWLR), is responsible for the administration of the Act.</p>	<p>The Act stipulates obligations to prevent pollution of water. Should wastewater be discharged, a permit is required. The EMP sets out measures to avoid polluting the water environment.</p> <p>The proposed project intends to treat all wastewater to acceptable greywater minimising the potential risk of groundwater and surface water pollution. The required/recommended mitigation measures are stipulated in the EMP.</p> <p>The project area falls within the groundwater control area. Abstraction of water from boreholes requires an abstraction permit. Abstraction rates need to be measured and reported to the authorities by following the requirements of the permit.</p>

National regulatory framework	Summary	Applicability to the project
Soil Conservation Act, No. 76 of 1969	This Act makes provision for the prevention and control of soil erosion, and for the protection, improvement, and conservation of soil and vegetation.	The Project entails clearing of vegetations and land portions. Soil and vegetation conservation measures will be included in the EMP.
The Forestry Act, No. 12 of 2001 as amended by the Forest Amendment Act, No. 13 of 2005	<p>Section 22 deals with the protection of natural vegetation that is not part of the surveyed erven of a local authority area as defined.</p> <p>Section 21 states that no person shall cut, destroy, or remove vegetation that is growing within 100 metres of a river, stream, or watercourse.</p> <p>Section 23 requires a permit from the Director for the clearance of vegetation on more than 15 hectares on any piece of land or several pieces of land situated in the same locality as that which has predominantly woody vegetation; or cut or remove more than 500 cubic metres of forest produce from any piece of land in a period of one year.</p>	<p>The Project activities may require limited land clearing where necessary.</p> <p>When the need arises to remove certain protected species, the Proponent will ensure that all required permits are in place.</p>
Animal Health Regulations: Animal Health Act, 2011 Under Section 32 of the Animal Health Act, 2011 (Act No. 1 Of 2011)	"The Act provides for the protection, prevention, detection and control of animal disease; Maintenance and improvement of animal health".	A butchery will be constructed on Farm Waldeck. The Act and its regulations are relevant to operating a butchery and ensuring animal health.

National regulatory framework	Summary	Applicability to the project
Animals Protection Act 71 of 1962	The Act provides for the consolidation and amendment of the laws relating to the prevention of cruelty to animals".	Due to the nature of the Project, it is essential that ethical treatment and hunting of game is promoted.
Controlled Wildlife Products and Trade Act 9 of 2008	The Act makes provision for the implementation of the Convention on International Trade in Endangered Species of Wild Fauna and Flora; and to provide for incidental matters".	Due to the nature of the project, it is essential that the relevant permits are in place for hunting, importing and exporting of animal products.
Arms and Ammunition Act No. 7 of 1996.	The Act provides for the control over the possession of arms and ammunition; to regulate the dealing in, importation, exportation and manufacture of, arms and ammunition; and to provide for incidental matters".	All firearms should have valid licences. People involved in game shooting activities should be competent and trained in firearms handling.
Nature Conservation Ordinance Act No. 4 of 1975 and its regulations.	The Act makes provision for the conservation and management of wildlife and regulates fishing in inland waters. The text consists of 91 sections divided into 7 Chapters and completed by 9 Schedules. The Chapters are the following: Preliminary (I); Game Parks and Nature Reserves (II); Wild animals (III); problem animals (IV); Fish in inland waters (V); Indigenous plants (VI); general (VII). The Nature Conservation Board shall be continued under section 3. The Cabinet may appoint Nature Conservator.	Relevant permits relating to hunting and biodiversity should be obtained from competent authorities. Most permit applications must be launched with MEFT. Application forms can be downloaded from the following link: <a href="https://www.wrnarn.org/permits">https://www.wrnarn.org/permits</a>  A detailed account on the relevant required permits for the Project are provided in Table 5.

National regulatory framework	Summary	Applicability to the project
<p>Namibia Tourism Board Act (No. 21 of 2000) and Regulations relating to levy payable by accommodation establishments: Government Notice 137 of 2004</p>	<p>The Act provides for the establishment of the Namibia Tourism Board and to provide for its functions; to provide for the registration and grading of accommodation establishments; to provide for the declaration of any sector of the tourism industry as a regulated sector and for the registration of businesses falling within a regulated sector, and to provide for matters incidental thereto.</p>	<p>The Proponent will have to apply for a licence from the Namibia Tourism Board.</p>

**Table 5 -Permits/licences required for the Project**

Permit or licence	Act / Regulation	Related activities requiring permits	Relevant Authority
<p>Environmental clearance certificate</p>	<p>Environmental Management Act, No. 7 of 2007.</p>	<p>Required for all listed activities shown in Chapter 1, Table 2.</p>	<p>Ministry of Environment, Forestry and Tourism (MEFT)</p>
<p>Water abstraction permit</p>	<p>In terms of Section 44 of the Water Resources Management Act No.11 of 2013</p>	<p>The Project area falls within a groundwater control area. An abstraction permit is required for the abstraction of water from a borehole for commercial purposes.</p>	<p>Ministry of Agriculture, Water and Land Reform</p>
<p>Wastewater treatment and discharge permit</p>	<p>In terms of Section 72 of the Water Resources Management Act No.11 of 2013</p>	<p>A licence to discharge effluent or to construct or operate a wastewater treatment facility or a waste disposal site is required.</p>	<p>Ministry of Agriculture, Water and Land Reform (MAWLR)</p>

Permit or licence	Act / Regulation	Related activities requiring permits	Relevant Authority
Vegetation clearing	The Forest Act, 2001 (Act No. 12 of 2001).	This Act governs the removal of vegetation within 100 m of a water course, or removal of more than 15ha of woody vegetation, or the removal of any protected plant species. A vegetation clearing permit is required prior to the removal of any protected, threatened, critically threatened or endangered species.	Ministry of Environment, Forestry and Tourism (MEFT)
Registration of accommodation establishment	Namibia tourism Board Act No. 21 of 2000.	Section 20 of the Act states that accommodation establishment should be registered with the Board.	Namibia Tourism Board
Hunting permit	A hunting permit is required in terms of Section 30 and 36 of the Nature Conservation Ordinance Act No.4 of 1975.	Hunting permits will be required for the hunting of protected game and huntable game (i.e, if planned to hunt more animals than allocated under the yearly hunting regulations). For predator trophy hunting, cheetah and leopard an additional hunting permit has to be obtained prior to the start of the hunt.	Ministry of Environment, Forestry and Tourism (MEFT)
Permit to utilize game (wild animals)	In terms of Section 40 of the Nature Conservation Ordinance Act No.4 of 1975.	A permit needs to be applied for any of the following reasons: shoot and sell, shoot for own use, keep and sell, transport, night culling, trophy meat,	Ministry of Environment, Forestry and Tourism (MEFT)

Permit or licence	Act / Regulation	Related activities requiring permits	Relevant Authority
		catch, keep and sell and trophy hunting.	
Registration of game proof fence	in terms of Section 40 of the Nature Conservation Ordinance Act No.4 of 1975.	A requirement related to conditions of catching, capturing and killing wild animals.	Ministry of Environment, Forestry and Tourism (MEFT)
Game import and export permit	In terms of Section 49(1) of the Nature Conservation Ordinance Act No. 4 of 1975.	A permit is required to import into Namibia or export from Namibia any game or wild animal, raw skin or raw meat of any game.	Ministry of Environment, Forestry and Tourism (MEFT)
Registration of hunting guides and master hunting guides	In terms of Section 84 of the Nature Conservation Ordinance Act No.4 of 1975.	If not currently registered, Professional hunters should be registered with MEFT.	Ministry of Environment, Forestry and Tourism (MEFT)



## 4 PROJECT DESCRIPTION

### 4.1 PROPOSED PROJECT OVERVIEW

The Proponent (Waldeck (Pty) Ltd) propose to develop a tourism and hunting lodge approximately 36 km south of Windhoek on Farm Waldeck No.28. The Project entails the constructing of 6 accommodation units (2 double units and 4 single units), main common core area consisting of a restaurant, wellness centre (gym), sauna and therapy room, boma area lounge, bar, dining area, cellar, media room, public bathrooms, offices, laundry, an activities area, butchery, cold storage facility and storerooms. A staff village will be constructed to accommodate 12 staff employees required during the operational phase. As an alternative energy source, the Proponent further plan to construct two PV solar plants and two battery room to cater for a peak demand of 400 kWh and 100 kWh, respectively. The dilapidated farmhouse has been demolished and a new 4-bedroom farmhouse will be constructed. Furthermore, the Proponent purchased a portion of Farm Iturea, hence the farm boundary will be extended by opening the game- proof fence that is currently dividing the two farms (Figure 4). Further works entail renovation of the game – proof fence around the farm to a height of approximately 2.5 metres. All Project works fall within the boundaries of Farm Waldeck No.28.

### 4.2 NEED FOR THE PROJECT

Namibia is a unique tourist destination due to its various popular geological features, its diverse wildlife populations and attraction sites across the country. The tourism and hunting industries are both big contributors to Namibia's Gross Domestic Product (GDP). Tourism play an important part in the socioeconomics and conservation model of the country. However, these two sectors suffered greatly as a result of the COVID-19 and its implicatory ban on international travels. In the aftermath of the pandemic, more and more countries gradually reopened their borders for international travels which lessened a bit of pressure on these sectors in Namibia. According to the MEFT (2023), tourism and international arrivals in Namibia increased by 98.1% from 232 756 (2021) to 461 027 (2022), thereby accounting for a 28.9% recovery level from the annual tourist arrival of 2019, before the COVID-19 pandemic.

New tourism and hunting projects will be beneficial in the sense that it attracts tourists and hunters to the country and will also result in the creation of local employment opportunities. The project of this scale has on average created about 107 jobs during the construction phase and will create approximately 12 on-site permanent jobs during the operational phase.

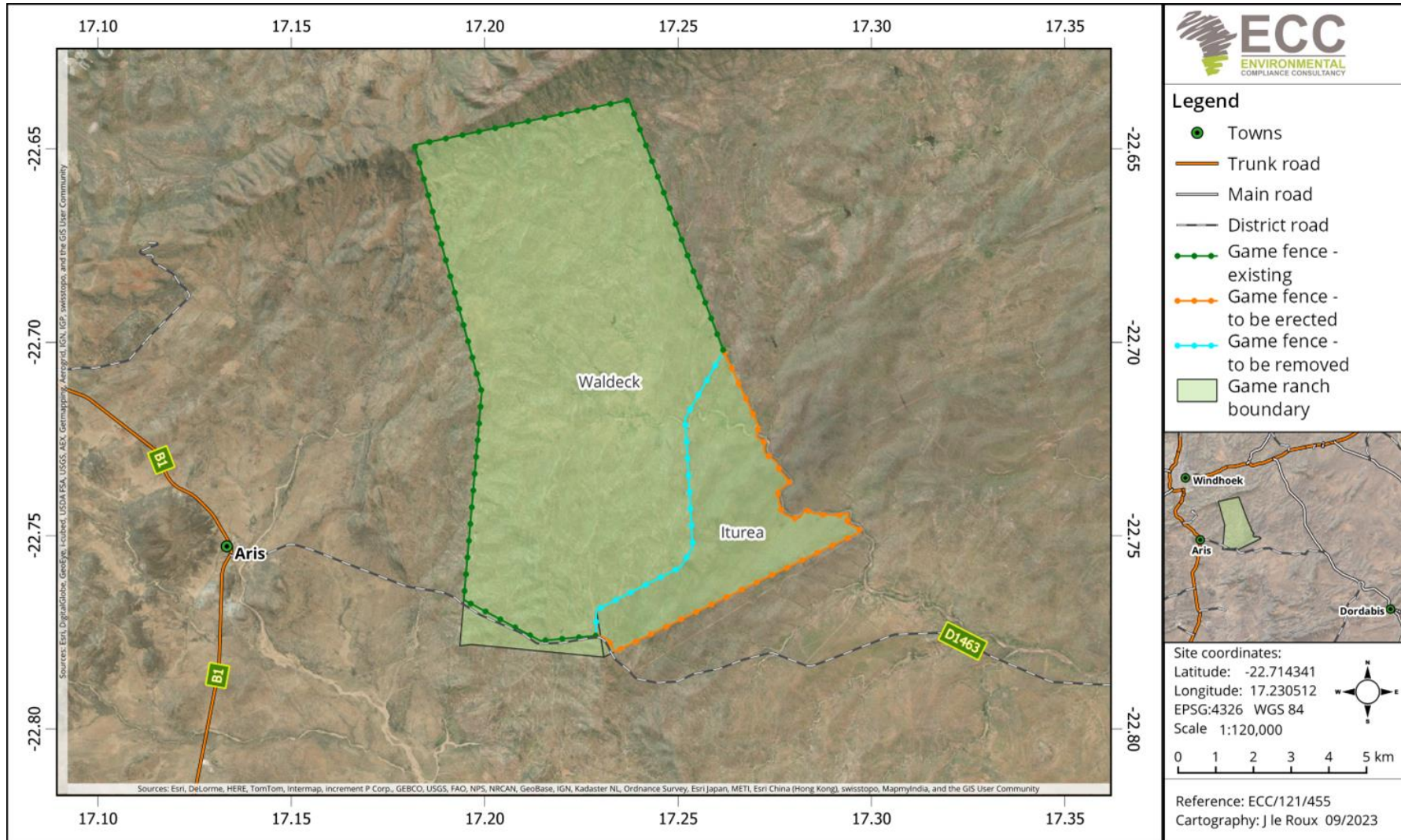


Figure 4 -Game fence map for Farm Waldeck No.28 and Iturea portion

### 4.3 ALTERNATIVES CONSIDERED

Best practice environmental assessment methodology calls for consideration and assessment of alternatives to the project. In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analysed. This requirement ensures that during the design evolution and decision-making process, potential environmental impacts, costs, and technical feasibility have been considered, which leads to the best option(s) being identified.

The proponent is the owner of Farm Waldeck No.28, thus, no alternative localities have been considered for the proposed project.

During the assessment, alternatives will consider optimisation and using eco-friendly solutions to reduce potential impacts e.g., lead-free ammunition, renewable energy and water recycling etc.

### 4.4 PROPOSED PROJECT INFRASTRUCTURE LAYOUT

The following infrastructure will be constructed on-site; some are near completion:

- 6 accommodation units (2 double units and 4 single units);
- Main common core area (consisting of a restaurant, wellness centre (gym), sauna and therapy room, boma area lounge, bar, dining area, cellar, media room, public bathrooms, offices, laundry and storerooms);
- Dirt routes connecting different lodge units;
- Two PV solar plants and 2 battery rooms;
- Lodge water reservoir tanks;
- Full sewage collection system and bubbler greywater treatment system;
- Extension of the farm boundaries to include the purchased portion of Farm Iturea;
- Erection of a 2.5 meters game - proof fence around the entire game farm (Figure 4);  
and
- Construction of the lodge staff village, manager's house and new farmhouse.

The overall Project infrastructure layout is provided in Figure 5 below.

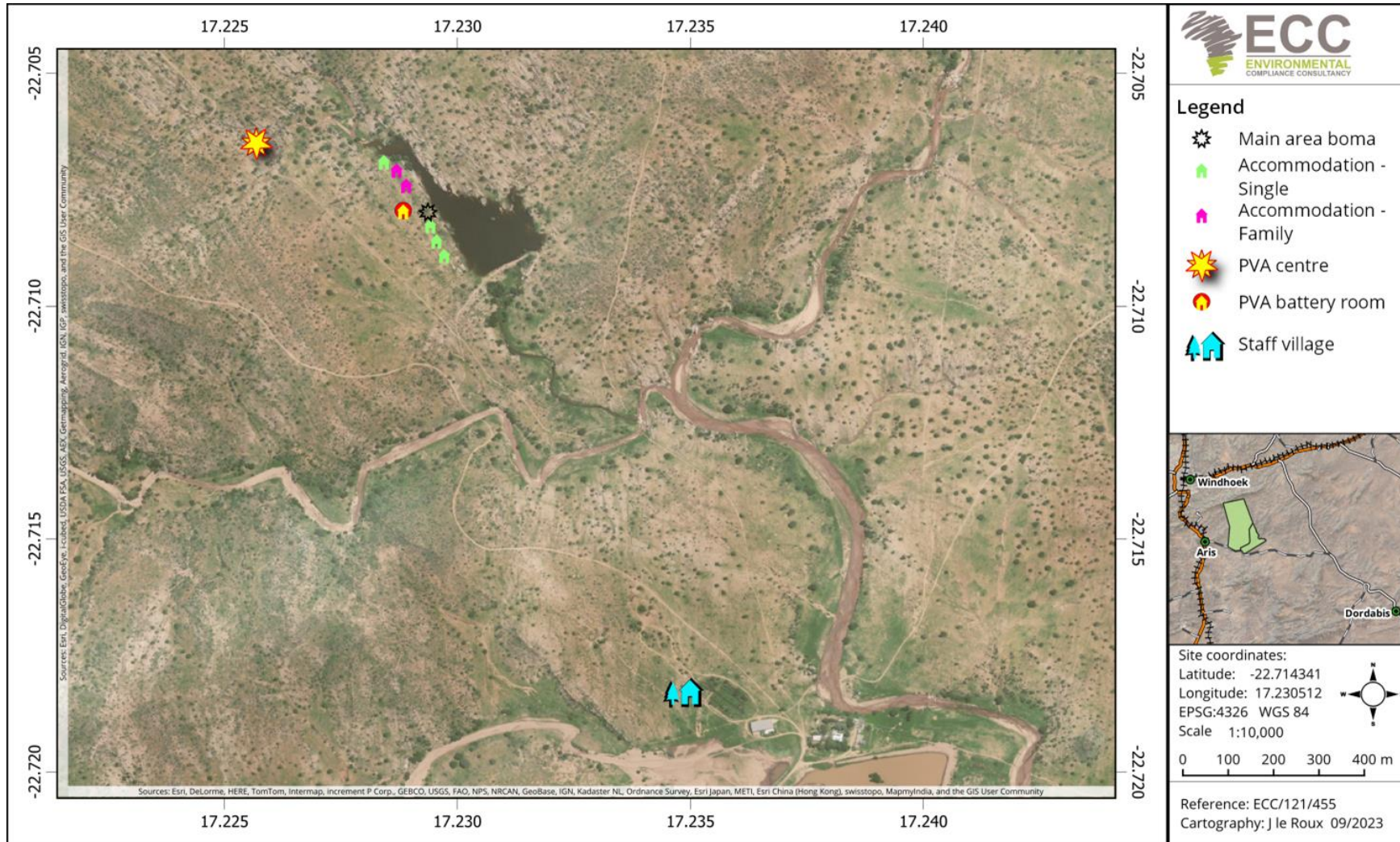


Figure 5 -Lodge infrastructure layout

#### 4.5 WATER SUPPLY

Water required during the lodge operations will be sourced from two existing boreholes on the farm. Water will be pumped to six 10 000 litres Jojo plastic reservoir tanks at the construction site to meet an estimate demand of between 6000 to 10 000 litres per day. No new dams will be constructed, however there are two existing dams on the farm and will be filled up with overflow from the storage tanks to ensure water is used efficiently and sparingly. Water abstracted from boreholes will not be pumped directly into the dams. During operations, between 9000 to 12 000 litres of water per day will be required.

The Project is within a groundwater control area; therefore the Proponent will be responsible to apply for legalisation of existing boreholes (if not registered) and abstraction permits at the MAWLR.

#### 4.6 POWER SUPPLY

There is a 66 kV NamPower overhead power grid overhanging over the proposed lodge site. There won't be a powerline upgrade to the lodge. Instead, the Proponent intent to use three 4.5 kVA generators to supply energy required during the construction phase. Generators will supply energy required for the Project until two PV solar plants and 2 battery rooms are fully installed and operational. The solar plants will supply energy required for the lodge operations (peak energy demand is estimated to be 400 kWh) and the back of house staffing area (peak energy demand is estimated to be 100kWh).

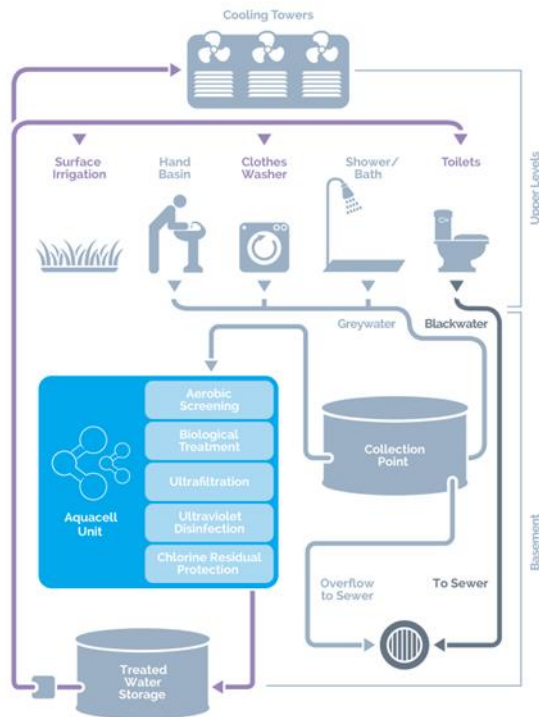
#### 4.7 SEWAGE AND SOLID WASTE

Septic tanks will be installed on site during the construction phase and will be emptied and removed after construction. A 2000 litres plastic septic tank will be constructed on site, whereby overflow will be directed to a bubbler grey water treatment system which ultimately will treat wastewater through aeration, bacterial supply and filtering process to greywater standards. The effluent water will have to be tested yearly to ensure that the water conforms to the relevant regulations and standards. The system's built-in pumps will pump water away from the source to a flat area that is approximately 100 metres above the lodge. The clean grey water will then be used for irrigation purposes and overflow will be pumped into a soak-away system.

The Proponent will also be responsible to ensure that effluent discharge permits are in order (to be launched with MAWLR). A fat trap will be installed in the kitchen and will be cleaned regularly or monthly to prevent contamination into the bubbler system, thus killing the bacteria and thus improving the efficiency of the system.

There will be a compost heap for food waste generated during the operational phase. The Proponent will commit to contracting an external waste collecting company to collect waste generated on site on a regular basis. Furthermore, waste generated on-site, including construction waste will be removed from site and disposed off at the Kupferberg landfill site.

A visual example of the bubbler grey water treatment system (similar to what has been proposed) is provided in Figure 6 below.



**Figure 6 - Greywater treatment system**

## 4.8 PROPOSED STAGES OF THE PROJECT

### 4.8.1 CONSTRUCTION PHASE

Construction of the 6 accommodation units has already commenced and nearing completion. Contractors have camped on site, close to the farmhouse.

The following vehicles and ancillary equipment are currently on site:

- 1x 3 ton truck;
- Telehandler;
- Concrete batch mixer truck;
- 4x concrete mixers;
- 4x jackhammers;
- 4x concrete pokers;
- Site pick -up bakkie;

- Tipper truck;
- Excavator
- Bulldozer;
- JCB; and
- 3x Generators.

The following surrounding farms will share borders with the current game proof fence:

- Farm Unkenfels No.73: located southeast of the Iturea portion, game proof fence will cover a distance of approximately 8km;
- Farm Paulinehof No.492: located east of Farm Waldeck No.28, game proof fence is expected to cover approximately 9km;
- Farm Gocheganas No.26: located south of Farm Waldeck No.28, game proof boarder fence length is expected to be approximately 4km;
- Farm Aris No.29: located to the west of Farm Waldeck No.28, game fence expected to stretch for approximately 14 km; and
- Farm Klein Windhoek No.70; located north of Farm Waldeck No.28, game proof fence is expected to cover a length of approximately 6km.

#### 4.8.2 OPERATIONAL PHASE

The proposed Project is envisioned to be a fully functional hunting and tourism lodge, that will aim to provide tourists and hunting enthusiasts with a luxury African hunting and lodging experience. No other tourism-related or recreational activities will be offered. It is estimated that 12 locally sourced employees will be recruited to assist during operations. Hunting expeditions on the farm will be conducted and guided strictly by the appointed professional hunters.

## 5 ENVIRONMENTAL AND SOCIAL BASELINE

Desktop studies relevant to the project formed part of the current environmental assessment conducted for the Project. Baseline studies aim to assess possible project impacts (positive, negative and cumulative), thus ensuring input into the project designs, which avoid, reduce or mitigate the potentially adverse environmental and social risks.

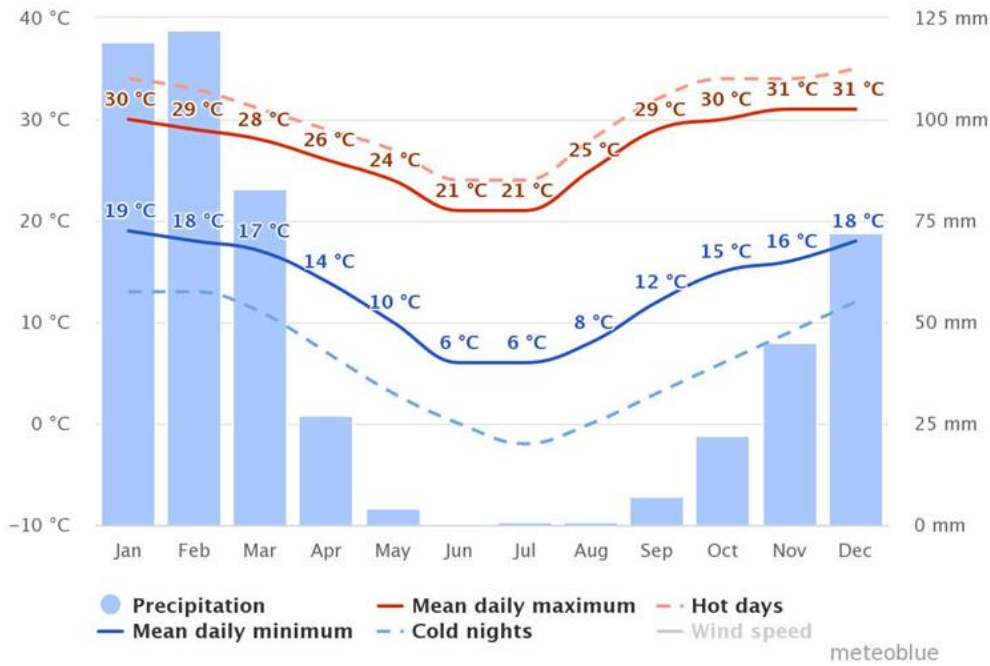
This section provides an overview of the existing biophysical environment through the analysis of the available baseline data regarding the receiving environment. Desktop studies, followed by site data verification on the national database are undertaken as part of the scoping process to get information about the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured and assessed.

### 5.1 CLIMATE

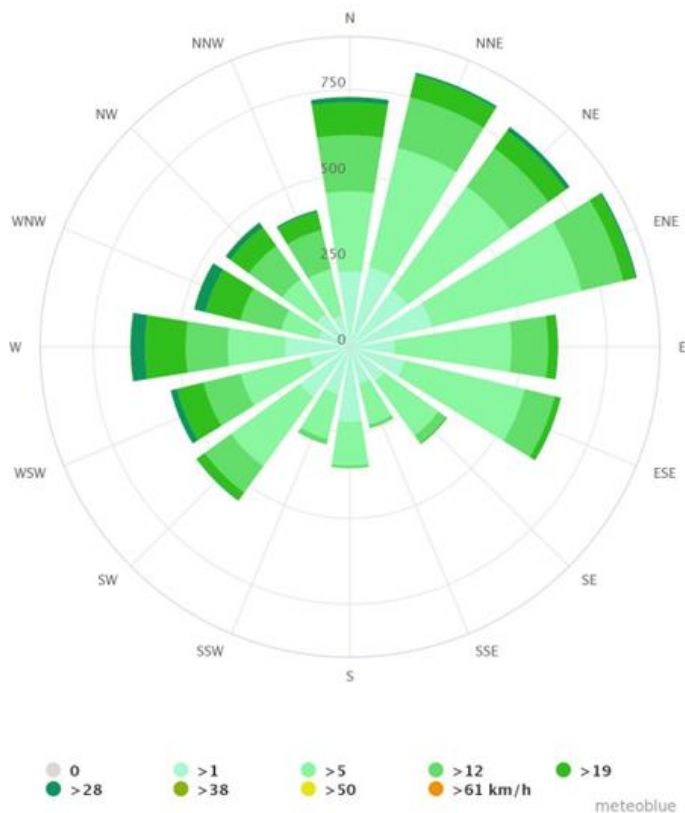
Farm Waldeck No.28 is located to the southeast of Windhoek in the Khomas Region, Namibia. The Project area is associated with mild summers and cold winter, with mean daily maximum temperatures ranging between 21 °C and 31 °C and mean minimum temperatures between 6 °C and 19 °C (Meteoblue, 2023). The hottest months are from November to February, whilst cold months are from April to August (Figure 7). Rainfall is limited to the summer months (October to March), with average records between 10 mm and 120 mm (Figure 7) (Meteoblue, 2023). However, Bubenzer (2002) state that in the past decades, the central regions received average annual rainfall between 300 mm to 350 mm and potential evaporation between 3000 mm and 3200 mm. February is considered to be the most humid month with relative humidity of approximately 56%, which drop relatively below 20% towards the winter months (Figure 7).

Additional climate and weather data for Farm Iturea (-22.755852°, 17.261323°) have been used as reference to give the most accurate data for the Project area. Average wind speed over the greater Windhoek Rural district range between >1 to 38 km/h (Figure 8) (Meteoblue, 2023). Generally, intense winds are associated with the summer, with north northeast (NNE), northeast (NE), east northeast (ENE) observed as most dominant over the greater Windhoek area (Figure 8) (Meteoblue, 2023). Light intense winds prevail from all different directions (Figure 8).





**Figure 7 -Yearly climate overview for Farm Waldeck No.28 (Meteoblue, 2023)**



**Figure 8 - Average wind speed and wind direction for Farm Waldeck No.28 (Meteoblue, 2023)**

## 5.2 NOISE GENERATION

Considering the scale and nature of the proposed project, noise levels are anticipated to be low in the Project area. Groundwork activities, on-site machineries and generators will generate relatively low noise levels, however on-site contract workers are considered as susceptible receptors to noise pollution as noise would raise occupational health and safety concerns. On a related note, aircrafts and hunting expeditions could potentially generate additional noise, although these are deemed to be infrequent events. Noise impacts are further discussed in detail in Chapter 7.

## 5.3 SOCIO-ECONOMIC ENVIRONMENT

Namibia is ranked amongst some of the least populated countries in the world with a population density of 3,13 persons per km<sup>2</sup> (Namibia Statistics Agency, 2019). Vast areas are without people, in contrast to some densely populated areas in the north and north central regions of the country. The urban population pyramid for Namibia is greatly dominated by the middle age working groups (age group 20 – 35) and infants (0 – 4 years of age). The urban population of Khomas Region is high as people are drawn by pull factors such improved economic activities and the growing expectations for better living conditions (Namibia Statistics Agency, 2019). Khomas Region occupies 4.5% of the land surface area of Namibia and accommodate the largest percentage (18%) of the national population, with a male to female sex ratio of 49: 50 (Namibia Statistics Agency, 2019).

The Regional Indicator Demographic Survey conducted by Namibia Statistics Agency in 2016 indicated that Khomas Region had a population of 415,780, population density of 11.3 persons per km<sup>2</sup> and population growth of 3.9% (Namibia Statistics Agency, 2017). The report further postulate that 95% of Khomas Region population live in Windhoek or nearby districts whilst the remainder of the population reside in the rural settlements (Namibia Statistics Agency, 2017). There is a diverse number of ethnic groups, however Oshiwambo is the most spoken language (47% of all households). The average literacy rate was estimated at 97% in 2016 (Namibia Statistics Agency, 2017). Living in an urban environment implies better living conditions – in the Khomas Region, 100% of all households have access to safe water drinking water and 64% of the households are electrified. On a contrary, 25% have no toilet facilities and 7% of the population depend on open fires to prepare food (Namibia Statistics Agency, 2017).

Windhoek is the national capital and the capital of the Khomas Region. Regions in Namibia are divided into constituencies and currently Khomas Region is divided into ten constituencies. Windhoek is governed by a local authority in the form of a City Council. The country's capital, Windhoek hosts many of the national head offices as well as the head offices of the Khomas Regional Council. Towns are governed through local authorities, in the form of municipalities. Places such as Groot Aub, Seeis and Dordabis are managed directly by the central authority.

## 5.4 GOVERNANCE

Since the country's independence in 1990, Namibia has enjoyed a constitutional democracy and political stability which provided a conducive environment for programming and for children to thrive ( UNICEF, 2022). The country ranked top 5 out of 54 African countries in the Ibrahim Index of African Governance in 2015 for the indicators including the quality of governance and the government's ability to support human development; sustainable economic opportunity; rule of law and human rights; and development of smart information and communication technology to access information for socio-economic growth (Namibia Statistics Agency, 2019). As a result of sound governance and stable macroeconomic management, Namibia has experienced rapid socio-economic development. Namibia has achieved the level of 'medium human development and is ranked 145<sup>th</sup> on the Human Development Index out of 188 countries (World Data Atlas, 2023). The country's governance is guided by the long-term strategic/sustainable development objectives such as Vision 2030, Harambee Prosperity Plan and the 5<sup>th</sup> National Development Plan (NDP5) (NPC, 2020).

## 5.5 EMPLOYMENT

According to the Labour Force Market Survey of 2018 conducted by the Namibia Statistics Agency, of all working groups in Namibia, 53.4% are employed in the private sector, 21.5% by the state, 16.6% by private households and 7.6% are employed by enterprises and parastatals (Namibia Statistics Agency, 2019). The employment rate increased steadily between 2016 and 2018 in both urban and rural settings by 4.8% and 8.3%, respectively (Namibia Statistics Agency, 2019). Agriculture combined with the forestry and the fishing sector employs the most across all sectors (23%) , followed by the accommodation and food service industry sector with 11.4% and thirdly the wholesale and retail sector with 11.1% (Namibia Statistics Agency, 2019). Additionally, the agriculture sector employs the most informal workers in Namibia, estimated at 87.6% (Namibia Statistics Agency, 2019). Khomas Region is ranked second after Erongo Region with a 76.8% labour force, although 42.9% are informally employed (Namibia Statistics Agency, 2019).

The 2018 Labour Force Survey report further indicate that the employment absorption rate increases with higher level of education, thus low education levels influence employability, and hence deprive many households from earning decent incomes. Out of the employed populations, the largest portion are employed in the elementary occupations (29.1%), followed by skilled agriculture occupations (15.2%), service workers (14.6%) and craft or related trades (12.5%) (Namibia Statistics Agency, 2019).

The unemployment rate in Namibia has been estimated at 33.4%, with the highest regional unemployment rate observed in the Kavango East Region (48.2%), Omaheke Region (38.7%), Khomas Region is ranked 10<sup>th</sup> with 31.5% (Namibia Statistics Agency, 2019). The unemployment rate in rural and urban areas is almost the same – 33.4% in urban areas and 33.5% in rural areas and is highly observed across persons with education levels lower than

junior secondary (Namibia Statistics Agency, 2019). The unemployment rate of persons with no formal education is 28.6%, with primary education is 34.6% and with junior secondary education 32.7% (Namibia Statistics Agency, 2019).

According to the COVID-19 socio economic impact assessment report conducted by the Institute for Public Policy and Research (IPPR), there has been redundancies (retrenchments) across all sectors in the country in 2020 (IPPR, 2020). The Ministry of Labour, Industrial Relations and Employment Creation reported in 2020 that in the midst of the COVID-19 pandemic, 388 employers had retrenched 5 748 employees (IPPR, 2020). The tourism and construction sectors retrenched 2,728 workers while mines retrenched 1,184 workers and the wholesale and retail sector retrenched 584 employees (IPPR, 2020). Subsequent to the COVID-19 socioeconomic implications, the World Health Organisation projected that unemployment rate increased by 1.1 % whilst poverty rate increased by 2.3% (World Health Organisation, 2020).

## 5.6 ECONOMY

On a national level, 47.4% of the population earn their main income from monthly salaries and wages, 19.8% depend on subsistence farming, 9.5% depend on non-business activities and 8.3% rely on state pension grants (Namibia Statistics Agency, 2019).

Khomas Region is urbanised, and agriculture is less prominent; unlike other regions where populations depend extensively on subsistence or mixed farming for better living standards. In Windhoek, most people are employed in a wide range of secondary economic sectors such as administration, services, manufacturing, guest farms and tourism related establishments (Namibia Statistics Agency, 2019). Most international travels arriving through the Hosea Kutako International Airport influence micro economic performance of many establishments through spendings.

According to the Gross Domestic Product: Second Quarter Report of 2020 conducted by Namibia Statistics Agency, the domestic economy contracted by 11.1%, which is the largest contraction since 2013 (Namibia Statistics Agency, 2019). Economic progression has been underpinned by the lingering effects of COVID-19 (UNICEF, 2022). Tourism and hospitality establishments in Namibia have had a 10-15% drop in revenue as a result of the COVID-19 pandemic in 2020 (Evelina et' al, 2020). Furthermore, the Bank of Namibia (BoN) August 2023 GDP report predicted that real GDP is projected to slow down in 2023 by 3.3% and by 3.0% in 2024 from a 4.6% registered in 2022 (Bank of Namibia, 2023).

## 5.7 HEALTH

The health status of Namibia has increased steadily with a remarkable improvement in access to primary health facilities and medical infrastructure since its independence in 1990. Despite the progress, the World Health Organization (WHO) in 2015 recommended strategic priorities of the health system in Namibia which include improved governance, an improved health

information system, emergency preparedness, risk reduction and response, preventative health care and the combating of HIV/AIDS and TB (World Health Organisation, 2016).

HIV/AIDS remains a major cause of death in Namibia and the leading cause of low life expectancy (PEPFAR, 2022). According to the PEPFAR 2022 report, 8.4% of the general population are living with HIV. Since the 2002 peak HIV infection rate which recorded close to 15,000 new HIV cases and close to 10,000 HIV deaths (UNICEF, 2011), new HIV infections have stabilized since 2004 and currently the rate of HIV/AIDS related deaths stands at 3 160 yearly (PEPFAR, 2022). Female children under 15 years of age account for 3.2% of new infections per year, while male children similarly account for 3.3%. Importantly, 97% of people living with HIV/AIDS in Namibia are on Antiretroviral therapy (ARV) (World Health Organisation 2016).

Namibia has one of the highest incidences of TB per capita and is ranked by the World Health Organization (WHO) among the top 30 high TB and TB/HIV burden countries in the world. The survey conducted in 2018, Namibia reported the rate of bacteriologically confirmed TB as 465/100,000 (PEPFAR, 2022). In 2020, the country recorded 6,537 TB cases (57% adult male, 33% adult females, and 10% children) (PEPFAR, 2022).

The World Health Organisation in the 2021 annual report described the COVID-19 crisis as “unprecedented”. A total of 4, 098 COVID-19 deaths were reported in Namibia from January 2020 to August 2023 (World Health Organisation, 2023). A total of 874 033 Namibians were successfully tested for COVID-19 contributing to a recovery of 132 596 out of the 149 478 confirmed cases and 495 254 people have been vaccinated thus far with the 1<sup>st</sup> dose of COVID-19 vaccines (Felicita, 2022).

In the past decade, significant death toll in the country were observed to have been caused by stroke (13.1%), ischemic heart diseases (16.2%), diabetes (21.2%) and neonatal disorders (16.2%) (retrieved from <http://www.healthdata.org/namibia>). Risk factors such as premature mortality, and social ills remain the leading factors for death – particularly unsafe sex, alcohol and drug abuse (Namibia Statistics Agency, 2020).

## 5.8 CULTURAL HERITAGE

A desktop study of the Namibian GIS data and information extracted from the Atlas of Namibia revealed that there are no archaeological records or heritage sites of significance within the project area from 1.8 million years until recently (i.e. the last 2000 years) (Bubenzer, 2002 & Mendelsohn et al., 2002). However, this does not nullify the probability of unearthing archaeological finds on Farm Waldeck No.28 or roughly somewhere else beyond the farm's boundary (Bubenzer, 2002 & Mendelsohn et al., 2002).

## 5.9 FLORA

Farm Waldeck No.28 falls within the tree-and-shrub-savanna biome, which distinctively is influenced by rainfall (Alice et'al, 2022). According to Bubenzer and Mendelsohn (2002), the project area has a plant diversity of approximately 150 to more than 400 species.

The flora species records from the National Botanical Research Institute (NBRI) indicate that close to 60 endemic species and 20 near-endemic species have been identified and sampled around the Project area and southeast of Windhoek. Furthermore, Bubenzer and Mendelsohn (2002) described the flora endemism in these areas as moderate to high in the Project area, thus some plant species may not necessarily be confined to the farm boundaries but rather in areas that extend beyond the farm boundaries and over the greater south and southeast regions of Windhoek.

The list provided by NBRI is broken down in respective categories as follows:

**Forestry protected species (Forestry Act No.12 of 2001):**

*-Boscia albitrunca, Maerua schinzii, Ficus cordata, Acacia galpinii; and Erythrina decora.*

**Protected species - Nature Conservation Ordinance Act No.4 of 1975:**

*-Huernia oculata, Piaranthus decipiens, Orbea lugardii, Tavaresia barklyi, Orbea lutea, Stapelia schinzii, Gasteria pillansii, Moringa ovalifolia, Harpagophytum procumbens, Cyphostemma currorii, Cyphostemma juttae, Adromischus schuldtianus, Crassula lanceolata, Crassula rhodesica, Crassula tabularis, Ebracteola montis-moltkei, Tavaresia barklyi and Ruschia axthelmiana.*

**Protected species listed under Appendix II of the CITES:** *Ansellia Africana, Eulophia speciosa Aloe hereroensis, Anacampseros filamentosa, Avonia albissima, Aloe hereroensis, Anacampseros filamentosa, Aloe zebrina and Pachypodium lealii.*

Appendix D provides a comprehensive summary on the local and international conservatory status of plant species found in the project area.

## 5.10 FAUNA

The overall terrestrial diversity for the Project area is moderate compared to other parts of the country. The project area has a bird population of approximately 300 species (migratory and residents). Notable endemic birds such as Rüppel parrot, Monteiro hornbills, Rockrunners, White -backed mouse and Shaft -tailed whydah are expected to occur in the project area. Most bird species in Namibia fall under Schedule 4: Protected Game within the Namibian Conservation Ordinance No. 4 of 1975 and 17 huntable game bird species identified in Schedule 6 of the Nature Conservation Ordinance. Mammal diversity in the project area is described as moderate with approximately 58 species (Alice et'al, 2022). Most carnivores occur at low densities due to their highly secretive and nocturnal traits, however close to 17 large and small carnivores' species have been recorded in the project area (Alice et'al, 2022).

According to Alice et'al (2022), the central highlands have a high reptile diversity of close to 79 reptiles species; of which 8 of the 36 snakes species are endemic; *Stigmochelys pardalis*, *Psammobates oculiferus*, *Python natalensis* and *Varanus albigularis* are protected and listed as least concern (IUCN, 2022). Records indicate that 13 of the 34 lizard species are endemic to Namibia. The amphibian diversity is estimated at roughly 13 species (3 are known to be endemic) whilst scorpion species are estimated between 14 to 17 species (Bubenzer, 2002 & Mendelsohn et al., 2002).

A great percentage of bird species are highly migratory and pass through Namibia sporadically. The Skaap River and its tributary catchment streams on Farm Waldeck attract various water birds (either resident or migratory). Sighting of certain migratory birds is further dictated by birds migratory patterns and seasonal changes. Certain marine bird species are protected under Section 18 of the regulations of the Exploitation of Marine Resources Act No.241 of 2001 or within CITES appendices. Namibia has currently no species under Appendix I, however, eagle species, korhaans, vultures and falcons species are listed under Appendix II (species not necessarily threatened with extinction but which trade must be controlled) (CITES, 2022). According to the IUCN red list, Lappet-faced vulture, Black harrier, Secretary birds and Martial eagles are endangered, White-headed vultures, White-backed vultures and Hooded vultures are critically endangered whilst Cape vultures are classified as vulnerable (IUCN, 2022).

Various protected or threatened mammal species may on occasions occur on the project site of which one is classified as near threatened (Brown Hyena) and four are classified as vulnerable (Cheetah, Leopard, Pangolin, Black-footed cat), according to the IUCN red list of threatened species. Furthermore, all tortoise species, rock monitors and pythons, dwarf and rock pythons (protected under Nature Conservation Ordinance No.4 of 1975) might potentially be encountered within the project boundaries.

## 5.11 HYDROLOGY AND HYDROGEOLOGY

The Hochfeld-Dordabis-Gobabis groundwater area stretches from east of Windhoek towards the Botswana and Namibian border. To the east of Farm Waldeck No.28 are high-profile ephemeral rivers such as Seeis River, Black Nossob River and the White Nossob River.

Farm Waldeck No.28 falls within a groundwater control area and is underlain by the Southeastern Kalahari groundwater basin which covers approximately 65 000 km<sup>2</sup> and is shared between Botswana and South Africa. A small portion of the farm is underlain by the Okahandja groundwater basin (Figure 9).

According to the Namibian Monitoring Information System & Hydrological Map, the project area generally has rock bodies with little to locally moderate groundwater potential. The groundwater vulnerability is considered to be low. The groundwater recharge capacity in the project area is also low (>0.5 – 1%, expressed as percent of the

average annual rainfall). Groundwater abstraction in the project area is generally good with a rate that falls of  $>100-500 \text{ m}^3$ , whilst neighbouring areas such as Windhoek and Groot Aub have groundwater abstraction rates of  $>10000-16000 \text{ m}^3$  and  $>5-10 \text{ m}^3$ , respectively (<https://www.uit-sensoweb.de/maptest.html>).

To a great extent, the project lies within the Skaap catchment which is recharged by major and minor drainage rivers (Figure 9). The Skaap River flows downstream to the Nossob-Auob River basin which is located southeast of the project area (<https://mapcarta.com/>).

The area receives rainfall between 300-350 mm annually (Bubenzer, 2002). Two boreholes on the farm will supply water required during the construction phase and operational phase.

The hydrology map for Farm Waldeck No.28 is provided in Figure 9.



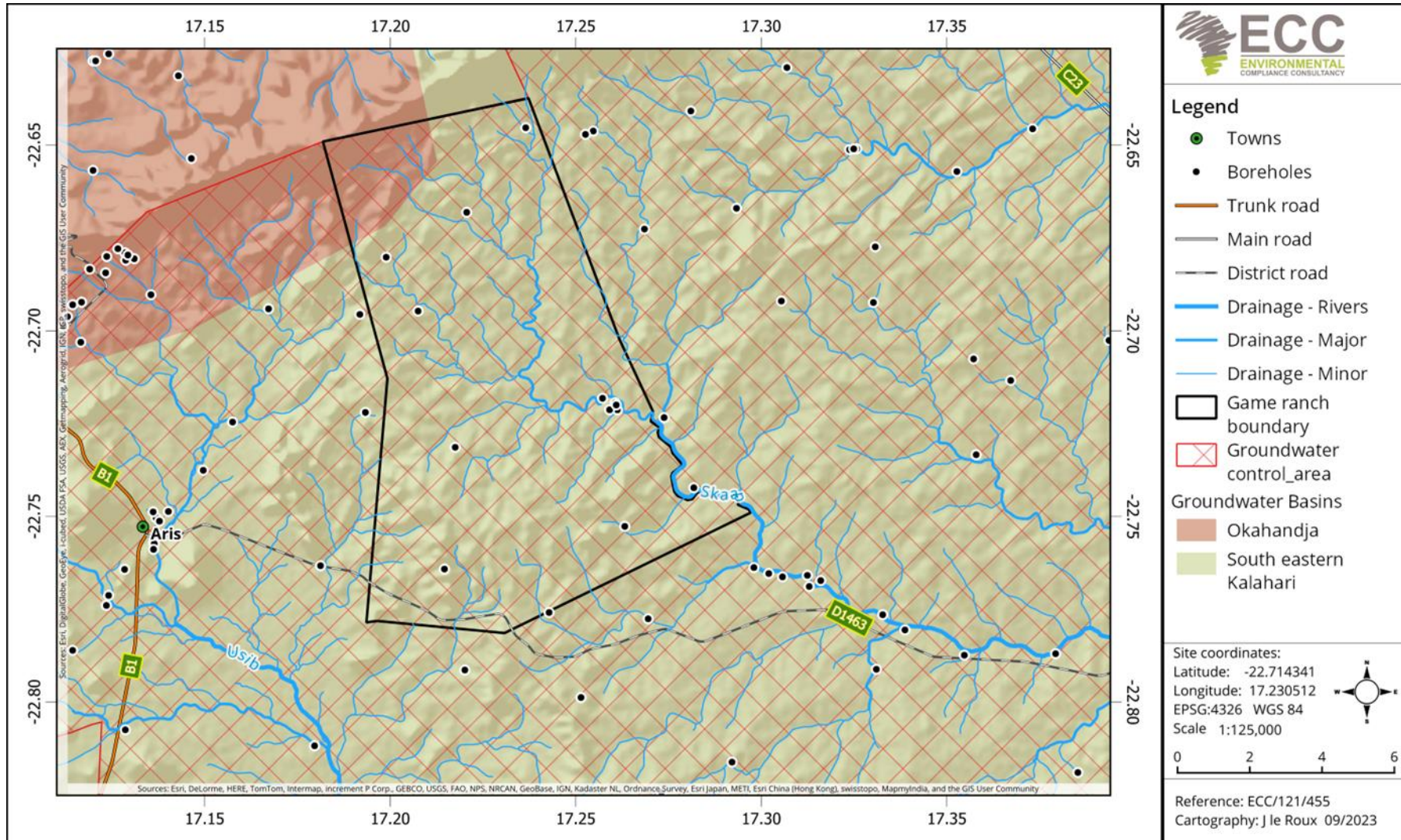


Figure 9 - Hydrology map for Farm Waldeck No.28

## 5.12 SOIL, GEOLOGY AND TOPOGRAPHY

Major geological features defined within the project area are Rehoboth Group and associated subgroups such as granite, gneiss and old volcanic rocks which are entirely covered by leptosol soils (Figure 11). Regosol soils are found in the broader portions east and southeast of the project area (Figure 10) (Bunbenzer, 2002). Sandstones and metamorphic sedimentary rocks such as schists and marble are other typical rock types found in the surroundings of the project area (Bunbenzer, 2002).

According to Alice et'al (2022), leptosol soils are typically stony and shallow with a high drainage ratio, hence their potential to support crop production is low. Similarly, regosol soils are medium to finely textured with an unconsolidated structure which increase their erodibility, hence their potential to support rain fed crops is also low (Alice et'al, 2022).

The topography of the farm is mountainous and to the southeast of the farm is the ephemeral Skaap catchment area and its small tributaries . The elevation varies between 2000 m to 1900 m above sea level in the north to south direction (Figure 12). The surface geology appears to be smooth to rugged and the entire landscape has a gentle gradient dipping north to south (Figure 12).

The soil, geology and elevation maps are shown in Figure 10, Figure 11 and Figure 12.

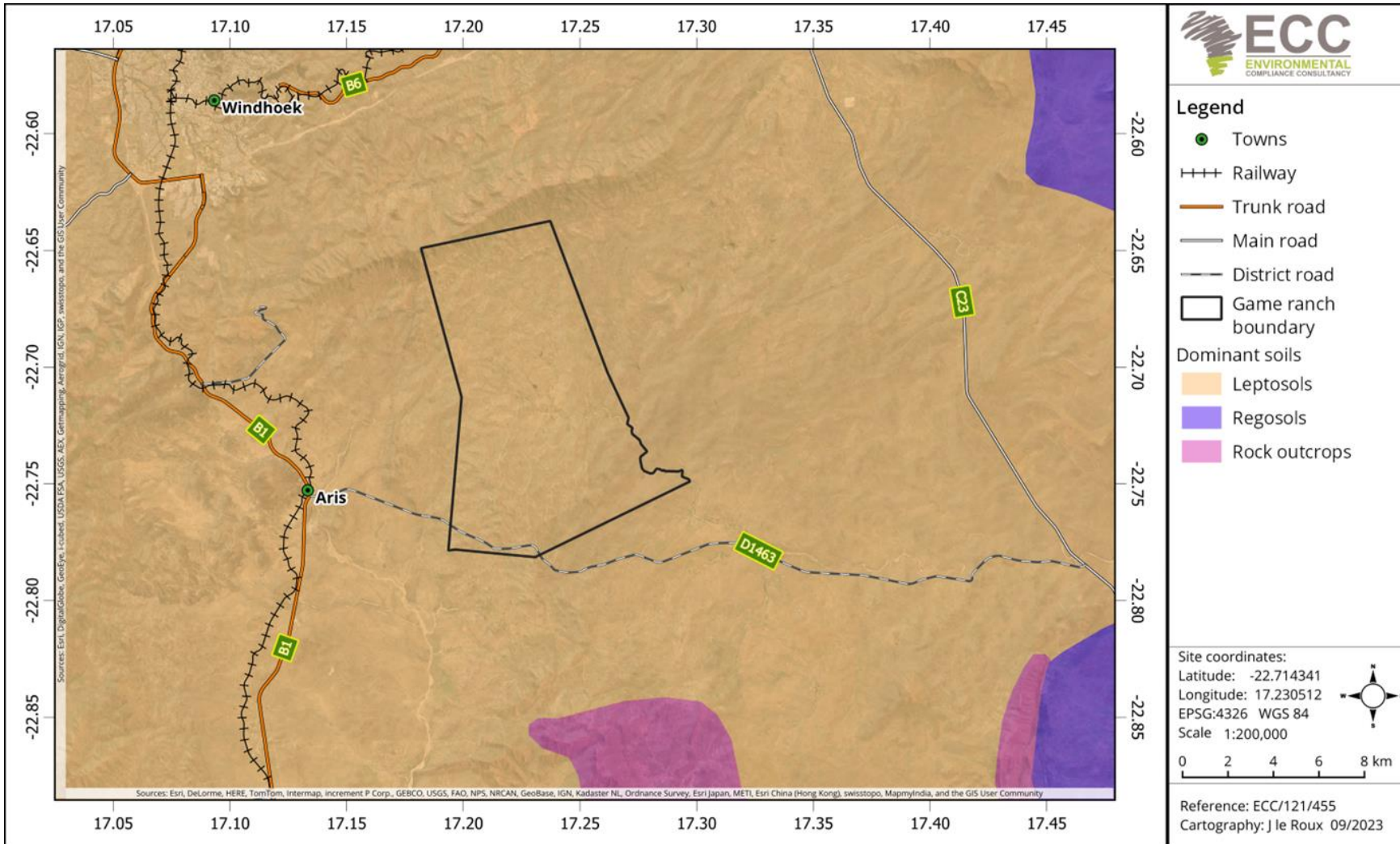


Figure 10 -Soil map for Farm Waldeck No.28

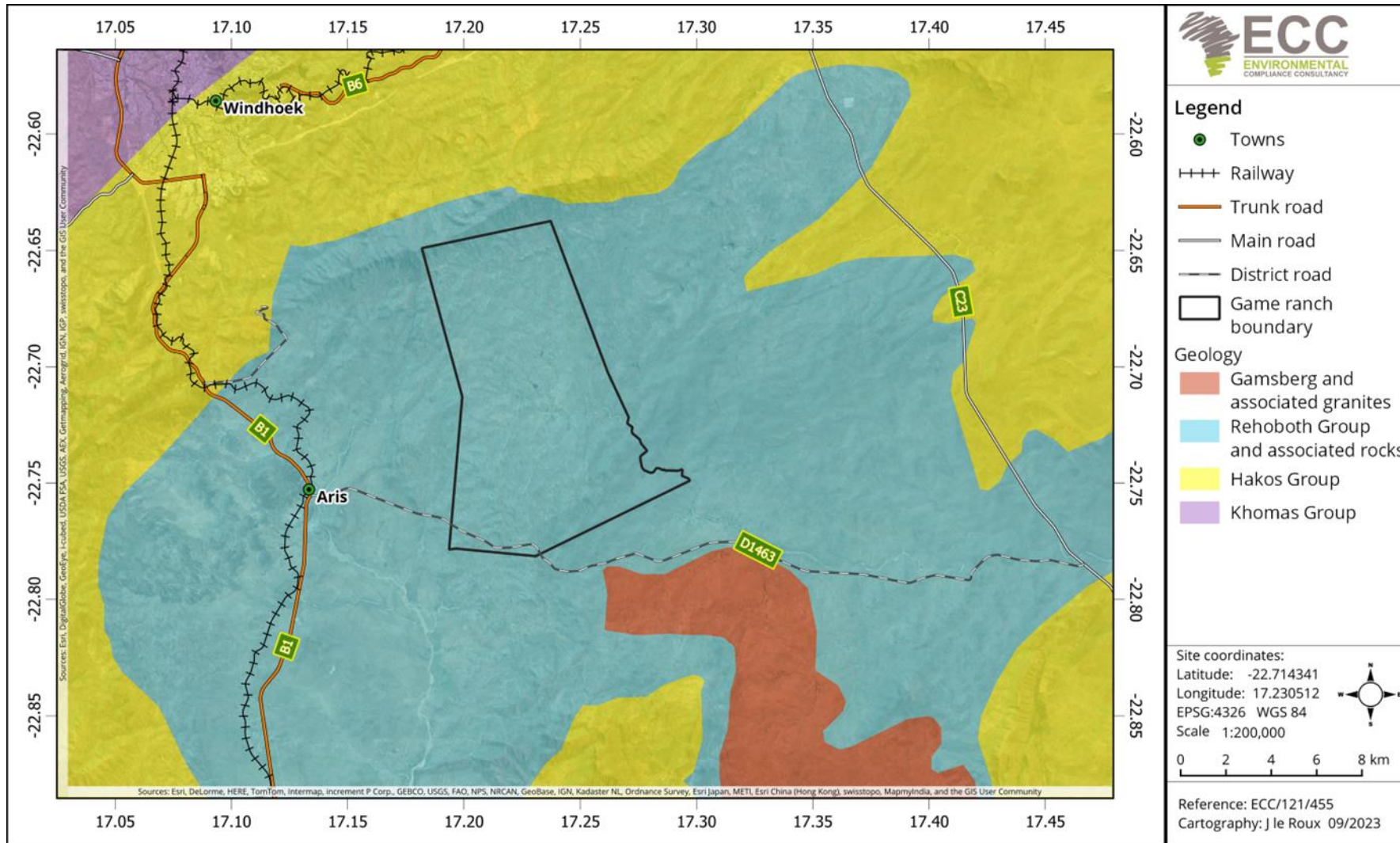


Figure 11 - Geology map for Farm Waldeck No.28

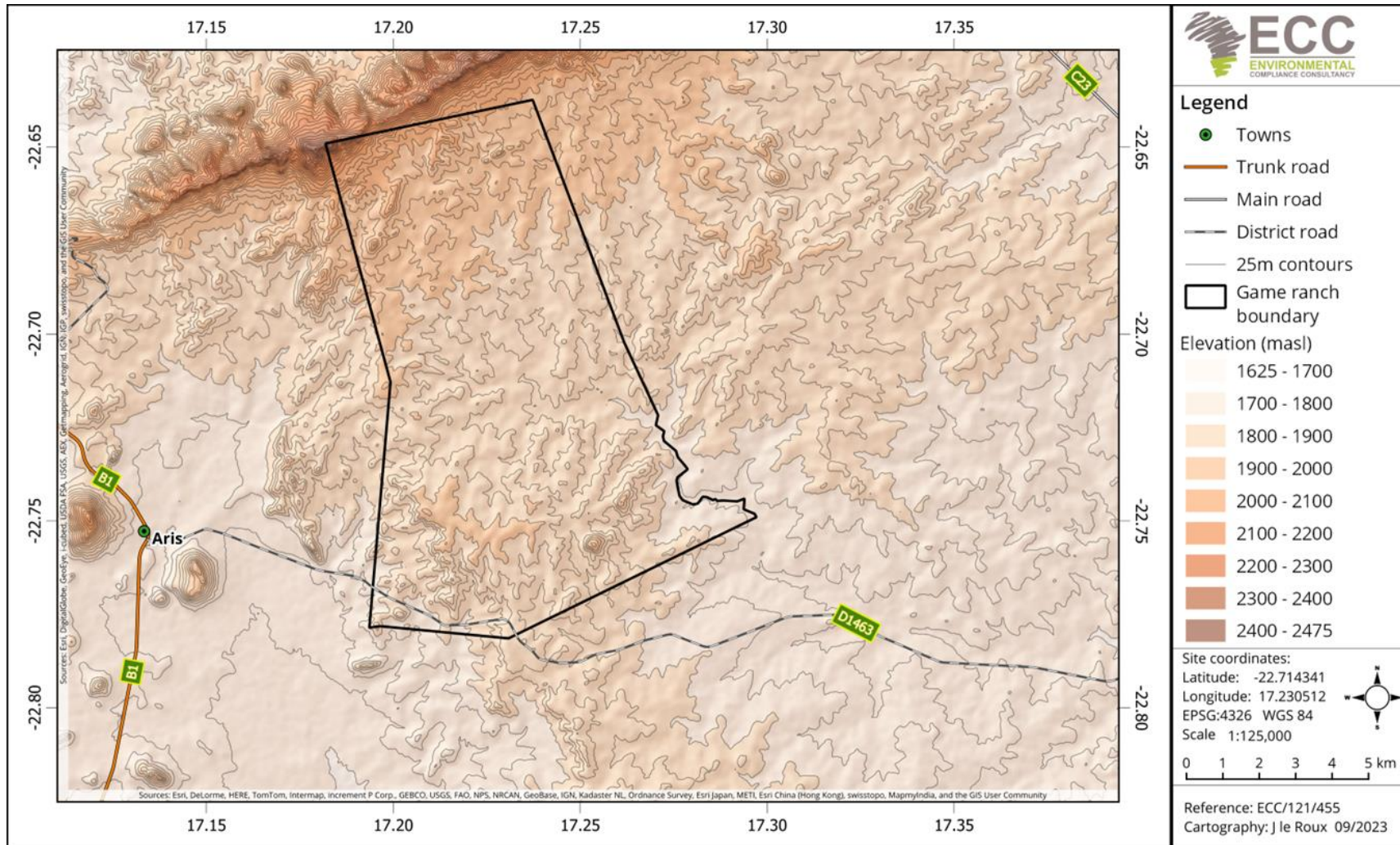


Figure 12 - Elevation map for Farm Waldeck No.28

## **6 IMPACT IDENTIFICATION AND EVALUATION METHODOLOGY**

### **6.1 INTRODUCTION**

The impact assessment method described in this chapter by ECC is designed to systematically identify and evaluate potential environmental and social impacts that may arise from a proposed project. The method takes into consideration the baseline characteristics of the project area and assesses the significance of impacts based on various factors, including the sensitivity and value of environmental and social receptors, the nature and characteristics of the potential impact, and the magnitude of potential change.

The method shown in Figure 13 provides assessment guidance that is used to evaluate impacts, and it also acknowledges any limitations, uncertainties, and assumptions associated with the assessment methodology. It outlines how impacts are identified and evaluated, and how the level of significance is derived. The method also addresses the application of mitigation measures in the assessment, and how additional mitigations are identified.

This chapter provides a structured approach for evaluating the potential impacts of a proposed project on the environment and social aspects. It considers various factors to determine the significance of impacts and provides guidance on how to identify and evaluate potential impacts. It also recognises the limitations and uncertainties associated with impact assessment methodologies, which adds transparency and credibility to the assessment process.

Overall, this chapter provides a comprehensive and systematic approach for conducting impact assessments, which can help ensure that potential environmental and social impacts are thoroughly evaluated and addressed in the decision-making process for the proposed project. However, it is important to note that the effectiveness of this method would ultimately depend on its implementation and the accuracy of the baseline data and assumptions used in the assessment. Therefore, regular reviews and updates of the methodology based on new information and feedback from stakeholders would be recommended to improve its accuracy and relevance.

## ECC IMPACT PREDICTION AND EVALUATION METHODOLOGY



### ECC – NATURE OF IMPACT

<b>+</b> <b>BENEFICIAL (POSITIVE)</b>	<b>-</b> <b>ADVERSE (NEGATIVE)</b>
An impact that is considered to represent an improvement on the baseline or introduces a positive change.	An impact that is considered to represent an adverse change from the baseline or introduces a new undesirable factor.

### REVERSIBILITY

<b>↔</b> <b>REVERSIBLE</b>	<b>↔</b> <b>PARTLY REVERSIBLE</b>	<b>→</b> <b>IRREVERSIBLE</b>
Impacts are reversible and recoverable in the future	Some parts of the impact can be reversed while others remain	Impacts which are not reversible and are permanent

### DURATION

<b>1</b> <b>TEMPORARY</b>	<b>2</b> <b>SHORT TERM</b>	<b>3</b> <b>MEDIUM TERM</b>	<b>4</b> <b>LONG TERM</b>	<b>5</b> <b>PERMANENT</b>
Transient, a period of less than 1 year	Impacts that are likely to last for the duration of the activity causing the impact and are recoverable (1-5 years)	Impacts that are likely to continue after the activity causing the impact and are recoverable (5-15 years)	Impacts that are likely to last far beyond the end of the activity causing the damage (greater than 15 years with impact ceasing after decommissioning of the project)	

### SCALE OF CHANGE - EXTENT / GEOGRAPHIC SCALE

<b>ON-SITE</b>	<b>LOCAL</b>	<b>REGIONAL</b>
Impacts that are limited to the boundaries of the proposed project site	Impacts that occur in the local area of influence, including around the proposed site and within the wider community	Impacts that affect a receptor that is regionally important by virtue of scale, designation, quality or rarity.
<b>NATIONAL</b>	<b>INTERNATIONAL</b>	
Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.	Impacts that affect a receptor that is internationally important by virtue of scale, designation, quality or rarity.	

### ECC – TYPE OF IMPACT

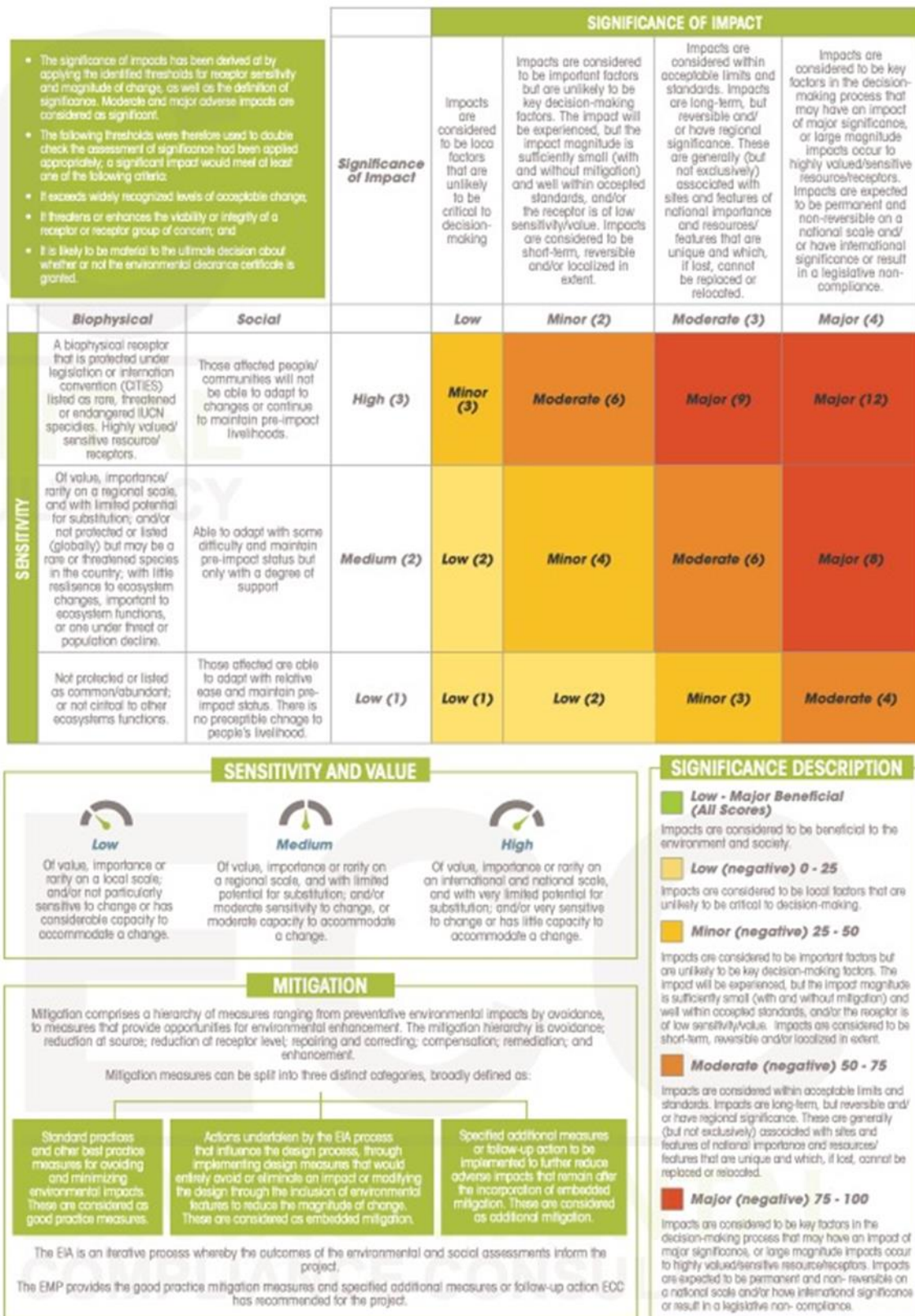
<b>→</b> <b>DIRECT</b>	<b>↪</b> <b>INDIRECT</b>
Impacts causing an impact through direct interaction between a planned project activity and the receiving environment/receptors.	Impacts that result from other activities that are encouraged to happen as a result / consequence of the Project. Associated with the project and may occur at a later time or wider area
	<b>↑</b> <b>CUMULATIVE</b>
	Impacts that arise as a result of an impact and effect from the project interacting with those from another activity to create an additional impact and effect

### MAGNITUDE OF CHANGE

<b>VERY HIGH / UNKNOWN</b>	Loss of resource, significantly affecting the long term quality and integrity of a resource; irreparable damage or loss of key characteristics, features or elements; or the magnitude is too great to quantify as it is unknown.
<b>HIGH / MAJOR</b>	Loss of resource, and quality and integrity of resource; severe damage to key characteristics, features or elements; or Large scale or major improvement of resources quality; extensive restoration or enhancement; major improvement of attribute quality.
<b>MODERATE</b>	Loss of resource, but not adversely affecting its integrity; partial loss of/damage to key characteristics, features or elements; or Benefit to, or addition of, key characteristics, features or elements; improvements of attribute quality.
<b>LOW / MINOR</b>	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (or maybe more) key characteristic, feature or element; or Minor benefit to, or addition of, one (or maybe more) key characteristic, feature or element; some beneficial effect on attribute quality or a reduced risk of a negative effect occurring.
<b>NONE / NEGLIGIBLE</b>	Very minor loss or detrimental alteration to one (or maybe more) characteristic, feature or element; or Very minor benefit to, or positive addition of, one (or maybe more) characteristic, feature or element.

### PROBABILITY

<b>IMPROBABLY (RARE)</b>	<b>LOW PROBABILITY (UNLIKELY)</b>	<b>MEDIUM PROBABILITY (POSSIBLE)</b>	<b>HIGH PROBABILITY (LIKELY)</b>	<b>DEFINITE (ALMOST CERTAIN)</b>
The event may occur in exceptional circumstances yet, rarely occurs in the industry. The event could occur once every 100 years	The event has happened elsewhere yet, is unlikely to occur. The event could occur once every 10 years	The event could occur under some circumstances. The event could occur once every 5 years.	The event is expected to occur. The event could occur twice per year	The event will occur. The event could occur once per month



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Figure 13 -ECC ESIA methodology based on IFC standards



## 6.2 ASSESSMENT GUIDE

The principal documents used to inform the assessment method are:

- International Finance Corporation standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012),
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013); and,
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

## 6.3 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The limitations and uncertainties associated with the assessment methodology in Namibia were observed to include the absence of topic-specific assessment guidance, with a generic methodology being applied based on IFC (International Finance Corporation) guidance and professional judgement with over 25 years of ESIA experience. This implies that there may be limitations in terms of tailoring the assessment to specific topics or issues relevant to Namibia, and that the methodology may not fully capture the unique characteristics and nuances of the local context.

It is important to note that the limitations and uncertainties identified in the assessment methodology, shown in

Table **6**, may introduce potential biases or inaccuracies in the assessment results. Therefore, it is recommended to regularly review and update the methodology to address these limitations and uncertainties, and to ensure that it remains robust and relevant for the specific context of Namibia. Additionally, incorporating stakeholder feedback and local knowledge can also contribute to improving the accuracy and comprehensiveness of the assessment process.

**Table 6 - Limitations, uncertainties and assumptions**

Limitations/uncertainty	Assumption
Topic-specific assessment guidance has not been developed in Namibia.	A generic assessment methodology will be applied to all topics using IFC guidance and professional judgement.
The potential extension of the project footprint.	The proponent has signed contractual purchase agreements with the landowners of Farm Dornbaum No.74 and Bethlehem No.27/Rem 3. The project footprint will be expanded prior to full acquisition of these portions. An ECC amendment will be launched with the competent authority and an impact assessment study will be undertaken to assess the potential impacts of any planned development activities that may be associated with these portions.
The assessment of potential impacts associated with imported game	The Proponent propose to import game from South Africa. The associated potential impacts will be discussed thoroughly through an amendment application which will be launched once the additional portions have been fully procured and transferred.
Meteorological data for Farm Iturea was used in this scoping and impact assessment study.	There is no site- specific weather data, therefore the neighbouring farm's records have been used as representative of the project area, with the assumption that atmospheric conditions over the two farms would likely be similar.

## **7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MEASURES**

This chapter presents the findings of the impact assessment for the proposed project, with a focus on significant potential impacts as set out in Chapter 2 and 6 of this report. The design of the proposed project and best practice measures were considered during the assessment to identify likely significant impacts and recommend mitigation management measures. This chapter aims to focus on potential significant impacts, however impacts deemed as not significant are listed and are not discussed further in this report.

The following topics were considered during the scoping phase:

- Air quality;
- Noise;
- Waste management;
- Potential hydrocarbon spills;
- Sewage waste;
- Soil and landscape;
- Visual;
- Impacts on biodiversity (fauna, flora and avifauna); and
- Socioeconomics (employment).

Impacts deemed as potentially significant are assessed in terms of their severity, duration, probability, sensitivity to receptors and nature of impact before and after mitigation. Best management practises are stated where required. The EMP provided in Appendix – A, provides best practice measures, management and monitoring for all impacts.

Due to the nature and localised scale of the current construction activities and proposed operational activities, and the environmental context of the site, the potential environmental and social effects are expected to be major, moderate and minor before mitigation measures. The areas where uncertainty remains are potential noise risks, potential habitat destruction, habitat fragmentation, potential lead poisoning of scavengers (especially vultures), potential risk of lowering groundwater and the potential risk of wildlife mismanagement. The potential risks are discussed in detail in section 7.2. Impacts associated with the additional land portions yet to be fully procured and transferred will be addressed in an amendment impact assessment application and study to be launched with the competent authority.

Mitigation measures will focus on reducing the effects of the potential impacts and ensure an acceptable measure of operation can be maintained when an impact cannot be avoided completely. An EMP has been drafted to accompany this scoping and impact assessment report, which sets out the management and mitigation measures for the project.

## 7.1 IMPACTS DEEMED AS NOT SIGNIFICANT

Impacts that have been assessed as not being significant are summarised in Table 7 and are not discussed further.

The listed impacts below are non-significant and do not render any threat to the environment in a way that adversely challenges its resilience to continue in its modified form.

**Table 7 -Table of non-significant impacts**

Environmental or social topic	Potential impact	Summary of preliminary assessment findings
Air quality	Potential dust generation from construction activities and vehicles driving on dirt roads on the farm.	<p>Construction of lodge infrastructure is underway and nearly completion. It is unlikely that current activities will generate dust that would potentially impact neighbouring farms. No complaints to date.</p> <p>It is anticipated that dust generated during game drives and hunting expeditions will relatively be low.</p>
Vegetation clearing	Potential removal of protected plant species.	No large scale clearing of vegetation is required and species are loosely scattered over the project area. Furthermore, the selected site for the PV solar plants is relatively small (40 m x 60 m), has no trees and only grass will be removed.
Waste generation (General solid waste and construction waste)	General waste generation during construction and the operational phase. Potential littering, pollution and visual nuisance.	<p>Waste generated on-site, including construction waste will be removed from site and disposed-of at the Kupferberg landfill site.</p> <p>There will be a compost heap for food waste generated during the operational phase and an external waste collecting company will be contracted to collect general waste.</p> <p>The Proponent will develop a waste management plan to counteract impacts of waste disposal on and surrounding the site.</p>

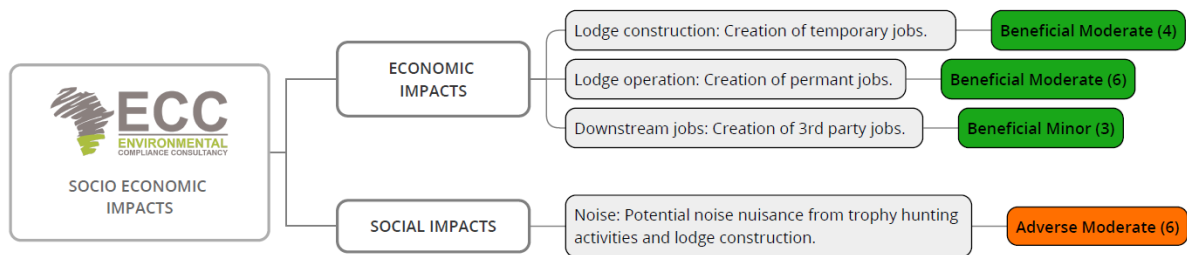
Environmental or social topic	Potential impact	Summary of preliminary assessment findings
Avifaunal collision	Light pollution and reflective surface risks from PV solar plants that could potentially act as "lake effect", thus leading to bird collisions and fatalities.	PV solar panels are less reflective than Concentrated Solar Power (CSP) which are more curved and reflective, therefore this impact is considered to be minor.
Fire risks	Potential fires on the farm due to operational, tourism and hunting activities.	<p>These are naturally unexpected events. The Proponent will need to carefully manage activities that have the potential to create field fires as specified in the EMP.</p> <p>Fire bands will be graded along perimeter fences and will be maintained on a yearly basis following rain season.</p>
Diesel tank, vehicle and equipment	Potential hydrocarbon and chemical spills that could impact soil, groundwater and surface water quality.	<p>The diesel tanks on site and vehicles should be well maintained to prevent any spills (appropriate bunding where required).</p> <p>Spill management measures are presented in the EMP.</p>
Increased people/foot traffic	Increased people/foot traffic within the project area and immediate vicinity.	The potential risk of negative social interactions to occur between the workforce and the public. The project scale is small and only 12 permanent staff members will be recruited, therefore influx of job seekers to the project area is not expected.
Visual	Change to the sense of place of the local area.	The farm's elevation has been taken into account; thus the project infrastructure is anticipated to have minimal visual disturbances towards the surrounding farms such as: Farm Unkenfels No.73, Farm Gocheganas No.26, Farm Bethlehem No.27/Rem 3, Farm Aris No.29, Farm Klein Windhoek No.70 and Farm Paulinehof No.492.

Environmental or social topic	Potential impact	Summary of preliminary assessment findings
Sewage waste	Potential contamination of groundwater.	Septic tanks and the greywater treatment system will have to be effectively cleaned, maintained and regularly monitored. Specifications in the EMP should be followed closely.



## 7.2 SOCIOECONOMIC IMPACTS

The term socio economic impact assessment embraces both social impacts and economic impacts. Economic impacts include issues such as employment, changes in economic activities and increased expenditure. The significant social and economic impacts that have specific interest to the community and stakeholders before mitigation are summarised in Figure 14. Details related to each specific impact are discussed further in the sections below.



**Figure 14 - Socioeconomic impacts**

### 7.2.1 EMPLOYMENT CREATION -ECONOMIC

Khomas Region has a 76.8% active labour force and the region is ranked 10<sup>th</sup> out of the 14 regions in terms of unemployment- with the unemployment rate projected to be 31.5% (Namibia Statistics Agency, 2019). In Windhoek, majority of the employment is through the food, accommodation and service sector, which significantly recovered since the COVID-19 pandemic. A summary of the impacts assessment is presented in Table 8.

#### 7.2.1.1 Direct employment impacts – construction phase

On average approximately 107 employees have been contracted for various project activities during the construction phase. The figure is not fixed and thus has been subject to changes based on the project desires. Where it was deemed feasible, local Namibian’s were contracted for these jobs. The creation these temporary jobs is beneficial, with minor magnitude for change. This is deemed to be a moderate beneficial impact towards the community. No mitigation measures are required.

#### 7.2.1.2 Direct employment – operational phase

During the operational phase, 12 (skilled and semi-skilled) permanent employees will be employed. This beneficial impact will result in a permanent impact with minor magnitude of change and medium sensitivity and value. A moderate beneficial impact could therefore be expected. No mitigation measures are required.

#### 7.2.1.3 Indirect employment – local suppliers

The lodge operation will boost the local economy by creating indirect downstream opportunities in terms of trading or market opportunities i.e., local suppliers. These indirect beneficial impacts

are long term and partly reversible. The probability of the impact is expected to be high whilst sensitivity and magnitude of change are expected to be low. The overall significance of impact is expected to be minor -beneficial. No mitigation measures are required.

**Table 8 -Impact related to socioeconomics**

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact
Construction works	Community, Job seekers and Local economy	Creation of approximately 107 temporary jobs.	Beneficial Direct Reversible Temporary Regional	Medium	Minor	<b>Beneficial Moderate (4)</b>
Operation of the proposed Project	Community, Job seekers and Local economy	Creation of 12 permanent jobs.	Beneficial Direct Reversible Permanent Regional	Medium	Minor	<b>Beneficial Moderate (6)</b>
Downstream economic injection	Local economy (goods and services trade businesses)	Financial injection into service and goods trading in the local economy, and direct foreign investment.	Beneficial Indirect Partly reversible Long term Local	Low	Minor	<b>Beneficial Minor (3)</b>

### 7.3 SOCIOECONOMIC ENVIRONMENT – SOCIAL

Social impacts include the consequences to local populations in terms of people’s lives, work, livelihood and interactions. Noise impacts associated with the project activities are discussed in the section below.

#### 7.3.1 NOISE IMPACTS

The construction phase may generate thunderous noise levels which potentially could pose occupational health and safety concerns. The proposed operational activities (hunting expeditions) and occasional aircrafts fly-over could generate additional noise which potentially could lead to hearing loss risks to shooters, nuisance towards neighbouring farms and the general biodiversity on the farm. Target shooting is a popular sport around the world, however this does not form part of the envisioned activities. According to Meinke et al. (2017), majority of firearms (not including smaller calibres like a .22) can generate peak sound pressure levels (SPLs) between 150 to 165 dB which could permanently damage the human cochlear structure. Professional

hunters, farm owners and game guides are more susceptible to excessive noise levels and are at high risk of enduring noise-induced hearing losses (NIHL) (Meinke et al. 2017).

There are limited literatures on gunshot noise impacts on biodiversity, however Burton (1998) narrated the importance of ecotourism in ensuring sustainable development. Although gunshots effects have been rarely studied in rural areas, hunting in these pristine environments is a notable activity (Milner-Gulland & Bennett 2003). The research paper on environmental impact of noise pollution on biodiversity by Sordello et al (2019) argued that man-made sound impact animals by influencing the use of space by biological groups such as birds, amphibians and reptiles (Sordello et al, 2019).

The potential risk of noise is rated direct, reversible and localised as the impact affect biodiversity's that could be close to the noise source. Although shooting/hunting expeditions occurs on occasions and over short durations, the impact is considered as long term due to prolonged exposure especially for the game hunting guides. Long term exposure could result in noise-induced hearing loss (NIHL). There are health and safety risks for hunters, therefore magnitude of change is rated as moderate, and sensitivity of impact is rated medium. Overall, the significance of impact is expected to be adverse moderate before mitigation measures and adverse minor after mitigation measures (Table 9).

**Table 9 -Impacts related to noise risks**

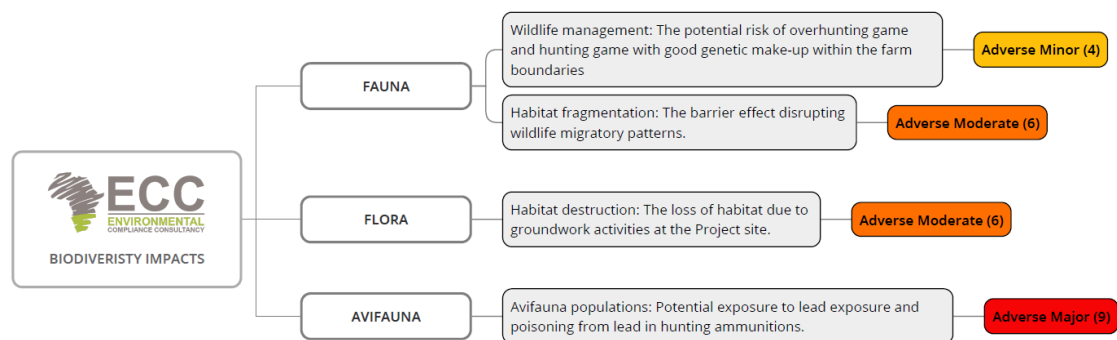
Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Hunting and shooting activities and vehicles driving on dirt roads and other noise generating activities.	Neighbouring farms, on-site employees and biodiversity groups.	Noise nuisance and potential hearing loss towards site-based employees and disturbance to biodiversity.	Adverse Direct Reversible Permanent Local Likely	Medium	Moderate	<b>Adverse Moderate (6)</b>	<b>Adverse Minor (4)</b>

The Proponent should consider the following mitigation measures:

- The Proponent should develop an occupational health and safety management plan, taking into account noise generation;
- Ensure appropriate PPE is worn during hunting expeditions (i.e. earmuffs, earplugs and ear protective equipment with >30 SNR (Single Number Rating));
- Hunting rifles should be equipped with silencers/ suppressors where required or feasible;
- Areas with rich biodiversity's should be identified and reserved (e.g. vulture breeding and nesting areas);
- People not shooting should stand further away from the noise source;
- Vehicles should be maintained regularly to limit noise levels; and
- Conduct safety inductions before hunting expeditions.

## 7.4 IMPACTS ON BIODIVERSITY

The biodiversity impact assessment chapter covers potential impacts to fauna and flora and the related ecological function or ecosystem services in the project area. The significant biodiversity impacts (before mitigation measures) that have specific interest to the community and stakeholders are summarised in Figure 15. Impacts are discussed further in detail in this section.



**Figure 15 -Biodiversity impacts**

### 7.4.1 IMPACTS RELATED TO HABITAT LOSS

Habitat destruction refers to the process where the natural habitat is disturbed or changed to the point where it cannot support the native species of the area anymore. Biodiversity that usually formed part of the landscape could potentially be killed or displaced, which ultimately reduce species abundances.

The proposed Project will involve the clearing of land for two PV solar plants and associated infrastructure. The area selected for PV solar plants is however relatively small, measuring approximately 40 m x 60 m and has no trees. Land clearing and surface levelling activities will involve the removal of grass, excavation of soils and roots, stripping and compaction of topsoils which potentially could result in the loss of certain habitats. According to Beatty et al (2017), herbicides are sometimes used as rapid mechanical land clearing methods to get rid of unwanted plants or weeds. These activities according to Jenkins et al (2017) impact on ecosystems patterns and functions such as wildlife cover, forage, nutrient cycle and animal displacement. These mass land clearing practices are usually used to accommodate convenient construction, operations of the plant and even for easy access, but according to Jenkins et al (2017) there are alternatives where vegetation could be incorporated into solar plant design.

There won't be removal of trees at this stage of the project, therefore it is anticipated that species likely to be impacted on by the land preparation activities will be reptiles, amphibians, scorpions, ground nesting birds and/or any other ground -burrowing species.

According to Alice et'al (2022), the central highlands have a high reptile diversity of close to 79 reptiles species; of which 8 of the 36 snakes species are endemic. Slow mobility reptiles such as: *Stigmochelys pardalis*, *Psammobates oculiferus*, *Python natalensis* and *Varanus albigularis* are protected and listed as least concern (IUCN, 2022). 13 of the 34 lizard species are endemic to Namibia. The amphibian diversity is estimated at roughly 13 species (3 are known to be endemic) whilst 14 -17 scorpion species are likely or expected to be found in the project area (Bubbenzer, 2002 & Mendelsohn et al., 2002).

Grass species such as *Eragrostis omahekensis*, *Pennisetum foermeranum*, *Setaria finite* and *Eragrostis scopelophila* are expected to occur in the project area or its surrounding and will likely be removed during land preparation. However, *Eragrostis omahekensis* thrive exponentially well under disturbed soils (Cunningham, 2017).

The magnitude of change regarding the loss of habitat loss is moderate because land portions will be cleared for two PV solar plants. The impact will be direct, on-site and irreversible because the ecosystem will be altered and natural habitat will be destroyed, some species might potentially be displaced. The sensitivity of impact is ranked as medium and not expected to be severe. The significance of the impact has thus been classified as moderate. Prior to construction activities, the project site and the contractors housing area were thoroughly inspected and fenced off to prevent incursion into un-inspected areas. With the implementation of the mitigation management measures, the significance of the impact is considered minor (Table 10).

**Table 10 - Impacts related habitat destruction**

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Land clearing activities for two PV solar plant.	Biodiversity	Potential habitat destruction and disturbances of ecosystem functioning due to land clearing activities for the PV solar plants.	Adverse Direct Irreversible Permanent On-site Likely	Medium	Minor	<b>Adverse Moderate (6)</b>	<b>Adverse Minor (4)</b>

The Proponent should consider the following impact management/control measures:

- When new project areas are identified, the area should be inspected to determine the presence of any unique nesting/breeding site;
- Use existing roads and avoid off-road driving; and
- Conduct training and inductions on biodiversity and negative impacts on habitat destruction.

#### 7.4.2 HABITAT FRAGMENTATION

A 2.5-meter-high, non-electrified game proof fence is currently under construction to exclusively fence off Farm Waldeck No.28 and the Iturea portion. Erection of the game proof fence creates a barrier effect, which ultimately alters game migratory routes, confine game to limited land portions (habitat fragmentation) and hinder animal access to crucial resources (Jakes et al., 2018). Large mammals, slow moving reptiles such as tortoises, monitors, chameleons, snakes and amphibians are the most identified susceptible receptors. Burrowing species could potentially not be regarded as potential receptors as they may be able to migrate between farms. Game proof fences have been erected across most game farms and nature reserves in South African countries to define boundaries, control game movements, control the spread of animal diseases and mitigate human wildlife conflicts (Jakes et al., 2018).

The following surrounding farms will share borders with the current game proof fence:

- Farm Unkenfels No.73: located southeast of the Iturea portion, game proof fence will cover a distance of approximately 8km;
- Farm Paulinehof No.492: located east of Farm Waldeck No.28, game proof fence is expected to cover approximately 9km;
- Farm Gocheganas No.26: located south of Farm Waldeck No.28, game proof boarder fence length is expected to be approximately 4km;
- Farm Aris No.29: located to the west of Farm Waldeck No.28, game fence expected to stretch for approximately 14 km; and
- Farm Klein Windhoek No.70; located north of Farm Waldeck No.28, game proof fence is expected to cover a length of approximately 6km.

The game fence may be associated with potential negative impacts such as wildlife entanglement, increase competition for resources and pressure on the land carrying capacity. The opening up of the Iturea portion will however ease the severity of the impact, as the land carrying capacity will increase.

The impact related to habitat fragmentation will be adverse and direct. The impact is expected to have a local extent as game migratory routes between the surrounding farms will be disturbed. Impacts such as wildlife entanglement in the fence, increase in resource competition and impacts on the land carrying capacity are deemed as cumulative.

The opening up of Farm Iturea will mitigate the impact by increasing the carrying capacity. Additional farms will be purchased by the Proponent; however, the impacts will be explored thoroughly in a different impact assessment study once the portions have been fully procured and transferred. The magnitude of the impact is therefore considered to be moderate and overall significance of the impact to be adverse moderate before mitigation measures and adverse minor after mitigation. An overview of the impact as assessed is presented in Table 11 below.

**Table 11- Impact related to habitat fragmentation**

Activity	Receptor	Impact	Nature of impact	Value of sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Construction of a game proof fence	Biodiversity	Disturbance to wildlife migratory routes leading to habitat fragmentation, wildlife entangled in the fence and increase competition for resources.	Adverse Direct /cumulative Partly reversible Long term Local Likely	Medium	Moderate	<b>Adverse Moderate (6)</b>	<b>Adverse Minor (4)</b>

Impact management/control measures may include but are not limited to the following:

- Swing gates could be added to ensure that borrowing animals can get through;
- Droppers should be added at regular intervals to ensure that the fence will be visible to wildlife;
- Conduct regular patrols to monitor game movements and wildlife that might be stuck/entangled; and
- Fences should be checked for snares and removed immediately.



### 7.4.3 WILDLIFE MANAGEMENT

The Proponent intent to engage in professional hunting (hunting for game which is managed by the Proponent through proper breeding protocols and gene diversification). Hunting will be aimed at targeting trophy game and will be conducted strictly under the supervision of a registered Professional Hunters. The meat will mainly be used for the lodge, thus providing tourists with the opportunity to enjoy local game. Excess meat will be provided to staff for rations and any excess meat will be donated.

The Namibia Labour Survey Report of 2018 indicated that 19.8% of the population depend on subsistence farming (NSA, 2019). Additionally, Brink et al (2011) narrated that game farming has grown exponentially since the 1960's and contributed significantly to the GDP. However, hybridization, inbreeding and ecosystem disruptions concerns have been raised by various environmental institutions and academics in recent years. As a result, this prompted the desire for improved sustainable game farming management through ecological, social and economic approaches (Brink et al, 2011).

Responsible wildlife management increase the capacity in which the ecosystem contributes and continues to provide services as well as prevent the costs of degradation, repair and restoration (Brink et al. 2011). Furthermore, Brink et al (2011) narrated that responsible game management improves the genetic health of wildlife populations through the prevention of inbreeding by fenced-off populations.

The renovation of the farm fence entails that game will be confined inclusively to areas within the farm areas, thus the impact of wildlife mismanagement will be on- site and duration of impact is considered to be long term. The impact is partially reversible provided that practical mitigation measures are implemented. The magnitude of change is expected to be minor and sensitivity of potential risk of wildlife mismanagement is rated as medium as the impact could lead to game population imbalances within the farm (e.g. too many herbivores or too many predators). Closed-circuit cameras were installed to monitor the project area on a 24-hour basis. The significance of impact expected to be minor, and low with the implementation of mitigation measures (Table 12).

**Table 12 - Potential wildlife mismanagement impact**

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Wildlife management	Huntable game	Potential risk of overhunting of game and hunting of game good genetic make-up within the farm boundaries	Adverse Cumulative Partly reversible Minor Long term On site Medium probability	Medium	Minor	<b>Minor (4)</b>	<b>(Low) 2</b>

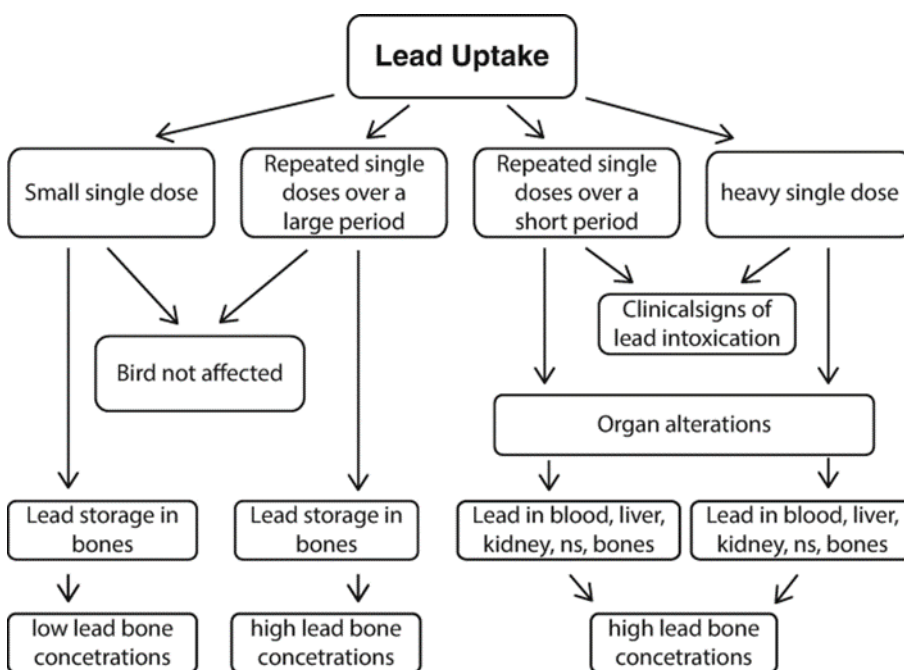
Impact management/control measures may include but not limited to the following:

- Develop an effective wildlife (biodiversity) management plan;
- Game hunting permits should be applied for;
- Hunting should be conducted under the supervision of a registered Master or Professional Hunter;
- Create awareness, training on biodiversity conservation to employees and tourists;
- Conduct annual game counts and keep records of hunted game and game populations;
- Introduce new game to the farm from elsewhere (new genetics) to prevent inbreeding of fenced off population; and
- Sustainable game farm management and ethical practices should be promoted and incorporated throughout the hunting season (expeditions).

#### 7.4.4 LEAD POISONING

Hunting and shooting for trophy form part of the proposed project. Lead-based ammunitions are popularly used in the hunting/shooting sectors and lead exposure from hunting ammunitions might have potential negative impacts on wildlife within farm boundaries, especially scavengers (i.e., White Backed Vulture). White -backed vultures are listed by IUCN as critically endangered (IUCN, 2022). In broad terms, vultures are the most susceptible receptors as they are mostly associated with game farms. According to the IUCN red list, Lappet-faced vulture, Black harrier, Secretary bird and Martial eagle are endangered, White-headed vultures, White- backed vultures and Hooded vultures are critically endangered whilst Cape vultures are classified as vulnerable (IUCN, 2022).

According to van den Heever et al. (2019), poisoning and lead poisoning are the most notable causes of vulture mortalities in Africa. The research study conducted in 2019 on lead concentration levels in bones of scavenging and non- scavenging birds indicated that 12% of White-backed vultures suffer from subclinical to severe clinical lead poisoning upon their death (van den Heever et al, 2019). The study concluded that the likely source of lead could be fragments of lead ammunition embedded in the carcasses of hunted animals. Once ingested by vultures and regurgitated to chicks, the lead concentrations are passed on leading to detrimental impacts (van den Heever et al 2019). For illustrative purpose, Figure 16 shows the lead poisoning flowchart in birds.



**Figure 16 - Lead poisoning in birds' flowchart**

The sensitivity of the receptor is rated as high because of the critically endangered White-backed vultures and White-headed vultures, Cape vultures (vulnerable) and Lappet-faced vultures (endangered) that are on occasion associated with game farms. Additionally, these species are listed under Appendix II of the CITES. The magnitude of impact is rated high due to the conservation status of these scavenger species. The potential risk of lead poisoning expected to be indirect and irreversible. Receptors (scavenger bird species) are migratory and will not always be confined to the project area, hence the potential risk is ranked to have a regional impact. Overall, the significance of impact is rated major- moderate before mitigation and moderate after implementation of mitigation measures (Table 13).

**Table 13 - Impacts related to lead poisoning**

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Hunting activities	Avifauna	Potential lead exposure and poisoning from lead in hunting ammunitions (i.e raptors and scavenger birds)	Adverse Indirect Irreversible Moderate Permanent Regional Medium probability	High	High	<b>Adverse Major (9)</b>	<b>Adverse Moderate (6)</b>

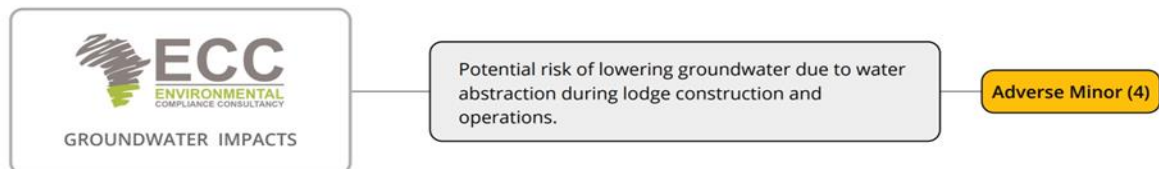
Impact management/control measures may include but are not limited to the following:

- Using lead-free ammunition within farm boundaries;
- Create awareness on conservation of endangered species i.e., raptors and vultures; and
- Ensure that carcasses (where the bullet made an impact and fragmented) hunted with lead-based ammunitions are disposed- off properly.

## 7.5 IMPACTS ON THE ENVIRONMENT

### 7.5.1 GROUNDWATER IMPACTS

This section describes the potential risk of water abstractions on the Schaff River catchment water quantities (Figure 17). To conclude this section, mitigation management measures to reduce the impact are provided.



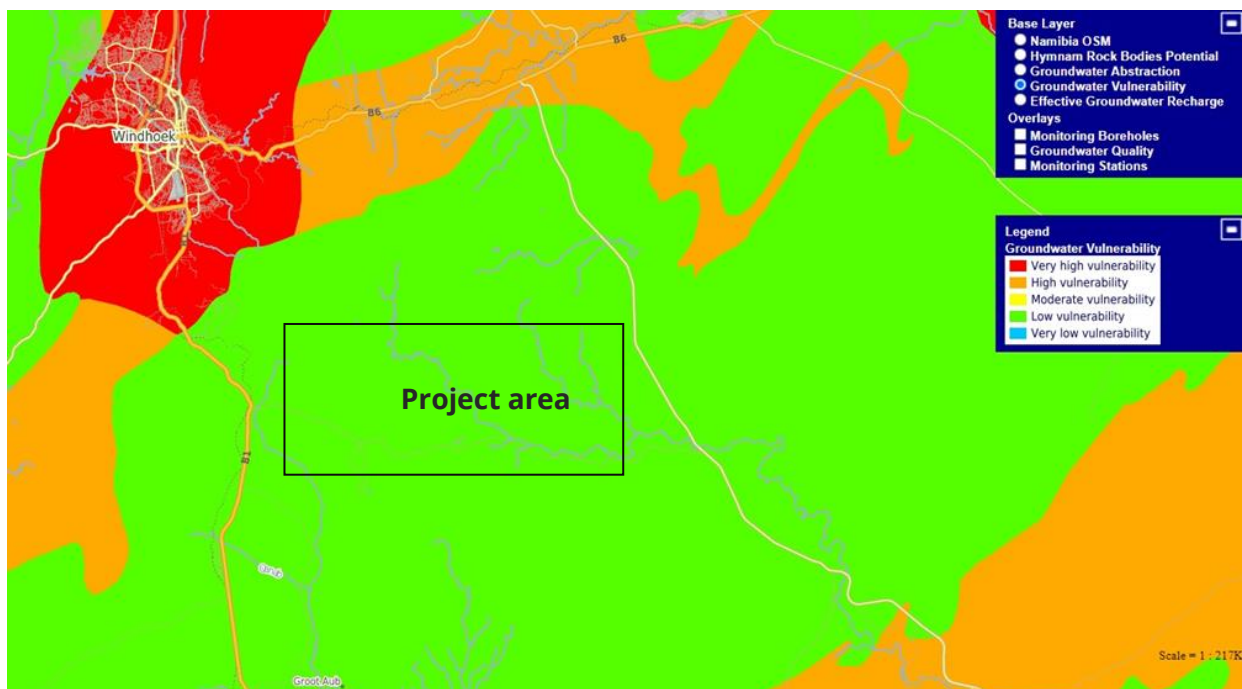
**Figure 17 -Impacts related to water abstraction**

Two existing boreholes will supply water required for the construction and operation of the lodge. Water will be pumped to six 10 000 litres Jojo plastic reservoir tanks at the construction site to meet an estimate demand of between 6000 to 10 000 litres per day during the construction phase. Overflow from the tank will be pumped to the existing artificial dam and water will not directly be abstracted from the boreholes and pumped to the dam. The water

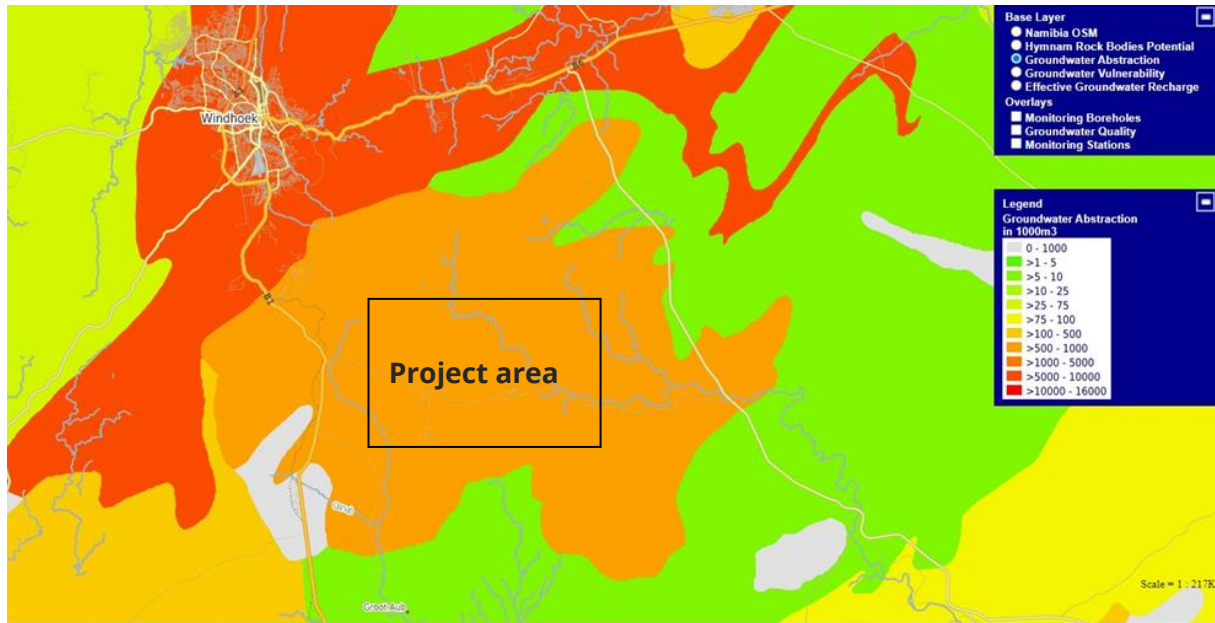
demand during lodge operations will approximately be 9000 to 12 000 litres per day. Water reservoir tanks are the only artificial water holding structures envisioned for this project and no new earth dams will be constructed.

However, the proposed project is within the proclaimed groundwater control area and most of the Project footprint's is in proximity of the Shaap catchment area which recharges the downstream Schaap River and is water sourced by most downstream farmers. There is a potential risk that excessive abstractions during the lodge operations will lead to lowering aquifer levels for downstream communities.

According to the Namibian Monitoring Information System and Hydrological Map of Namibia there are generally rock bodies with little to locally moderate groundwater potential and the groundwater vulnerability is considered to be low (Figure 18). According to (Bubenzer, 2002) the project area receives rainfall between 300-350 mm annually. In relation to rainfall associated with the area, groundwater recharge capacity is considered low (>0.5 - 1%, expressed as percent of the average annual rainfall) (Figure 18). Groundwater abstraction over the project site is generally good with a rate that falls between >100-500 m<sup>3</sup>, whilst surrounding areas such Windhoek and Groot Aub have groundwater abstraction rates of >10000 - 16000 m<sup>3</sup> and >5-10 m<sup>3</sup>, respectively (Figure 19)(<https://www.uit-sensoweb.de/maptest.html>).



**Figure 18 - Groundwater vulnerability in the proposed Project area (<https://www.uit-sensoweb.de/maptest.html>)**



**Figure 19 - Water abstraction rates in the proposed project area (<https://www.uit-sensoweb.de/maptest.html>)**

The groundwater vulnerability over the proposed project area is considered low (Figure 18), thus the magnitude of change associated with the potential risk of lowering groundwater is ranked moderate, the sensitivity of impact is expected to be medium and localised due to the lodge proximity to the Shaap catchment area. Abstraction from two existing borehole will be regulated and closely monitored and water will not be pumped directly into the earth dams, but rather to six jojo 10 000 litre tanks. Feasible concurrent abstractions are not foreseen, and no new dams will be constructed. Therefore, over dependence on these two boreholes is not expected. The impact therefore deemed partly reversible given that mitigation management measures are implemented. Overall, the significance of impact is considered to be minor before mitigation and low after mitigation. A summary of the impact assessment rating is provided in Table 14.

**Table 14 - Impacts related to potential lowering of groundwater**

Activity	Receptor	Impact	Nature of impact	Value & sensitivity	Magnitude of change	Significance of impact	Impact after mitigation
Water abstraction	Groundwater	Potential lowering of groundwater due to water abstraction during lodge construction and operation.	Adverse Direct Partly reversible Long term Local Medium probability	Medium	Moderate	<b>Adverse Moderate (6)</b>	<b>Adverse Minor (4)</b>

The project area falls within a proclaimed groundwater control area, therefore impact management/control measures may include the following:

- Legalization of the two boreholes. In terms of Section 44 of the Water Resources Management Act No.11 of 2013, abstraction permits should be in place;
- Abstraction rates should be monitored regularly;
- Boreholes rest water levels should be monitored regularly to monitor any irregular trends;
- Adopt a water- wise mindset on-site;
- Water leakages or pipe burst should be reported and fixed as soon as possible;
- Eco-friendly and low water use equipment should be used ie., eco-freindly showerheads and taps; and
- Activities that require a lot of water should be monitored to ensure water is used efficiently.

These mitigation measures will result in a low significance rating of the impact described.

## 8 CONCLUSION

A scoping and impact assessment has been undertaken for the proposed development and construction of a tourism lodge on Farm Waldeck No.28, Khomas Region, Namibia. All aspects have been considered in the impact assessment and have been thoroughly investigated against planned activities. Potential significant impacts that may occur during the construction and operational phase of the project are impacts relating to occupational and community health and safety (noise generation), socioeconomic impacts, habitat destruction, habitat fragmentation, potential mismanagement of wildlife, potential lead poisoning risk for scavengers, especially critically endangered white-backed and white-headed vultures and abstraction leading to potential lowering of groundwater. Thus, these areas will need to be carefully monitored and managed according to the EMP, to ensure that the significance of these impacts are reduced as far as reasonably possible.

Table 15 summaries the impacts after mitigation. On a scale from 1 to 12, low to high, the beneficial (B) and negative (N) impact significance is stated.

**Table 15 - Summary of the significance rating after mitigation for the expected impacts**

Socioeconomic environment: economic		Socioeconomic environment: social		Biophysical environment	
Impacts on temporal job creation	B4	Noise impacts	N4	Flora: Habitat destruction	N4
Impacts on permanent job creation	B6			Fauna: Wildlife mismanagement	N2
Job creation for 3 <sup>rd</sup> parties.	B3			Fauna: Habitat fragmentation	N4
				Avifauna: Lead exposure and poisoning.	N6
				Groundwater impacts	N4

The assessment of this project on the current receiving environment has shown that the Project may have moderate, minor and beneficial impacts (Table 15). The potential impacts with regards to waste generation, increased traffic or people in the vicinity, fire risks, sewerage waste, visual impacts, risks concerning the removal of protected species are deemed as non-significant and are expected to be minor. However, these areas should still be managed as per requirements of the environmental management plan (EMP) to ensure that the Proponent complies with the relevant legislation, international standards and best practices.



## **BIBLIOGRAPHY**

Alice, J. Mendelson, J. Mendelson, J. Mendelson, M. & Robertson, T. (2022). *Atlas of Namibia: Its land, water and life*. pg 148-151.

Bank of Namibia (BoN), (2023). Economic Outlook: Global and Regional Economy August 2023. Pg 2-3.

Brink, M., Cameron, M., Coetzee, K., Currie, B., Fabricius, C., Hattingh, S., Schmidt, A., & Watson, L. (2011). *Sustainable management through improved governance in the game industry*; South African Journal of Wildlife Research, 41(1), 110–119.

Bubbenzer, O. (2002). *Project E1 - Atlas of Namibia*. Retrieved from [http://www.uni-koeln.de/sfb389/e/e1/download/atlas\\_namibia/e1\\_download\\_physical\\_geography\\_e.htm](http://www.uni-koeln.de/sfb389/e/e1/download/atlas_namibia/e1_download_physical_geography_e.htm)

Burton, R. (1998). Maintaining the quality of ecotourism: ecotour operators' responses to tourism growth. *Tour.* 6: 117–142.

Emergency Plan for AIDS Relief (PEPAR), (2022). *Namibia Country Operational Plan 2022; Strategic Direction Summary*. Pg 3-5. <https://www.state.gov/wp-content/uploads/2022/09/Namibia-COP22-SDS.pdf>

Evelina, J. Julius, S. & Lukas, H. J. (2020). *Estimating the Economic Impact of COVID-19: A case study of Namibia*. Pg 4-13.

Felicita, H. (2022). *World Health Organisation Namibia: Biennial Report 2020-2021*. pg 6, 27-48.

IUCN 2022. The IUCN Red List of Threatened Species. Version 2022-1. <https://www.iucnredlist.org>. Downloaded on [10 2022].

Institute for Public Policy Research (IPPR), (2020). *COVID-19 in Namibia; Helping the people*. pg 3-5. [https://ippr.org/na/wp-content/uploads/2020/08/COVID\\_PAPER2\\_Welfare.pdf](https://ippr.org/na/wp-content/uploads/2020/08/COVID_PAPER2_Welfare.pdf)

Jakes, A. F., Jones, P. F., Paige, L. C., Seidler, R. G., & Huijser, M. P. (2018). A fence runs through it: a call for greater attention to the influence of fences on wildlife and ecosystems. *Biological Conservation*, 227, 310–318. <https://doi.org/10.1016/j.biocon.2018.09.026>

Jenkins, A. R., Ralston, P., Smit-Robinson, A. H. (2017). *Bird & Solar Energy: Guidelines for assessing and monitoring the impact of solar power generating facilities on birds in southern Africa*. pg 8-20. <https://www.birdlife.org.za/wp-content/uploads/2018/06/Birds-and-Solar-Energy.pdf>

Mendelshon, J., Jarvis, A., Roberts, C., & Robertson, T. (2002). *Atlas of Namibia. A portrait of the land and its people*. Cape Town: David Philip Publishers.

Meinke, D. K., Finan, D. S., Flamme, G. A., Murphy, W. J., Stewart, M., Lankford, J. E., & Tasko, S. (2017). *Prevention of noise-induced hearing loss from recreational firearms. Seminars in Hearing*, 38(04), 267–281. <https://doi.org/10.1055/s-0037-1606323>

Meteoblue.(2023).[https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/windhoek\\_namibia\\_3352136](https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/windhoek_namibia_3352136)

Milner-Gulland, E. J. and Bennett, E. L.( 2003). *Wild meat: the bigger picture*. – Trends Ecol. Evol. 18: 351–357.

Namibia Statistics Agency. (2019). *Namibia Labour Force Survey 2018*. Windhoek: Namibia Statistics Agency.

Namibia Statistics Agency. (2017). *Namibia Labour Force Survey 2016 Report*. Windhoek: Namibia Statistics Agency.

NA-MIS Namibian Monitoring Information System & Hydrogeological Map of Namibia. <https://www.uit-sensoweb.de/maptest.html>

Sordello, R., Flamerie De Lachapelle Frédérique, Livoreil, B., & Vanpeene, S. (2019). *Evidence of the environmental impact of noise pollution on biodiversity: a systematic map protocol*. Environmental Evidence, 8(1), 1–7. <https://doi.org/10.1186/s13750-019-0146-6>

United Nations International Children’s Emergency Fund (UNICEF),(2022). *Country office annual report 2022: Namibia: An update on the context and situation of children*. <https://www.unicef.org/media/136236/file/Namibia-2022-COAR.pdf>

van den Heever, L., Smit-Robinson, H., Naidoo, V., & McKechnie, A. E. (2019). Blood and bone lead levels in south africa's gyps vultures: risk to nest-bound chicks and comparison with other avian taxa. *Science of the Total Environment*, 669, 471–480.

World Health Organization (WHO) (2016). *WHO country cooperation strategy 2010 – 2015 Namibia*. Windhoek: WHO

World Health Organisation(WHO)(2023): <https://covid19.who.int/region/afro/country/na>

World Data Atlas (WDA)(2023): <https://knoema.com/data/world-rankings>

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## **APPENDIX A – ENVIRONMENTAL MANAGEMENT PLAN**

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## **APPENDIX B – BACKGROUND INFORMATION DOCUMENT**

# APPENDIX C – PUBLIC PARTICIPATION

MONDAY 3 JULY 2023

Market Watch


Republiek Sun Allgemeine Zeitung 7

**NOTICE OF AN ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED DEVELOPMENT AND CONSTRUCTION OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO. 28, KHOMAS REGION, NAMIBIA**

Environmental Compliance Consultancy (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

**Applicant:** Waldeck (Pty) Ltd.  
**Environmental Assessment Practitioner (EAP):** Environmental Compliance Consultancy Khomas Region, Namibia

**Location:** The project is located to the southeast of Windhoek next to the C23 road. It can be accessed from Windhoek by driving south along the B1 road and turning onto the D1463 road in an eastern direction. The farm is situated north of the road approximately 9 km from the junction.




**Proposed Activities:** Waldeck (Pty) Ltd proposes to develop a tourism and hunting lodge 36 km south of Windhoek on Farm Waldeck No. 28 in the Khomas Region, Namibia. The development involves the construction of 6 accommodation units, a main dwelling area, two solar plants, an activities area, a butchery and cold storage, as well as an existing game fence along the perimeter of the farm.

**I&APs Registration:** The purpose of the registration period is to introduce the proposed project and to allow Interested and Affected Parties (I&APs) to register and comment on the project and to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

The registration period is effective from **26 June 2023 to 10 July 2023**. I&APs and stakeholders are required to register for the Project at: <https://eccenvironmental.com/download/the-proposed-development-and-construction-of-a-tourism-and-hunting-lodge-on-farm-waldeck-no-28-khomas-region-namibia/> or call ECC to register.

The team at ECC will maintain contact with registered I&APs to engage and to keep them informed as the EIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.

Contact: Environmental Compliance Consultancy  
PO Box 91193, Klein Windhoek | Tel: +264 81 669 7608  
E-mail: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)  
Website: [www.eccenvironmental.com/projects](http://www.eccenvironmental.com/projects)



**RE-ADVERTISEMENT**

**INVITATION TO BID / REQUEST FOR PROPOSAL (RFP)**

The Electricity Control Board (ECB) hereby invites qualified, competent and registered individuals, companies and / or joint ventures to submit their Bids for the following:

**Bid no:** CS/RFP/ECB-2023/24-02-DOGER-RSS

**Bid description:** Procurement of Consultancy Services: Request for Proposal to provide consultancy services to develop the off-grid electrification regulations.

**Overall objective:** To obtain the services of a consultant/s, with appropriate technical and economic/financial expertise in the Namibian Electricity Supply Industry (ESI) as well as relevant legal expertise in developing legal instruments in Namibia, to assist the ECB with the development of regulations for off-grid electrification initiatives in the Namibia Electricity Supply Industry (ESI).

**Closing date and time:** 28 July 2023 at 12:00

**Cost per set of documents:** Free

**Bid documents availability:** The documents for this bid or Request for Proposals (RFP) can be collected at the **ECB office, No. 35 Dr. Theo-Ben Gurubur Street, Windhoek, Namibia**

**Details on Bid Submission:** Kindly submit your bid in a sealed envelope, clearly marked with the **"BID NUMBER AND DESCRIPTION"** as stated above, addressed to the ECB Procurement Officer. The bid must first be registered at reception and deposited in the Tender Box at **ECB office No. 35 Dr. Theo-Ben Gurubur Street, Windhoek, Namibia**. The name of the bidder must be indicated on the cover of each envelope.

All requests for information of any kind relating to this RFP should be channelled in writing to:

**Ms. Ester Hamukwaya**  
[ehamukwaya@ecb.org.na](mailto:ehamukwaya@ecb.org.na)  
**+264-61 374 334**

No 35 Dr. Theo-Ben Gurubur Street, Klein Windhoek.  
Business Hours: Weekdays from 07:30 - 16:30  
P O Box 2923, Windhoek, Namibia | +264 61 374 300 | +264 61 374 305 | [www.ecb.org.na](http://www.ecb.org.na)

**SUN KARRROS**  
LIFESTYLE SAFARIS  
C/O FELD & THORER STREET, WHK  
P O BOX 22927 WINDHOEK

**VACANCY**

**EXECUTIVE CHEF**

The successful incumbent will report to the Lodge Manager. We are looking for an experienced, creative, and passionate Executive Chef to join our team. As Executive Chef, you will run the back-of-house. You will manage the daily operations of the kitchen, oversee the kitchen staff, provide training and to ensure that the highest quality of cuisine is served to our guests, and ensure that all food and labor cost goals are met at our establishments countrywide.

**MINIMUM REQUIREMENTS**

- Grade 12
- Culinary Arts degree and/or other culinary certification with at least 20 years' experience in the kitchen.
- 10 years' experience in a head chef or managerial kitchen position at high-end luxury remote lodge
- Excellent time management and organizational skills
- Proven leadership and creative abilities inside the kitchen
- Expert problem solver who thrives under pressure
- Top of the line customer service skills
- Expert skills and experience planning, designing, and preparing meals
- International culinary knowledge and skills
- Training skills
- Valid driver's license will be advantageous

**KEY FUNCTIONS**

- Development and implementation of innovative menus to optimize international guest satisfaction and retention while leading staff training initiatives
- Direct kitchen operations, including food preparation, cooking, and cleanup
- Assign tasks; supervise chefs and cooks in the preparation and presentation of food
- Prepare international standard food
- Maintain control of the kitchen to ensure that all tasks are carried out efficiently and effectively
- Make sure that all kitchen and waiting staff adhere to food safety and hygiene regulations to ensure a clean and sanitary kitchen
- Plan menus and set prices, making adjustments as needed based on the availability of ingredients
- Inspect raw and cooked food items to guarantee that the highest quality products are prepared and served to customers
- Collaborate with the General Manager and Owner to align kitchen operations with the overarching goals of the establishment
- Maintaining/raising the food's profit margins for your employer
- Monitoring and controlling stock levels

**CLOSING DATE: 07 July 2023**  
Interested candidates should please forward their CV's to:  
[CV@sunkarros.com](mailto:CV@sunkarros.com)

**WE'RE HIRING**

**Portfolio Manager: Specialist Insurance**

**JOB PURPOSE**

- In-country role and champion for the Namibia JV Partnership
- Market and develop specialist risks products in Namibia
- Market and develop specialist risks products sales strategies in Namibia
- Underwrite Specialist Risks, within the set standards required by the company thus contributing to the productivity of the underwriting department as set out
- Co-ordination of complex risks above mandate into ITDD Product Experts
- Ensure detailed reports are executed – risk reporting
- Ensure detailed reports are executed – financial reporting
- Enhance the image of the JV through the continuous delivery of efficient and effective customer service
- Reinsurance - Co-ordinate treaty placements and Inwards
- Reinsurance - Outwards Facultative Business
- Training and development of local partner and key channel partners
- Co-ordinate claims process and service

**KEY RESPONSIBILITIES**

- Underwrite specific classes of business currently offered by the JV.
- Adhere to individual underwriting mandates and ITDD guidelines to ensure responsible underwriting and profitability of their portfolio
- Approve risk selection within the boundaries of the specific product line. Quote, accept and renew risks within the agreed guidelines of the service level agreement and within delegated mandates
- Combination of both internal and external relationship development on specialist liability products and services to brokers in the market
- Re-underwrite renewals to ensure organic growth and maintain profitability of portfolio
- Develop and maintain effective business relationships brokers in order to attract, develop and retain profitable business – local, multinational and Local African Brokers.
- Ensure all technical aspects and administrative functions of underwriting are adhered to.
- Train and mentor the local teams and brokers on identified product lines
- Assist in placing risks that fall outside of the scope of our treaty reinsurance, into other markets locally and overseas
- Develop Fee Inwards strategy and processes, including co-ordination thereof

**UNDERWRITING/RISK ANALYSIS:**

- Analyze qualitative and quantitative data to provide approval for risk selection and acceptance, coverage and price.
- Recommend creative alternatives in regards to rating plans, coverage and payment plans. Recommend or implement changes to improve productivity, profitability, growth and the quality of assigned book of business.
- Decline unsuitable risks
- Ensure that policy transactions are issued and changes recorded accurately and in a timely manner by rating and/or capturing transactions to the core business system.

**ACCOUNT MANAGEMENT:**

- Meet goals for volume and value of quality new business quoted and written within company/ JV guidelines.
- Recommend or implement changes to improve productivity, profitability, growth and the quality of assigned book of business.
- Service, grow and maintain renewal policies and re-underwrite where required
- Confirm rating and cover on endorsements requested
- Review segment profit/growth results and trends to recommend and implement action plans to produce profitable underwriting results.

**RELATIONSHIP MANAGEMENT:**

- Interact on a day-to-day basis with brokers, Partners and JV Partners.
- Customer service
- Effective communication
- Market Intelligence
- Innovation
- Continuous Process Improvement
- Employee Growth

**REQUIRED QUALIFICATIONS**

Minimum:

- Business degree or similar insurance qualification
- RE and FAIS compliance

**REQUIRED EXPERIENCE/ REQUIRED KNOWLEDGE AND SKILLS (relevant or in a similar role)**

- Specialist underwriting experience on specific lines of products offered with at least 3 – 5 years' experience including:
  - Product knowledge
  - Industry segmentation knowledge and applicable risk exposures
  - Enquiring mind – seek out additional information in order to best understand a risk before underwriting such risk
  - Underwriting procedure
  - Rating principles
  - Risk Management
  - Market knowledge (including competitors)
  - Claims procedure
  - Reinsurance market, reinsurance and treaties

**For the full Job description, please visit our website**  
<https://www.holland.com.na/careers>

**Review Date: 14 July 2023**

**Holland**

### Economic Indicators

#### Exchange Rates

Currency	Spot	Currency	Spot	Forward Cover				
				1M	3M	6M	12M	
USD/NAD	18.6528	NAD/AUD	0.080068	USD/ZAR	18.7153	18.8340	19.0055	19.3516
EUR/NAD	20.24263	NAD/NZD	0.087371	EURO/ZAR	379.0532	381.5236	385.0856	392.2755
GBP/NAD	23.69994	NAD/BWP	0.7216543	GBP/ZAR	44.37659	44.65843	450.6512	458.7350
NAD/CHF	0.3837177	NAD/JPY	7.67	ZAR/JPY	7.6099	7.4890	7.3139	6.9778

Please call your Private Banker or alternatively SMS PMM to 34778

\*Effective rate (withholding tax still to be applied)

## COMPANY NEWS IN BRIEF

### LOAD SHEDDING SHOCKS MR PRICE

Mr Price's somewhat slower approach in insulating itself from the threat of load shedding came back to haunt it in 2023, with the value retailer saying having just over a third of its store base covered by backup power helped shave off more than R1 billion in revenue. A massive increase in its store base, including through the acquisition of Studio 88, helped lift group revenue 17% to R32.9 billion in the year to 1 April, but core profit only grew 5.4% to R7.2 billion.

The retailer, valued at about R35 billion on the JSE, said it was hit by a "significant increase" in load shedding in its second half which "heavily impacted the most important festive trading months". At the end of September, back-up power was only available in 37% of its core business, with Mr Price saying the group had been "conservative in its back-up power investment" because the "historical implementation of load shedding was manageable until September 2022". If acquisitions were included, a total of 58% of the store footprint had back up power. Mr Price said that between September and March this year, the



PHOTO REUTERS

"cumulative quantum of load shedding" had been more than the previous 15 years combined, resulting in an estimated annual loss of 318 000 trading hours or R1 billion in revenue. - Fin24

### ARAMCO, TOTALENERGIES IN US\$11BN DEAL

Saudi Aramco and France's TotalEnergies on Saturday signed contracts to start building a US\$11 billion petrochemicals facility in the Gulf kingdom. The project, first announced in 2018, represents an investment of around US\$11 billion, of which US\$4 billion

will be funded through equity by Aramco and TotalEnergies. The complex will enable Saudi Arabia's SATORP refinery to convert internally produced off-gases and naphtha, as well as ethane and natural gasoline sup-

plied by Aramco, into higher value chemicals. It will have the capacity to produce 1.65 million tonnes per annum of ethylene and other industrial gases, Aramco said. "As part of Aramco's growth strat-

egy, the project is anticipated to contribute to value-addition opportunities in the kingdom's downstream ecosystem," Aramco president Amin Nasser said at the signing ceremony. - Fin24/AFP



The Road Fund Administration (RFA) is a statutory organisation established under Act 18 of 1999 to manage the Namibian Road User Charging System (RUCS) to secure the funding required to achieve a safe and efficient road network in Namibia.

## INTERNSHIP OPPORTUNITY

As a national institution, the RFA would like to ensure skills exposure to Namibian students and graduates. The RFA herewith invites final year students looking for an internship to graduate or graduate interns to apply for practical exposure in the following fields:

FIELD OF STUDY	REQUIREMENTS
• Computer Science (specifically Software Development/Programming and Mobile Development)	• Namibian citizenship
• Accounting (specialising in Auditing)	• Final year student OR Graduate
• Procurement/Supply Chain Management	• Proof of registration at a recognised tertiary institution
• Property Studies/Facility Management and Fleet Management	• Tertiary qualification/programme relevant to listed fields
• Law	• Certified copy of latest examination results and/or academic record
• Finance (specialising in Accounting)	• Certified copy of Namibian ID
• Human Resources	• Written application and detailed curriculum vitae (CV)
• Marketing	
• Communication	

Enquiries: Ms. Chalwa Kasika on 061 433 3062  
Closing date for applications: 07 July 2023 at 17h00

All applications should be addressed to the Manager: Human Capital, Road Fund Administration, Private Bag 13372, Aussenplanplatz. Applications can be hand-delivered at the Road Fund Administration Head Office, 21 Feld Street, Windhoek, or emailed to recruitment@rfanam.com.na. Faxed and/or late applications will not be considered.

Road Fund Administration 21 Feld Street, Windhoek • Tel: +264 61 433 3000 • E-mail: info@rfanam.com.na • Website: www.rfanam.com.na



### NOTICE OF AN ENVIRONMENTAL ASSESSMENT FOR THE PROPOSED DEVELOPMENT AND CONSTRUCTION OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO. 28, KHOMAS REGION, NAMIBIA

Environmental Compliance Consultancy (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

**Applicant:** Waldeck (Pty) Ltd.  
**Environmental Assessment Practitioner (EAP):** Environmental Compliance Consultancy Khomas Region, Namibia

**Project:** Farm Waldeck No. 28 is located to the southeast of Windhoek next to the C23 road. It can be accessed from Windhoek by driving south along the B1 road and turning onto the D1463 road in an eastern direction. The farm is situated north of the road approximately 9 km from the junction.



**Proposed Activities:** Waldeck (Pty) Ltd proposes to develop a tourism and hunting lodge 36 km south of Windhoek on Farm Waldeck No. 28 in the Khomas Region, Namibia. The development involves the construction of 6 accommodation units, a main dwelling area, two solar plants, an activities area, a butchery and cold storage, as well as an existing game fence along the perimeter of the farm.

**I&APs Registration:** The purpose of the registration period is to introduce the proposed project and to allow Interested and Affected Parties (I&APs) to register and comment on the project and to ensure that potential issues and concerns are brought forward, so that they can be considered and assessed during the impact assessment process.

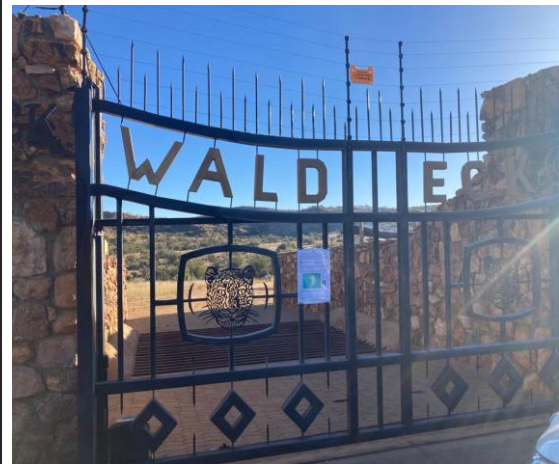
The registration period is effective from 26 June 2023 to 10 July 2023. I&APs and stakeholders are required to register for the Project at: <https://eccenvironmental.com/download/the-proposed-development-and-construction-of-a-tourism-and-hunting-lodge-on-farm-waldeck-no-28-khomas-region-namibia/> or call ECC to register.

The team at ECC will maintain contact with registered I&APs to engage and to keep them informed as the ESIA process develops. ECC will also provide registered I&APs input opportunities and review periods throughout the assessment process.

Contact: Environmental Compliance Consultancy  
PO Box 91193, Klein Windhoek | Tel: +264 81 669 7608  
E-mail: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)  
Website: [www.eccenvironmental.com/projects](http://www.eccenvironmental.com/projects)



**Site notices**



GPS coordinates:

-22.777012, 17.221327

## APPENDIX D – NBRI SPECIES LIST

NP= not protected, LC= least concern, E= endemic, NE= near endemic, II= Appendix II, DD= data deficient, P= protected under Nature Conservation Ordinance Act No.4 of 1975, NT= near threatened, FP= protected under Forest Act No.12 of 2001

Species	Endemism	Protected	IUCN		CITES
<i>Aizoon giessii</i>	E	NP	LC		
<i>Aizoon virgatum</i>		NP	LC		
<i>Galenia africana</i>					
<i>Galenia papulosa</i>		NP	LC		
<i>Plinthus sericeus</i>		NP			
<i>Tetragonia arbuscula</i>		NP			
<i>Tetragonia calycina</i>		NP			
<i>Zaleya pentandra</i>		NP			
<i>Achyranthes aspera</i>		NP			
<i>Aerva leucura</i>		NP			
<i>Alternanthera pungens</i>		NP			
<i>Amaranthus deflexus</i>		NP			
<i>Amaranthus praetermissus</i>		NP			
<i>Amaranthus spinosus</i>		NP			
<i>Guilleminea densa</i>		NP			
<i>Hermbstaedtia argenteiformis</i>		NP	LC		
<i>Hermbstaedtia odorata</i>		NP			
<i>Kyphocarpa angustifolia</i>		NP			
<i>Leucosphaera bainesii</i>		NP	LC		
<i>Nelsia quadrangula</i>		NP			
<i>Pupalia lappacea</i>		NP			
<i>Sericorema remotiflora</i>					
<i>Sericorema sericea</i>		NP			
<i>Ozoroa crassinervia</i>		NP			
<i>Schinus molle</i>		NP			
<i>Chlorophytum calyptrocarpum</i>		NP			
<i>Chlorophytum krauseanum</i>		NP			
<i>Searsia lancea</i>		NP			
<i>Searsia marlothii</i>		NP			
<i>Searsia pendulina</i>		NP			
<i>Searsia pyroides</i>		NP			



Species	Endemism	Protected	IUCN		CITES
<i>Boophone disticha</i>		NP			
<i>Nerine laticoma</i>		NP	LC		
<i>Pancratium tenuifolium</i>		NP			
<i>Crinum lugardiae</i>		NP			
<i>Crinum walteri</i>		NP			
<i>Barleria lanceolata</i>	E	NP	LC		
<i>Barleria lancifolia</i>		NP			
<i>Barleria rigida</i>		NP	LC		
<i>Blepharis integrifolia</i>		NP			
<i>Blepharis mitrata</i>		NP	LC		
<i>Blepharis obmitrata</i>		NP	LC		
<i>Dicliptera eenii</i>		NP			
<i>Dyschoriste pseudirecta</i>		NP			
<i>Hypoestes forskoolii</i>		NP			
<i>Justicia protracta</i>		NP			
<i>Megalochlamys marlothii</i>		NP	LC		
<i>Monechma divaricatum</i>		NP			
<i>Monechma genistifolium</i>	E	NP			
<i>Monechma leucoderme</i>	NE	NP			
<i>Peristrophe grandibracteata</i>	E	NP	LC		
<i>Peristrophe hereroensis</i>	E	NP	LC		
<i>Pachypodium lealii</i>	NE	P	VU		II
<i>Brachystelma blepharathera</i>	E	NP	LC		
<i>Huernia oculata</i>	NE	P			
<i>Piранthus decipiens</i>		P	DD		
<i>Fockea angustifolia</i>		NP			
<i>Orbea lugardii</i>	NE	P	DD		
<i>Cynanchum orangeanum</i>		NP	LC		
<i>Asclepias aurea</i>		NP			
<i>Pentarrhinum insipidum</i>		NP	LC		
<i>Tavaresia barklyi</i>		P			
<i>Orthanthera jasminiflora</i>		NP	LC		
<i>Raphionacme lanceolata</i>		NP			
<i>Raphionacme velutina</i>		NP			
<i>Gomphocarpus fruticosus</i>		NP			
<i>Gomphocarpus tomentosus</i>		NP			
<i>Orbea lutea</i>	NE	P			

Species	Endemism	Protected	IUCN		CITES
<i>Pergularia daemia</i>		NP			
<i>Stapelia schinzii</i>	E	P			
<i>Cyclospermum leptophyllum</i>		NP			
<i>Heteromorpha papillosa</i>	E	NP	LC		
<i>Peucedanum upingtoniae</i>		NP			
<i>Steganotaenia araliacea</i>		NP			
<i>Asparagus cooperi</i>		NP			
<i>Asparagus laricinus</i>		NP			
<i>Asparagus nelsii</i>		NP			
<i>Aloe hereroensis</i>		P			II
<i>Aloe striata</i>		P			II
<i>Aloe zebrina</i>		P			II
<i>Bulbine capitata</i>		NP			
<i>Gasteria pillansii</i>		P			
<i>Trachyandra saltii</i>		NP			
<i>Asplenium cordatum</i>		NP			
<i>Erucastrum arabicum</i>		NP			
<i>Heliophila carnosa</i>		NP	LC		
<i>Lepidium africanum</i>		NP			
<i>Sisymbrium burchellii</i>		NP			
<i>Gomphostigma virgatum</i>		NP			
<i>Commiphora glandulosa</i>		NP	LC		
<i>Opuntia ficus-indica</i>		NP			
<i>Opuntia stricta</i>		NP			
<i>Namacodon schinzianum</i>	E	NP	LC		
<i>Wahlenbergia androsacea</i>		NP	LC		
<i>Wahlenbergia denticulata</i>		NP			
<i>Wahlenbergia undulata</i>		NP			
<i>Boscia albitrunca</i>		FP	LC		
<i>Cleome angustifolia</i>		NP			
<i>Cleome elegantissima</i>		NP			
<i>Cleome gynandra</i>		NP			
<i>Cleome monophylla</i>		NP			
<i>Cleome oxyphylla</i>		NP			
<i>Cleome rubella</i>		NP			
<i>Maerua juncea</i>		NP			
<i>Maerua schinzii</i>		FP	LC		
<i>Ornithoglossum vulgare</i>		NP			
<i>Commelina africana</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Commelina benghalensis</i>		NP			
<i>Commelina livingstonii</i>		NP			
<i>Combretum apiculatum</i>		NP			
<i>Convolvulus argillicola</i>	E	NP			
<i>Convolvulus sagittatus</i>		NP			
<i>Cuscuta campestris</i>		NP			
<i>Cuscuta hyalina</i>		NP			
<i>Cuscuta planiflora</i>		NP			
<i>Evolvulus alsinoides</i>		NP			
<i>Ipomoea bolusiana</i>		NP			
<i>Ipomoea crassipes</i>		NP			
<i>Ipomoea hochstetteri</i>		NP			
<i>Ipomoea holubii</i>		NP			
<i>Ipomoea oblongata</i>		NP			
<i>Ipomoea obscura</i>		NP			
<i>Ipomoea oenotherae</i>		NP			
<i>Ipomoea sinensis</i>		NP			
<i>Ipomoea suffruticosa</i>		NP			
<i>Ipomoea verbascoidea</i>		NP			
<i>Merremia palmata</i>		NP			
<i>Seddera suffruticosa</i>		NP			
<i>Xenostegia tridentata</i>		NP			
<i>Adromischus schuldianus</i>	E	P			
<i>Crassula capitella</i>		P			
<i>Crassula cotyledonis</i>		P	LC		
<i>Crassula dependens</i>		P	DD		
<i>Crassula lanceolata</i>		P			
<i>Crassula nemorosa</i>		P	LC		
<i>Crassula rhodesica</i>		P	LC		
<i>Crassula subaphylla</i>		P			
<i>Crassula tabularis</i>		NP			
<i>Kalanchoe brachyloba</i>		NP			
<i>Kalanchoe lanceolata</i>		NP			
<i>Kalanchoe rotundifolia</i>		NP			
<i>Citrullus lanatus</i>		NP			
<i>Coccinia sessilifolia</i>		NP			
<i>Corallocarpus schinzii</i>		NP	LC		
<i>Corallocarpus welwitschii</i>		P			
<i>Cucumis africanus</i>		NP			
<i>Cucumis meeusei</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Kedrostis africana</i>		NP			
<i>Kedrostis foetidissima</i>		NP			
<i>Trochomeria macrocarpa</i>		NP			
<i>Zehneria marlothii</i>		NP			
<i>Cyperus congestus</i>		NP			
<i>Cyperus laevigatus</i>		NP			
<i>Cyperus margaritaceus</i>		NP			
<i>Cyperus marginatus</i>		NP			
<i>Cyperus schinzii</i>		NP			
<i>Cyperus squarrosus</i>		NP			
<i>Fuirena pubescens</i>		NP			
<i>Kyllinga alba</i>		NP			
<i>Scirpoides dioecus</i>		NP			
<i>Scabiosa columbaria</i>		NP			
<i>Sansevieria longiflora</i>		NP			
<i>Sansevieria pearsonii</i>		NP	LC		
<i>Diospyros lycioides</i>		NP			
<i>Diospyros lycioides</i>		NP			
<i>Euclea undulata</i>		NP			
<i>Eriospermum bakerianum</i>		NP			
<i>Eriospermum flagelliforme</i>		NP			
<i>Eriospermum mackenii</i>		NP			
<i>Eriospermum rautanenii</i>		NP	LC		
<i>Eriospermum roseum</i>		NP	LC		
<i>Acalypha segetalis</i>		NP			
<i>Croton gratissimus</i>		NP			
<i>Euphorbia austro-occidentalis</i>		NP			II
<i>Euphorbia cyathophora</i>		NP			II
<i>Euphorbia helioscopia</i>		NP			
<i>Euphorbia hirta</i>		NP			II
<i>Euphorbia inaequilatera</i>		NP			
<i>Euphorbia monteiroi</i>	E	NP			
<i>Euphorbia prostrata</i>		NP			II
<i>Euphorbia spartaria</i>	E	NP	DD		II
<i>Euphorbia virosa</i>					
<i>Phyllanthus maderaspatensis</i>		NP			
<i>Phyllanthus pentandrus</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Catophractes alexandri</i>		NP	LC		
<i>Rhigozum trichotomum</i>		NP			
<i>Anchusa capensis</i>		NP			
<i>Cordia sinensis</i>		NP	LC		
<i>Ehretia alba</i>		NP			
<i>Ehretia namibiensis</i>	E	NP			
<i>Heliotropium ciliatum</i>		NP			
<i>Lithospermum cinereum</i>		NP			
<i>Trichodesma angustifolium</i>		NP			
<i>Myriophyllum aquaticum</i>		NP			
<i>Albuca abyssinica</i>		NP			
<i>Albuca amboensis</i>		NP	DD		
<i>Albuca fleckii</i>		NP	DD		
<i>Albuca maxima</i>		NP	R		
<i>Albuca viscosa</i>		NP	DD		
<i>Dipcadi glaucum</i>		NP			
<i>Dipcadi longifolium</i>		NP			
<i>Dipcadi papillatum</i>		NP			
<i>Dipcadi platyphyllum</i>		NP			
<i>Dipcadi viride</i>		NP			
<i>Drimia sanguinea</i>		NP			
<i>Ledebouria floribunda</i>		NP			
<i>Ornithogalum pulchrum</i>		NP	LC		
<i>Ornithogalum tenuifolium</i>		NP			
<i>Pseudogaltonia clavata</i>		NP			
<i>Hydnora abyssinica</i>		NP			
<i>Hypericum lalandii</i>		NP			
<i>Hypoxis iridifolia</i>		NP			
<i>Pollichia campestris</i>		NP			
<i>Babiana hypogea</i>		NP			
<i>Ferraria glutinosa</i>		NP	LC		
<i>Gladiolus permeabilis</i>		NP			
<i>Gladiolus saccatus</i>		NP	LC		
<i>Lapeirousia avasmontana</i>	E	NP			
<i>Lapeirousia coerulea</i>		NP			
<i>Moraea polystachya</i>		NP	NT		
<i>Juncus rigidus</i>		NP			
<i>Acrotome fleckii</i>	E	NP	LC		
<i>Acrotome inflata</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Acrotome pallescens</i>		NP			
<i>Leonotis ocymifolia</i>		NP			
<i>Leonotis schinzii</i>		NP			
<i>Leucas glabrata</i>		NP			
<i>Leucas pechuelii</i>	NE	NP			
<i>Ocimum americanum</i>		NP			
<i>Ocimum filamentosum</i>		NP			
<i>Plectranthus dinteri</i>	E	NP	LC		
<i>Salvia stenophylla</i>		NP			
<i>Salvia verbenaca</i>		NP			
<i>Tetradenia riparia</i>		NP			
<i>Lemna aequinoctialis</i>		NP			
<i>Lobelia erinus</i>		NP	LC		
<i>Agelanthus discolor</i>	E	NP	LC		
<i>Plicosepalus kalachariensis</i>		NP	LC		
<i>Plicosepalus undulatus</i>		NP	LC		
<i>Tapinanthus oleifolius</i>		NP	LC		
<i>Sphedamnocarpus pruriens</i>		NP			
<i>Abutilon austro-africanum</i>		NP			
<i>Abutilon fruticosum</i>		NP			
<i>Abutilon pycnodon</i>		NP			
<i>Abutilon rehmannii</i>		NP			
<i>Gossypium herbaceum</i>		NP	LC		
<i>Hibiscus calyphyllus</i>		NP			
<i>Hibiscus dinteri</i>	E	NP			
<i>Hibiscus discophorus</i>	E	NP			
<i>Hibiscus fleckii</i>	E	NP			
<i>Hibiscus palmatus</i>		NP			
<i>Hibiscus pusillus</i>		NP			
<i>Hibiscus sulfuranthus</i>	E	NP			
<i>Hibiscus trionum</i>		NP			
<i>Malva verticillata</i>		NP			
<i>Malvastrum coromandelianum</i>		NP			
<i>Pavonia burchellii</i>		NP			
<i>Sida chrysantha</i>		NP			
<i>Sida ovata</i>		NP			
<i>Melianthus comosus</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Antizoma angustifolia</i>		NP	LC		
<i>Ebracteola montis-moltkei</i>	E	P			
<i>Psilocaulon coriarium</i>		NP			
<i>Psilocaulon granulicaule</i>		NP			
<i>Hilliardiella oligocephala</i>		NP			
<i>Linzia glabra</i>		NP			
<i>Polydora poskeana</i>		NP			
<i>Glinus lotoides</i>		NP			
<i>Hypertelis bowkeriana</i>		NP	LC		
<i>Hypertelis salsoloides</i>		NP			
<i>Limeum argute-carinatum</i>		NP			
<i>Limeum myosotis</i>		NP			
<i>Limeum pterocarpum</i>		NP			
<i>Limeum sulcatum</i>		NP			
<i>Montinia caryophyllacea</i>		NP			
<i>Ficus cordata</i>		FP			
<i>Moringa ovalifolia</i>	NE	P	LC		
<i>Boerhavia coccinea</i>		NP			
<i>Boerhavia erecta</i>		NP			
<i>Boerhavia repens</i>		NP			
<i>Commicarpus decipiens</i>	E	NP	DD		
<i>Commicarpus pentandrus</i>		NP			
<i>Phaeoptilum spinosum</i>		NP			
<i>Olea europaea</i>		NP			
<i>Oenothera indecora</i>		NP			
<i>Oenothera rosea</i>		NP			
<i>Ophioglossum polyphyllum</i>		NP			
<i>Ansellia africana</i>		P	LC		II
<i>Eulophia speciosa</i>		P	LC		II
<i>Alectra orobanchoides</i>		NP			
<i>Alectra pseudobarleriae</i>		NP	DD		
<i>Striga bilabiata</i>		NP			
<i>Striga gesnerioides</i>		NP			
<i>Oxalis depressa</i>		NP			
<i>Oxalis purpurascens</i>		NP			
<i>Argemone ochroleuca</i>		NP			
<i>Adenia repanda</i>		NP	LC		
<i>Harpagophytum procumbens</i>		P			

Species	Endemism	Protected	IUCN		CITES
<i>Rogeria bigibbosa</i>	E	NP	LC		
<i>Sesamum capense</i>		NP	LC		
<i>Sesamum triphyllum</i>		NP			
<i>Lophiocarpus polystachyus</i>		NP	LC		
<i>Polygala albida</i>		NP			
<i>Polygala leptophylla</i>		NP			
<i>Polygala uncinata</i>		NP			
<i>Emex australis</i>		NP			
<i>Oxygonum alatum</i>		NP			
<i>Oxygonum sinuatum</i>		NP			
<i>Persicaria hystricula</i>		NP			
<i>Persicaria lapathifolia</i>		NP			
<i>Polygonum aviculare</i>		NP			
<i>Polygonum kitaibelianum</i>		NP			
<i>Polygonum plebeium</i>		NP			
<i>Rumex lanceolatus</i>		NP			
<i>Rumex sagittatus</i>		NP			
<i>Portulaca kermesina</i>		NP			
<i>Talinum arnotii</i>		NP			
<i>Talinum tenuissimum</i>		NP			
<i>Adiantum capillus</i>		NP			
<i>Cheilanthes hirta</i>		NP			
<i>Cheilanthes involuta</i>		NP			
<i>Cheilanthes marlothii</i>		NP			
<i>Cheilanthes multifida</i>		NP			
<i>Cheilanthes parviloba</i>		NP			
<i>Pellaea calomelanos</i>		NP			
<i>Andropogon chinensis</i>		NP			
<i>Andropogon schirensis</i>		NP			
<i>Anthephora pubescens</i>		NP			
<i>Anthephora schinzii</i>		NP			
<i>Aristida adscensionis</i>		NP			
<i>Aristida congesta</i>		NP			
<i>Aristida effusa</i>		NP			
<i>Aristida meridionalis</i>		NP			
<i>Aristida rhiniochloa</i>		NP			
<i>Arundo donax</i>		NP			
<i>Brachiaria nigropedata</i>		NP			
<i>Brachiaria serrata</i>		NP			



Species	Endemism	Protected	IUCN		CITES
<i>Bromus catharticus</i>		NP			
<i>Cenchrus ciliaris</i>		NP			
<i>Chloris virgata</i>		NP			
<i>Cymbopogon caesius</i>		NP	LC		
<i>Cymbopogon dieterleniae</i>		NP			
<i>Cymbopogon pospischilii</i>		NP			
<i>Cynodon dactylon</i>		NP			
<i>Dactyloctenium aegyptium</i>		NP			
<i>Danthoniopsis ramosa</i>		NP			
<i>Digitaria seriata</i>		NP			
<i>Diheteropogon filifolius</i>		NP			
<i>Eleusine africana</i>		NP			
<i>Elionurus muticus</i>		NP			
<i>Enneapogon cenchroides</i>		NP	LC		
<i>Enneapogon desvauxii</i>		NP			
<i>Eragrostis annulata</i>		NP			
<i>Eragrostis biflora</i>		NP			
<i>Eragrostis curvula</i>		NP			
<i>Eragrostis echinochloidea</i>		NP			
<i>Eragrostis lehmanniana</i>		NP			
<i>Eragrostis macrochlamys</i>		NP			
<i>Eragrostis nindensis</i>					
<i>Eragrostis omahekensis</i>	E	NP			
<i>Eragrostis pilgeriana</i>		NP			
<i>Eragrostis pilosa</i>		NP			
<i>Eragrostis porosa</i>		NP	LC		
<i>Eragrostis rotifer</i>		NP			
<i>Eragrostis sclerantha</i>		NP			
<i>Eragrostis scopelophila</i>	E	NP			
<i>Eragrostis stapfii</i>		NP			
<i>Eragrostis superba</i>		NP			
<i>Eragrostis tef</i>		NP			
<i>Eragrostis trichophora</i>		NP			
<i>Eragrostis truncata</i>		NP			
<i>Fingerhuthia africana</i>		NP	LC		
<i>Heteropogon contortus</i>		NP			
<i>Hyparrhenia hirta</i>		NP			
<i>Leptochloa fusca</i>		NP			
<i>Melinis nerviglumis</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Melinis repens</i>		NP			
<i>Microchloa caffra</i>		NP	LC		
<i>Microchloa kunthii</i>		NP			
<i>Monelytrum luederitzianum</i>		NP			
<i>Oropetium capense</i>		NP			
<i>Panicum arbusculum</i>		NP			
<i>Panicum maximum</i>		NP	LC		
<i>Paspalum vaginatum</i>		NP			
<i>Pennisetum clandestinum</i>		NP			
<i>Poa annua</i>		NP			
<i>Pogonarthria fleckii</i>		NP	LC		
<i>Pogonarthria squarrosa</i>		NP	LC		
<i>Schizachyrium jeffreysii</i>		NP	LC		
<i>Schmidtia kalahariensis</i>		NP	LC		
<i>Schmidtia pappophoroides</i>		NP	LC		
<i>Setaria finita</i>	E	NP			
<i>Setaria italica</i>		NP			
<i>Setaria pumila</i>		NP			
<i>Setaria verticillata</i>		NP	LC		
<i>Sorghum bicolor</i>		NP			
<i>Sporobolus fimbriatus</i>		NP	LC		
<i>Sporobolus ioclados</i>		NP	LC		
<i>Sporobolus rangei</i>		NP	LC		
<i>Stipagrostis ciliata</i>		NP	LC		
<i>Stipagrostis hirtigluma</i>		NP			
<i>Stipagrostis hirtigluma</i>		NP			
<i>Stipagrostis namaquensis</i>		NP			
<i>Stipagrostis obtusa</i>		NP	LC		
<i>Stipagrostis uniplumis</i>		NP			
<i>Stipagrostis uniplumis</i>		NP			
<i>Themeda triandra</i>		NP	LC		
<i>Tragus berteronianus</i>		NP	LC		
<i>Tragus racemosus</i>		NP	LC		
<i>Trichoneura grandiglumis</i>		NP	LC		
<i>Triraphis ramosissima</i>		NP			
<i>Tristachya rehmannii</i>		NP			
<i>Urochloa brachyura</i>		NP	LC		
<i>Urochloa oligotricha</i>		NP	LC		

Species	Endemism	Protected	IUCN		CITES
<i>Urochloa panicoides</i>		NP	LC		
<i>Clematis brachiata</i>		NP			
<i>Ranunculus multifidus</i>		NP			
<i>Ziziphus mucronata</i>		NP			
<i>Anthospermum spathulatum</i>		NP			
<i>Kohautia caespitosa</i>		NP			
<i>Rubia horrida</i>		NP			
<i>Walleria nutans</i>		NP			
<i>Gnidia polycephala</i>		NP			
<i>Passerina montana</i>		NP			
<i>Corchorus asplenifolius</i>		NP			
<i>Grewia flava</i>		NP			
<i>Grewia flavescens</i>		NP			
<i>Forsskaolea candida</i>		NP	LC		
<i>Forsskaolea viridis</i>		NP	LC		
<i>Obetia carruthersiana</i>	NE	NP	LC		
<i>Xerophyta humilis</i>		NP			
<i>Xerophyta viscosa</i>		NP			
<i>Chascanum pinnatifidum</i>		NP			
<i>Lantana angolensis</i>		NP			
<i>Lantana dinteri</i>		NP	LC		
<i>Lantana rugosa</i>		NP			
<i>Verbena litoralis</i>		NP			
<i>Hybanthus densifolius</i>		NP			
<i>Viscum rotundifolium</i>		NP	LC		
<i>Cissus quadrangularis</i>		NP			
<i>Cyphostemma congestum</i>		NP	LC		
<i>Cyphostemma currorii</i>		P	NT		
<i>Cyphostemma hereroense</i>		NP	LC		
<i>Cyphostemma juttae</i>	E	P	VU		
<i>Cyphostemma uter</i>	NE	P	NT		
<i>Welwitschia mirabilis</i>	NE	P	LC		II
<i>Tribulus zeyheri</i>		NP			
<i>Osyris lanceolata</i>		NP	LC		
<i>Thesium xerophyticum</i>	E	NP	NT		
<i>Thesium zeyheri</i>		NP			
<i>Cardiospermum corindum</i>		NP			
<i>Dodonaea viscosa</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Aptosimum albomarginatum</i>		NP	LC		
<i>Aptosimum arenarium</i>	E	NP	LC		
<i>Aptosimum elongatum</i>		NP			
<i>Aptosimum lugardiae</i>		NP			
<i>Aptosimum spinescens</i>		NP			
<i>Craterostigma plantagineum</i>		NP	LC		
<i>Diclis petiolaris</i>		NP			
<i>Jamesbrittenia canescens</i>		NP			
<i>Jamesbrittenia canescens</i>		NP			
<i>Jamesbrittenia huillana</i>		NP			
<i>Jamesbrittenia integerrima</i>		NP			
<i>Jamesbrittenia lyperioides</i>	E	NP			
<i>Jamesbrittenia maxii</i>		NP			
<i>Jamesbrittenia tenella</i>		NP			
<i>Manulea conferta</i>		NP			
<i>Manulea dubia</i>	E	NP	LC		
<i>Manuleopsis dinteri</i>	E	NP	LC		
<i>Mimulus gracilis</i>		NP			
<i>Nemesia lilacina</i>		NP			
<i>Peliostomum leucorrhizum</i>		NP			
<i>Selago albomarginata</i>		NP	LC		
<i>Selago alopecuroides</i>		NP	LC		
<i>Selago dinteri</i>		NP			
<i>Sutera patriotica</i>		NP			
<i>Datura ferox</i>		NP			
<i>Datura inoxia</i>		NP			
<i>Lycium bosciifolium</i>		NP	DD		
<i>Lycium eenii</i>		NP	DD		
<i>Lycium hirsutum</i>		NP	DD		
<i>Lycium villosum</i>		NP	DD		
<i>Nicotiana glauca</i>		NP			
<i>Solanum burchellii</i>		NP			
<i>Solanum capense</i>		NP			
<i>Solanum catombelense</i>		NP			
<i>Solanum dinteri</i>	E	NP	LC		
<i>Solanum lichtensteinii</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Solanum multiglandulosum</i>		NP			
<i>Solanum nigrum</i>		NP			
<i>Solanum rigescens</i>		NP			
<i>Solanum rigescentoides</i>	E	NP	LC		
<i>Solanum seaforthianum</i>		NP			
<i>Solanum supinum</i>		NP			
<i>Withania somnifera</i>		NP			
<i>Dombeya rotundifolia</i>		NP	LC		
<i>Hermannia abrotanoides</i>		NP			
<i>Hermannia affinis</i>		NP			
<i>Hermannia bicolor</i>		NP			
<i>Hermannia comosa</i>		NP			
<i>Hermannia minutiflora</i>	NE	NP			
<i>Hermannia modesta</i>		NP			
<i>Hermannia quartiniana</i>		NP			
<i>Hermannia rautanenii</i>		NP			
<i>Hermannia tomentosa</i>		NP			
<i>Melhania acuminata</i>		NP			
<i>Melhania damarana</i>		NP			
<i>Melhania virescens</i>		NP			
<i>Waltheria indica</i>		NP			
<i>Dianthus namaensis</i>		NP			
<i>Atriplex lindleyi</i>		NP			
<i>Atriplex nummularia</i>		NP			
<i>Atriplex semibaccata</i>		NP			
<i>Atriplex suberecta</i>		NP			
<i>Chenopodium amboanum</i>	E	NP	DD		
<i>Chenopodium ambrosioides</i>		NP			
<i>Chenopodium olukondae</i>		NP			
<i>Chenopodium pumilio</i>		NP			
<i>Chenopodium schraderianum</i>		NP			
<i>Salsola kali</i>		NP			
<i>Salsola mirabilis</i>	E	NP	DD		
<i>Anisopappus pinnatifidus</i>		NP	LC		
<i>Antiphonia pinnatisecta</i>	E	NP	LC		
<i>Arctotis venusta</i>		NP			
<i>Artemisia afra</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Aspilia eenii</i>		NP			
<i>Berkheya spinosissima</i>		NP			
<i>Bidens biternata</i>		NP			
<i>Bidens pilosa</i>		NP			
<i>Calostephane divaricata</i>		NP			
<i>Chrysocoma obtusata</i>		NP			
<i>Cineraria canescens</i>		NP			
<i>Cineraria vallis-pacis</i>		NP			
<i>Conyza bonariensis</i>		NP			
<i>Cotula anthemoides</i>		NP			
<i>Dicoma anomala</i>		NP			
<i>Dicoma capensis</i>		NP	DD		
<i>Dicoma dinteri</i>	E	NP	DD		
<i>Dicoma macrocephala</i>		NP			
<i>Dicoma schinzii</i>		NP			
<i>Dicoma tomentosa</i>		NP			
<i>Didelta carnosa</i>		NP			
<i>Doellia cafra</i>		NP			
<i>Emilia marlothiana</i>		NP			
<i>Eriocephalus dinteri</i>	E	NP	LC		
<i>Eriocephalus luederitzianus</i>		NP			
<i>Felicia anthemidodes</i>		NP			
<i>Felicia clavipilosa</i>		NP			
<i>Felicia muricata</i>					
<i>Flaveria bidentis</i>		NP			
<i>Galinsoga parviflora</i>		NP			
<i>Garuleum schinzii</i>		NP			
<i>Geigeria acaulis</i>		NP	LC		
<i>Geigeria alata</i>		NP	LC		
<i>Geigeria odontoptera</i>	E	NP	LC		
<i>Geigeria ornativa</i>		NP	DD		
<i>Geigeria pectidea</i>		NP	LC		
<i>Geigeria plumosa</i>	E	NP	LC		
<i>Geigeria rigida</i>	E	NP	DD		
<i>Geigeria schinzii</i>		NP	DD		
<i>Gnaphalium confine</i>		NP			
<i>Helichrysum argyrosphaerum</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Helichrysum candolleianum</i>		NP			
<i>Helichrysum cerastioides</i>		NP			
<i>Helichrysum herniarioides</i>		NP			
<i>Helichrysum obtusum</i>		NP			
<i>Helichrysum pumilio</i>		NP			
<i>Helichrysum tomentosulum</i>		NP	LC		
<i>Helichrysum zeyheri</i>		NP			
<i>Hirpicium gazanioides</i>		NP			
<i>Hirpicium gorterioides</i>		NP	DD		
<i>Kleinia longiflora</i>		NP			
<i>Lactuca serriola</i>		NP			
<i>Laggera crispata</i>		NP			
<i>Laggera decurrens</i>		NP			
<i>Launaea intybacea</i>		NP			
<i>Litogyne gariepina</i>		NP			
<i>Lopholaena cneorifolia</i>		NP			
<i>Nidorella resedifolia</i>		NP			
<i>Nidorella resedifolia</i>		NP			
<i>Nolletia gariepina</i>		NP			
<i>Nolletia tenuifolia</i>	E	NP	DD		
<i>Oncosiphon grandiflorum</i>		NP			
<i>Ondetia linearis</i>	E	NP	LC		
<i>Osteospermum karrooicum</i>		NP			
<i>Osteospermum montanum</i>	E	NP	LC		
<i>Osteospermum muricatum</i>		NP	LC		
<i>Osteospermum muricatum</i>		NP			
<i>Pechuel-loeschea</i>		NP			
<i>Pegolettia oxyodonta</i>	NE	NP	LC		
<i>Pegolettia pinnatilobata</i>	E	NP	LC		
<i>Pegolettia retrofracta</i>		NP	LC		
<i>Pegolettia senegalensis</i>		NP	LC		
<i>Pentatrachia petrosa</i>	NE	NP			
<i>Pentzia calva</i>		NP			
<i>Pentzia incana</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Pentzia monocephala</i>		NP			
<i>Pentzia pinnatisecta</i>		NP			
<i>Pentzia spinescens</i>		NP			
<i>Pseudognaphalium luteo-album</i>		NP			
<i>Pteronia cylindracea</i>		NP			
<i>Pteronia eenii</i>	E	NP	LC		
<i>Pteronia glauca</i>		NP			
<i>Rennera eenii</i>	E	NP	NT		
<i>Schkuhria pinnata</i>		NP			
<i>Senecio cinerascens</i>		NP			
<i>Senecio consanguineus</i>		NP			
<i>Senecio eenii</i>		NP			
<i>Senecio engleranus</i>	E	NP	LC		
<i>Senecio hieracioides</i>		NP			
<i>Senecio inaequidens</i>		NP			
<i>Senecio pinguifolius</i>		NP			
<i>Senecio sarcoides</i>		NP			
<i>Senecio windhoekensis</i>	E	NP			
<i>Sonchus asper</i>		NP			
<i>Sonchus oleraceus</i>		NP			
<i>Stoebe plumosa</i>		NP			
<i>Tagetes minuta</i>		NP			
<i>Tripteris aghillana</i>		NP			
<i>Tripteris microcarpa</i>		NP			
<i>Tripteris nervosa</i>		NP			
<i>Verbesina encelioides</i>		NP			
<i>Xanthium spinosum</i>		NP			
<i>Pentatrichia rehmii</i>	E	NP	LC		
<i>Platycarphella carlinoides</i>		NP			
<i>Monsonia angustifolia</i>		NP			
<i>Monsonia burkeana</i>		NP			
<i>Monsonia glauca</i>		NP			
<i>Monsonia senegalensis</i>		NP			
<i>Pelargonium dolomiticum</i>		NP			
<i>Gisekia africana</i>		NP			
<i>Gisekia pharnacioides</i>		NP			
<i>Acacia erubescens</i>		NP	LC		
<i>Acacia galpinii</i>		NP			
<i>Acacia haematoxylon</i>		FP			



Species	Endemism	Protected	IUCN		CITES
<i>Acacia hebeclada</i>		NP			
<i>Acacia hereroensis</i>		NP	LC		
<i>Acacia karroo</i>		NP	LC		
<i>Acacia luederitzii</i>		NP			
<i>Acacia mellifera</i>		NP			
<i>Acacia reficiens</i>		NP			
<i>Acacia sieberiana</i>		NP			
<i>Acacia tortilis</i>		NP			
<i>Caesalpinia gilliesii</i>		NP			
<i>Chamaecrista biensis</i>		NP			
<i>Crotalaria argyrea</i>		NP			
<i>Crotalaria damarensis</i>		NP			
<i>Crotalaria dinteri</i>		NP			
<i>Crotalaria leubnitziana</i>		NP			
<i>Crotalaria podocarpa</i>		NP			
<i>Cullen tomentosum</i>		NP			
<i>Cyamopsis senegalensis</i>		NP			
<i>Dichrostachys cinerea</i>		NP			
<i>Dolichos trilobus</i>		NP			
<i>Elephantorrhiza suffruticosa</i>		NP			
<i>Erythrina decora</i>	NE	FP	LC		
<i>Indigastrum costatum</i>		NP			
<i>Indigastrum parviflorum</i>		NP			
<i>Indigofera alternans</i>		NP			
<i>Indigofera colutea</i>		NP			
<i>Indigofera cryptantha</i>		NP			
<i>Indigofera hochstetteri</i>		NP			
<i>Indigofera sordida</i>		NP			
<i>Indigofera vicioide</i>		NP			
<i>Lablab purpureus</i>		NP			
<i>Lessertia benguellensis</i>		NP			
<i>Lessertia pauciflora</i>		NP			
<i>Listia heterophylla</i>		NP			
<i>Lotononis calycina</i>		NP			
<i>Lotononis crumanina</i>		NP			
<i>Lotononis curtii</i>		NP			
<i>Lotononis pallidirosea</i>	E	NP	DD		
<i>Medicago laciniata</i>		NP			
<i>Melolobium calycinum</i>		NP			

Species	Endemism	Protected	IUCN		CITES
<i>Melolobium macrocalyx</i>		NP			
<i>Melolobium microphyllum</i>		NP			
<i>Otoptera burchellii</i>		NP			
<i>Parkinsonia aculeata</i>		NP			
<i>Ptycholobium biflorum</i>		NP			
<i>Requienia sphaerosperma</i>		NP			
<i>Rhynchosia minima</i>		NP			
<i>Rhynchosia namaensis</i>		NP			
<i>Rhynchosia sublobata</i>		NP			
<i>Rhynchosia totta</i>		NP			
<i>Rhynchosia venulosa</i>		NP			
<i>Senna italica</i>		NP			
<i>Senna pendula</i>		NP			
<i>Sutherlandia frutescens</i>		NP			
<i>Tephrosia burchellii</i>		NP			
<i>Tephrosia dregeana</i>		NP			
<i>Tephrosia rhodesica</i>		NP			
<i>Vigna frutescens</i>		NP			
<i>Vigna lobatifolia</i>		NP			
<i>Calobota obovata</i>	E	NP			
<i>Leobordea furcata</i>		NP			
<i>Leobordea platycarpa</i>		NP			
<i>Cyperus palmatus</i>		NP			
<i>Cyperus decurvatus</i>		NP			
<i>Syncolostemon canescens</i>		NP			
<i>Syncolostemon bracteosus</i>		NP			
<i>Symphyotrichum squamatum</i>		NP			
<i>Lepidium englerianum</i>		NP			
<i>Cylindropuntia imbricata</i>		NP			
<i>Cylindropuntia rosea</i>		NP			
<i>Amaranthus hybridus</i>		NP			
<i>Rhipsalis baccifera</i>		NP			
<i>Chenopodium murale</i>		NP			
<i>Dovyalis caffra</i>		NP			
<i>Landoltia punctata</i>		NP			
<i>Amaranthus thunbergii</i>		NP			
<i>Symphyotrichum subulatum</i>		NP			
<i>Nolletia chrysocomoides</i>		NP			

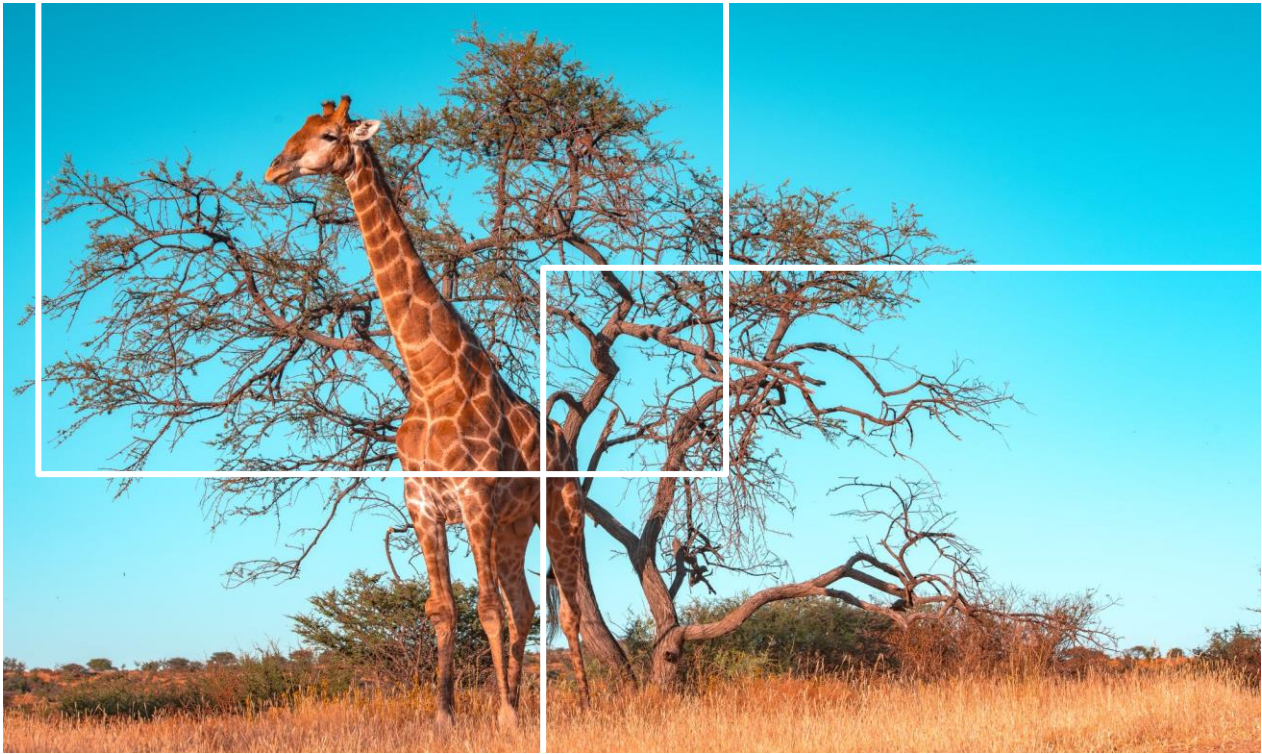
Species	Endemism	Protected	IUCN		CITES
<i>Trianthena parvifolia</i>		NP			
<i>Emilia schinzii</i>		NP			
<i>Aptosimum lineare</i>		NP			
<i>Tridax procumbens</i>		NP			
<i>Cuscuta australis</i>		NP			
<i>Tenaxia stricta</i>		NP			
<i>Hypertelis cerviana</i>		NP			
<i>Maerua juncea</i>		NP			
<i>Vincetoxicum fleckii</i>	E	NP	LC		
<i>Parapolydora fastigiata</i>		NP			
<i>Roepera pubescens</i>		NP	LC		
<i>Cyphostemma currorii</i>		P	NT		

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## **APPENDIX E – EAP CV'S**

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## **APPENDIX F – ADDENDUM REPORT**



**Submitted to: Waldeck (Pty) Ltd**  
**Attention:** Mr. Constantin Fugger  
P O Box 21012,  
Olympia, Windhoek,  
Namibia

# REPORT:

## EMP FOR THE PROPOSED CONSTRUCTION AND DEVELOPMENT OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO.28, KHOMAS REGION, NAMIBIA

**PROJECT NUMBER:** ECC-121-455-REP-07-A

**REPORT VERSION:** REV 01

**DATE:** 26 OCTOBER 2023



## TITLE AND APPROVAL PAGE

Project Name:	EMP for the proposed construction and development of a tourism and hunting lodge on Farm Waldeck No.28, Khomas Region, Namibia
Client Company Name:	Waldeck (Pty) Ltd
Authors:	Samuel Shinyemba, Stephan Bezuidenhout and Jessica Bezuidenhout
Status of Report:	Final for Government submission
Project Number:	ECC-121-455-REP-07-A
Date of issue:	26 October 2023
Review Period	NA

## ENVIRONMENTAL COMPLIANCE CONSULTANCY CONTACT DETAILS:

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## DISCLAIMER

The report has been prepared by Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) on behalf of the Proponent. Authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the Project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the Project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

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**ABBREVIATIONS**

Abbreviation	Description
<	Less than
dB	decibels
ECC	Environmental Compliance Consultancy (Pty) Ltd
EIA	environmental impact assessment
EMP	environmental management plan
GPS	Global Positioning System
IFC	International Finance Corporation
Km/h	kilometre per hour
m	metre
MAWLR	Ministry of Agriculture, Water and Land Reform
MSDS	material safety data sheet
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
Ltd.	Limited
PPE	personnel protective equipment
Pty	proprietary
PV	photovoltaic
OSH	occupational safety health
SHE	safety health and environment
SNR	Signal Noise Ratio

# 1 INTRODUCTION

## 1.1 PROJECT BACKGROUND

Environmental Compliance Consultancy (ECC) has been contracted by Waldeck (Pty) Ltd (herein referred to as 'the Proponent') to conduct an environmental impact assessment (EIA) for the proposed construction and development of a hunting lodge and associated infrastructure on Waldeck Farm No.28, Khomas Region, Namibia.

Waldeck (Pty) Ltd propose to upgrade Farm Waldeck No.28 by developing a tourism and hunting lodge. The envisioned works include construction of 6 accommodation units (2 double units and 4 single units), a main common core area, two PV solar plants with a battery room, an activities area, staff village, demolition of the current dilapidated farmhouse and construction of a new 4-bedroom farmhouse and construction of a cold storage room, a butchery and a grey water treatment plant. The Proponent purchased a portion of Farm Iturea (a portion southeast of Farm Waldeck No.28), hence the boundary fence that is currently dividing the two farms will be removed. The entire farm boundary fence will also be renovated to a height of approximately 2.5 meters. Hunting particularly for trophy will be supervised strictly by registered Professional Hunters. All work will fall within the boundaries of Farm Waldeck No.28.

In addition to Farm Iturea, the Proponent signed a contractual purchase agreement with landowners of Farm Dornbaum No.74 and Bethlehem No.27/Rem 3. These portions are south and southeast of Farm Waldeck No.28. Once the portions have been procured, fully acquisitioned and transferred, an amendment to the environmental clearance certificate will be launched with the competent authority (Ministry of Environment, Forestry and Tourism). The EMP will be updated to address any impacts that may be associated with the land development works in these portions.

Farm Waldeck No. 28 is located approximately 36km south of Windhoek in the Windhoek Rural Constituency, Khomas Region, Namibia. The Project site can be accessed by driving south of Windhoek along the B1 road, turning and driving onto the D1463 district road for approximately 9 km. The location of Farm Waldeck No.28 and the purchased portion of Farm Iturea is shown in Figure 1.

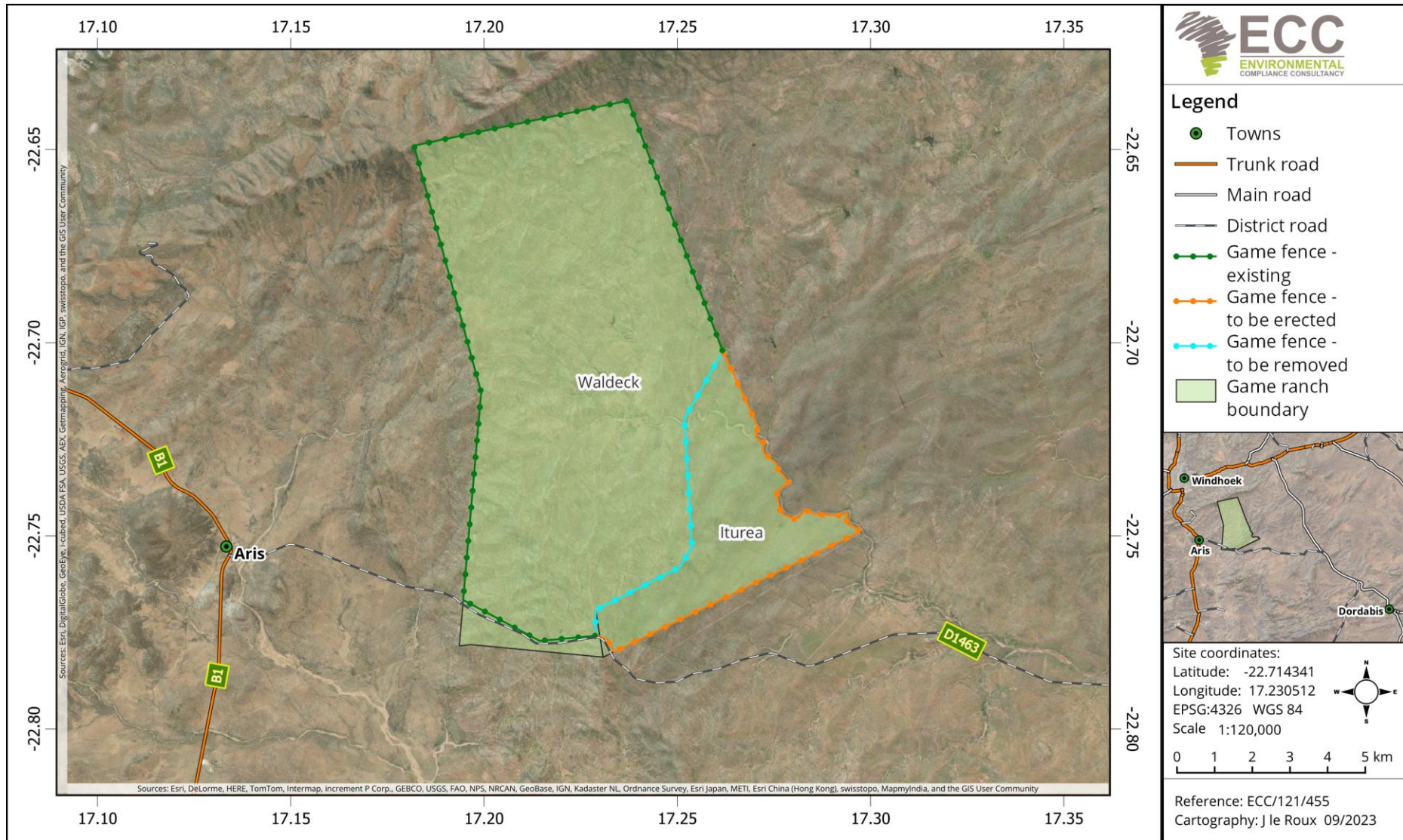


Figure 1: Location of Farm Waldeck No. 28 and Farm Iturea

## 1.2 ENVIRONMENTAL REGULATORY REQUIREMENTS

The proposed project triggers listed activities as stipulated in the Environmental Management Act, No. 7 of 2007 and its Regulations, promulgated in 2012. An environmental scoping report, environmental impact assessment (EIA) and environmental management plan (EMP) are required to be submitted as part of the application to support the decision-making process for issuing an environmental clearance certificate.

This report presents the EMP and has been undertaken in terms of the requirements of the Environmental Management Act, 2007 and its Regulations.

## 1.3 PURPOSE AND SCOPE OF THIS REPORT

The environmental management plan (EMP) provides a logical framework, mitigation measures and management strategies for the activities associated with the proposed project. In this way ensuring that the potential environmental impacts are curbed and minimised as far as practically possible and that statutory and other legal obligations are adhered to and fulfilled. Outlined in the EMP are the protocols, procedures and roles and responsibilities to ensure the management arrangements are effectively and appropriately implemented.

The EMP is submitted as an appendix to the environmental scoping and impact assessment report which has been prepared for this Project. The environmental scoping report should be referred to for project specifications, assessment methodology, applicable legislations and assessment findings.

This EMP is a live document and shall be reviewed at predetermined intervals, and or updated during the EIA process when or if the scope of work alters, or when further data or information is added. All personnel working on the project will be legally required to comply with the requirements set out in the final EMP that is approved by the competent authorities i.e., Ministry of Environment, Forestry and Tourism (MEFT).

## 1.4 MANAGEMENT OF THIS EMP

The Proponent, will hold the environmental clearance certificate for the proposed project and will be responsible for the implementation and management of this EMP. The implementation and management of this EMP, and thus the monitoring of compliance, will be undertaken through daily duties and activities, as well as monthly inspections.

## 1.5 LIMITATIONS, UNCERTAINTIES, AND ASSUMPTIONS RELATED TO THIS EMP

This EMP does not include measures for compliance with statutory occupational health and safety requirements. This will be provided in the safety management plan to be developed by the Proponent. Additionally, mitigation measures associated with impacts on additional portions that are not procured and fully transferred to the Proponent are not included in this report. Mitigation management measures regarding the import of game are also not included in this report as the full

extent of the impacts will be scoped in an environmental clearance application amendment application which will be launched with the competent authority (MEFT) once the land portions have been transferred.

Where there is any conflict between the provisions of this EMP and any contractor's obligations under their respective contracts, including statutory requirements (such as licences, project approval conditions, permits, standards, guidelines, and relevant laws), the contract should be amended, and statutory requirements are to take precedence.

The information contained in this EMP is based on the project description as provided in the environmental scoping report. When the design or operation method changes, this EMP may require updating and potential further assessment may be undertaken.

## 1.6 ENVIRONMENTAL ASSESSMENT PRACTITIONER

The report has been prepared by Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) on behalf of the Proponent. Authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

All compliance and regulatory requirements regarding this report should be forwarded by email or posted to the following address:

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PO Box 91193, Klein Windhoek, Namibia  
Tel: +264 81 669 7608  
Email: [info@eccenvironmental.com](mailto:info@eccenvironmental.com)

## 2 ENVIRONMENTAL MANAGEMENT FRAMEWORK

### 2.1 OBJECTIVES AND TARGETS

Environmental objectives and targets have been developed so that trophy hunting activities and lodge operations can minimise potential impacts on the environment, as far as reasonably practicable.

Environmental objectives for the project are as follows:

- Zero pollution incidents;
- Minimal vegetation clearing;
- Minimal impact on regional groundwater users;
- Protect local flora and fauna, and
- Use natural resources effectively and efficiently.

### 2.2 ORGANISATIONAL STRUCTURE, ROLES, AND RESPONSIBILITIES

The Proponent shall be responsible for:

- Ensuring all members of the project team, including contractors, comply with the procedures set out in this EMP;
- Ensuring that all persons are provided with sufficient training, supervision, and instruction to fulfil this requirement;
- Ensuring that any persons allocated specific environmental responsibilities are notified of their appointment and confirm that their responsibilities are clearly understood; and
- Contractors shall be responsible for ensuring and demonstrating that all personnel employed by them are compliant with this EMP, and meet the responsibilities listed above.

Table 1 lists the roles and responsibilities allocated to different personnel throughout the project's lifecycle.

**Table 1 – Roles and responsibilities**

ROLE	RESPONSIBILITIES AND DUTIES
<p><b>General Manager (Proponent)</b></p>	<ul style="list-style-type: none"> <li>- Responsible for ensuring compliance with this EMP;</li> <li>- Ensuring employees understand and comply with the requirements of this EMP;</li> <li>- Ensuring that all personnel are provided with enough supervision and instructions to fulfil duties in line with the EMP;</li> <li>- Ensuring compliance with this EMP including overseeing the day-to-day activities during operations, and routine and non-routine maintenance works during operations;</li> <li>- Responsible for providing the required resources (including financial and technical) to complete any required tasks;</li> <li>- Responsible for the management, maintenance and revisions of this EMP;</li> <li>- Maintain community issues and concerns register and keep records of complaints and responses provided;</li> <li>- Ensuring that best environmental practices are undertaken throughout the operations of the facility;</li> <li>- Notifying the relevant authorities on serious environmental incidents promptly; and</li> <li>- Being responsible for all management plans and environmental monitoring.</li> </ul>
<p><b>Foreman (Appointed HSE responsible person)</b></p>	<p>The farm or lodge foreman will be responsible for the implementation of the EMP for the lodge. The foreman will be available as required throughout the operation of the lodge and is tasked with the following roles:</p> <ul style="list-style-type: none"> <li>- Bearing authority and independence to demand reasonable steps as required to avoid or minimise unintended or adverse environmental impacts, and failing the effectiveness of such steps, to direct that relevant construction activities be ceased immediately should an adverse impact on the environment be likely to occur;</li> <li>- Complete monthly EMP checklists and submit findings to the farm manager;</li> <li>- Provisioning of environmental awareness/management training, capacity building and inductions;</li> <li>- Ensuring that best environmental practices are undertaken throughout the operations of the lodge;</li> <li>- Timely distribution of any relevant environmental documentation, including revisions to this EMP to all staff;</li> <li>- Ensuring site inductions are conducted throughout the different phases of the Project;</li> </ul>

ROLE	RESPONSIBILITIES AND DUTIES
	<ul style="list-style-type: none"> <li>- Reporting of any operations and conditions that deviate from the EMP or any non-compliant issues or accidents to the Proponent; and</li> <li>- Responsible for compliance with conditions as set out in this EMP.</li> </ul>
<b>Employees, contractors and visitors</b>	<p>Contractors hired for operations or maintenance activities at the lodge should comply with this EMP and shall be responsible for the following:</p> <ul style="list-style-type: none"> <li>- Undertaking activities in accordance with this EMP as well as relevant policies, procedures, management plans, statutory requirements and contract requirements;</li> <li>- Implementing appropriate environmental management measures;</li> <li>- Reporting environmental issues, including actual or potential environmental incidents and hazards to the Proponent or foreman; and</li> <li>- Ensuring appropriate corrective or remedial actions are taken to address all environmental hazards and incidents.</li> </ul>

### 2.3 EMPLOYMENT

The Proponent and all contractors shall comply with the requirements of the Republic of Namibia’s regulations for Labour, Health and Safety, and any amendments to these regulations. The following shall be complied with:

- In liaison with local government and community authorities, the Proponent shall ensure that local people have access to information about job opportunities and are considered first for construction/maintenance contract employment positions;
- The number of job opportunities shall be made known together with the associated skills and required qualifications;
- The maximum length of time the job is likely to last for shall be indicated;
- Foreign workers with no proof of permanent legal residence shall not be hired;
- Every effort shall be made to recruit from the group of unemployed workers living in the surrounding area; and
- Every employee hired must be provided with a valid employment contract stating the position hired and hourly remuneration offered.



### 3 COMMUNICATION AND TRAINING

To ensure potential risks and impacts are minimised, it is vital that personnel are appropriately informed on how to properly implement the EMP. It is also important that regular communications are maintained with directly affected parties and are informed of potential environmental or socioeconomic impacts and how to minimise them. This section sets out the framework for communication and training in relation to the EMP.

#### 3.1 COMMUNICATIONS

During construction, the project manager and site manager shall communicate site-wide environmental issues to the project team through the following means (as and when required):

- Site inspection and audits;
- Site induction, including instruction on incident response procedure, and
- Briefings on key project-specific environmental issues, like feedback on complaints.

This EMP shall be distributed to the construction team including any contractors to ensure that the environmental requirements are adequately communicated. Key activities and environmentally sensitive operations should be highlighted to workers and contractors.

During the construction phase, communications between the management team shall include discussing any complaints received and actions to resolve them, - any inspections, audits, or non-conformance with this EMP, and any objectives or target achievements.

### 3.2 ENVIRONMENTAL EMERGENCY AND RESPONSE

An emergency is any abnormal event, which demands immediate attention. It is any unplanned event, which results in the temporary loss of management control at site, but where functional resources can manage the response. An emergency response plan document will be put in place that manages the response in relation to emergencies including environmental emergencies. Table 2 contains a list of emergency contact numbers.

**Table 2 - Emergency contact details**

TOWN	AMBULANCE	POLICE	FIRE BRIGADE
Windhoek	+264 (61) 21-1111	+264 (61) 1-0111	+264 (61) 21-1111
Dordabis	+264 (61) 302 931	+264 (62) 573 514	-
Rehoboth	+264 (62) 52-3811	+264 (62) 1-0111	+264 (62) 52-2091

For large-scale spills (i.e., greater than 200 litres) and other significant environmental incidents, the fire service should be notified as required and MEFT office should be informed of the incidents (telephone +264 61 284 2111) as well as the Ministry of Mines and Energy (MME) by completing form PP/11 (telephone: +264 61 284 8111). All correspondence with MME/MEFT should be undertaken by the farm manager as guided by the foreman.

### 3.3 COMPLAINTS HANDLING AND RECORDING

Any complaints received through various means of communication by contracted employees or directly affected IAPs should be documented by the receiver. The following aspects should be noted in the complaint register:

- The name of the complainant
- The contact details of the complainant
- Date and time of the complaint
- The nature of the complaint

The information shall be given to the Proponent who is responsible for the management of complaints. The project manager shall do the following:

- Acknowledge the complaint as received;
- Maintain a complaint document register file;
- Provide a written response to the complainant of the results of the investigation and action to be taken to rectify or address the matter(s). Where no action is taken, the reasons why are to be recorded in the register.

The workforce shall be informed about the complaints register. The complaints register shall be kept for the duration of the Project and will be available for government or public review upon request.

### 3.4 TRAINING AND AWARENESS

All personnel working on the project shall be competent to perform tasks that have the potential to cause an environmental impact. Competence is defined in terms of appropriate education, training, and experience. The Proponent should ensure that employees assigned with specific duties possess the necessary skill sets to complete such duties.

### 3.5 SITE INDUCTION

All personnel involved in the project shall be inducted to the site with specific environmental and social awareness training, and health and safety issues. The environmental and social awareness training shall ensure that personnel are familiar with the principles of this EMP, and the environmental impacts associated with their activities, the procedures in place to control these impacts and the consequences of departure from these procedures.

The site induction should include, but is not limited to the following:

A general site-specific induction that outlines:

- What is meant by “environment” and “social”;
- What are the environmental risks and impacts associated with lodge construction and operations;
- How can construction activities impact the environment; and
- What can be done to mitigate against impacts.
- 

The inductee's role and responsibilities concerning implementing the EMP:

- The site's environmental rules;
- Details of how to deal with, and who to contact should any environmental problems occur;
- The potential consequences of non-compliance with this EMP and relevant statutory requirements, and
- The role of responsible people working on the project.

## 4 REPORTING, COMPLIANCE AND ENFORCEMENT

### 4.1 ENVIRONMENTAL PERFORMANCE MANAGEMENT

The current summary of a register of environmental risks and issues identifies mitigation and monitoring measures, as well as the roles responsible for execution. The Project Manager and Foreman will use this register to undertake monthly inspections to ensure the project is compliant with this EMP.

### 4.2 CONSTRUCTION: ENVIRONMENTAL INSPECTION & COMPLIANCE MONITORING

#### 4.2.1 MONTHLY COMPLIANCE MONITORING

Monthly inspections will be undertaken by the Site manager to check that the standards and procedures set out in this EMP are being complied with and environmental control measures are in place and working correctly. Any non-conformance will be recorded, including the following details: a brief description of non-conformance; the reason for the non-conformance; the responsible party; the result (consequence); and the corrective action taken and any necessary follow up measures required.

### 4.3 OPERATIONS: ENVIRONMENTAL INSPECTIONS & COMPLIANCE MONITORING

Annual inspections of the different lodge operational areas will be undertaken by the Proponent to determine any non-conformances. Any non-conformance will be recorded, including the following details: a brief description of non-conformance; the reason for the non-conformance; the responsible party; the result (consequence); and the corrective action taken and any necessary follow up measures required.

### 4.4 REPORTING

There will be a requirement to ensure that any incident or non-compliance, including any environmental issue, failure of equipment or accident, is promptly reported to the Farm Manager.

### 4.5 NON-COMPLIANCE

Where it has been identified that works are not compliant with this EMP, the Farm Manager will implement corrective actions to the extent that the works return to being compliant as soon as possible. In instances where the requirements of the EMP are not upheld, a non-conformance and corrective action notice will be produced. The notice will be generated during the inspections and the project manager will be responsible for ensuring a corrective action plan is established and implemented to address the identified shortcoming.

Activities shall be stopped in the event of non-compliant event identified until corrective actions have been completed.

## 4.6 INCIDENT REPORTING

The Site Manager must ensure that an accident and incident (including minor or near-miss) reporting system is maintained by the foreman so that all applicable statutory requirements are covered. For any serious incident involving a fatality, or permanent disability, the incident scene must be left untouched until witnessed by a representative of the police. This requirement does not preclude immediate first aid being administered and the location being made safe.

The foreman must investigate the cause of all work accidents and significant incidents and must provide the results of the investigation and recommendations on how to prevent a recurrence of such incidents. A formal root-cause investigation process should be followed.

### 4.6.1 DISCIPLINARY ACTION

This EMP is a legally binding document and non-compliance with it shall result in disciplinary action being taken against the perpetrator(s). Such action may take the form of (but is not limited to):

- Fine/penalties;
- Legal action;
- Monetary penalties imposed by the Proponent on the contractor;
- Withdrawal of licence; and
- Suspension of work.

The disciplinary action shall be determined according to the nature and extent of the transgression / non-compliance, and penalties are to be weighed against the severity of the incident.

## 5 ENVIRONMENTAL AND SOCIAL MANAGEMENT

### 5.1 ENVIRONMENTAL PERFORMANCE MEASUREMENT

This chapter provides a summary register of environmental risks and issues which identifies mitigation and mitigation measures as well as responsible party(ies). This chapter is subject to regular review by the Proponent and will be updated as necessary.

The Proponent will use this register to undertake monthly and annual inspections to ensure the Project is compliant with the EMP.

### 5.2 OBJECTIVES AND TARGETS

Environmental protection is the responsibility of management and if management incorporate environmental disciplines in their day-to day activities, employees, contractors and customers would act and align their operations towards such standards.

Environmental objectives and targets have been developed so that activities on the proposed site can minimise potential impacts on the environment, as far as reasonably practicable.

The Project aims to achieve the following environmental objectives:

- Zero pollution incidents;
- Sustainable resource use (water and energy);
- Application of the waste management hierarchy;
- A safe working environment for employees; and
- Use natural resources efficiently and effectively.

### 5.3 REGISTER OF ENVIRONMENTAL RISKS AND ISSUES

An environmental review of the proposed project has been completed to identify all the commitments and agreements made within the environmental scoping and impact assessment report. From this, a schedule of environmental commitments and risks has been produced which details deliverables including measures identified for the prevention of pollution or damage to the environment during the project's lifetime (Table 3).

Table 3 provides a register of environmental risks and issues, which identifies mitigation and monitoring measures, as well as the responsible persons.

**Table 3 - Environmental risks and issues, mitigations and monitoring measures**

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
<b>Air quality</b>	Possible dust emissions from construction vehicles and equipment. Dust generation during construction /future maintenance activities.	To minimise the potential for dust generation, the following management measures should be implemented, as required: <ul style="list-style-type: none"> <li>- Restrict speed of vehicles (&lt;40 km/h);</li> <li>- Vehicles and machinery should be maintained to limit exhaust fume emissions;</li> <li>- Dust generating activities should be avoided during strong wind events;</li> <li>- Where an effect is profound, ensure dust suppression measures are in place; and</li> <li>- Employees should use and wear appropriate PPE (e.g. dust masks).</li> </ul>	Daily	Farm Manager Site Supervisor Foreman Employees
<b>Visual</b>	Visual disturbances	- Engage with the surrounding neighbours about the construction activities; and -Practise Good housekeeping on site.	Monthly  Daily	Farm Manager Foreman Employees
<b>Noise</b>	Gunshot noise and construction noise leading to noise nuisance and potential hearing loss towards site-based employees.	The Labour Act No.11 of 2007 and Regulations relating to the Health and Safety of Employees at Work (GN 156/177) should be followed for occupational noise exposure (Chapter 6, section 197, sub-section 1-3). This section states that no employee shall work in an environment where noise levels equal or exceed 85 dB.	Daily	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p>The following mitigation measures should be implemented, as required:</p> <ul style="list-style-type: none"> <li>-The Proponent should develop a healthy and safety management plan that takes into account noise generation;</li> <li>-Restrict noise generating activities to day- time operations;</li> <li>-Conduct safety inductions before hunting expeditions;</li> <li>-Appropriate PPE should be worn during hunting activities (i.e. earplugs, earmuffs, ear protective equipment with &gt;30 SNR).</li> <li>-Ensure that hunting ammunitions are equipped with silencers;</li> <li>-People not shooting should stand further away from the noise source;</li> <li>- Vehicles on site should be maintained regularly to exhaust noise levels; and</li> <li>-Ensure noise complaints are recorded and responded to timeously.</li> </ul>		



Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
<p><b>Occupational health and safety</b></p>	<p>Occupational health and safety concerns during the construction phase of the project.</p>	<p>To promote a safe and conducive working environment, the following mitigation measures should be considered:</p> <ul style="list-style-type: none"> <li>-A health and safety management plan should be developed and implemented on-site by the Proponent;</li> <li>-The Labour Act No.11 of 2007 and Regulations relating to occupational health and safety should be adhered to;</li> <li>-Appropriate PPE should be worn by employees (e.g. safety boots, overalls, butchery apron and gloves).</li> <li>-Conduct safety induction to employees and employees should be trained on weapon handling;</li> <li>-Appropriate safety/warning signs should be erected at areas considered to cause certain degree of harm;</li> <li>-Risk assessment in the workplace must be done to identify facility areas that could cause some degree of impacts, suitable prevention measures should be identified;</li> <li>-Frequent maintenance of all equipment and machineries is advised;</li> <li>-Occupational incidents and accidents incurred on-site should be reported to the authorities (i.e.</li> </ul>	<p>Daily</p>	<p>Foreman</p>

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p>Occupational Safety &amp; Health (OSH) at the Ministry of Labour, Industrial Relation and Employment Creation, by using form F.5 (Ministry of Labour, Industrial Relations and Employment Creation);</p> <ul style="list-style-type: none"> <li>-Emergency contact details should be displayed to contact relevant services in emergency situations;</li> <li>- In the unlikely event of a death occurring within farm boundaries from occupational negligence or otherwise from a "freak accident event", the area should be secured, and all personnel removed from the scene;</li> <li>- A root cause analysis into the event should be undertaken as soon as practicably possible; and</li> <li>-Counselling should be provided to the witnesses and other personnel member who may have been impacted by the event.</li> </ul>		
<b>Fire risks management</b>	Potential risk of fire occurrences and veld fire leading to ecosystems breakdown.	<ul style="list-style-type: none"> <li>- Develop a fire management system through risk identification and assessment;</li> <li>- Identify and signpost dedicated assembly points at the lodge area;</li> <li>- Develop site-specific work procedures as part of the fire management system;</li> <li>- Control and reduce the potential risk of fire by segregating and safe storage of flammable materials;</li> </ul>	Weekly, monthly and annually	All staff

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>- Avoid potential sources of ignition for example, by prohibiting smoking in and around areas where chemicals/fuel is stored;</li> <li>- Ensure suitable fire-extinguishing equipment are easily accessible whenever necessary (this can include pails of water, buckets of sand, or portable extinguishers);</li> <li>- For veld fires, appropriate firefighting equipment should be available on-site;</li> <li>-Design and re-define the fire breaks within the farm on an annual basis following the rain season;</li> <li>- Emergency contact details should be readily available on-site;</li> <li>- Fires made for “braai”/BBQ within farm boundaries should be monitored and extinguished to prevent the risks of causing a veld fire; and</li> </ul>		
<b>Wildlife mismanagement</b>	Potential overhunting of game with good genetic make-up and wildlife mismanagement within the farm boundaries. Potential risk of inbreeding	<p>The Nature Conservation Ordinance Act No. 4 of 1975 and its regulations, Controlled Wildlife Products and Trade Act 9 of 2008 and the Animals Protection Act 71 of 1962 should be followed closely with regards to any hunting activities within farm boundaries.</p> <p>The following measures will guide the sustainable hunting of game:</p>	Daily, monthly and yearly.	Farm Manager Foreman

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>- Develop an effective wildlife management plan;</li> <li>-Create awareness on biodiversity, conservation and ecosystem to staff members and hunters;</li> <li>-Hunting should be conducted under the supervision of registered professional hunters;</li> <li>- Game hunting permits should be applied for;</li> <li>- Conduct annual game counts and keep a record of hunted and game populations;</li> <li>- Introduce new game to the farm from elsewhere (new genetics) to prevent inbreeding of fenced off populations; and</li> <li>- Sustainable game farm management and ethical practices should be promoted and incorporated.</li> </ul>		
<b>Avifauna management</b>	Potential lead exposure and poisoning from lead in hunting ammunitions (i.e raptors and vulnerable scavenger birds)	<p>Management/control measures include the following:</p> <ul style="list-style-type: none"> <li>- Lead ammunitions should not be used during hunting expeditions; and</li> <li>- Ensure that carcasses (where the bullet made an impact and fragmented) hunted with lead-based ammunitions are disposed- off properly.</li> </ul>	Daily, monthly and yearly.	Farm Manager and Foreman
<b>Wildlife management</b>	The possible of encountering and interacting with biodiversity on-site.	The Nature Conservation Ordinance Act No. 4 of 1975 and its Regulations, Controlled Wildlife Products and Trade Act 9 of 2008 and the Animals Protection Act 71 of 1962 should be closely followed with regards to any encounters with wildlife with farm boundaries.	Daily, monthly and yearly.	Farm Manager Foreman

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>- Wildlife encountered on farm have the right of way;</li> <li>- Restrict speed of vehicles (&lt;40 km/h);</li> <li>- No living organism should be removed from farm boundaries by anyone other than a professional/registered animal handler, pest control company, MEFT/MAWLR or relevant rehabilitation or wildlife organisations;</li> <li>- Prohibit illegal hunting, consumption and possession of game and game products (i.e., illicit trade of pangolins for scales);</li> <li>- Police and MEFT should be notified of any illegal hunting incident involving sensitive or protected species or if such an animal is found on someone within or surrounding farm boundary;</li> <li>-Snares found on the farm should be removed and destroyed;</li> <li>- An anti-poaching unit should be recruited to conduct regular patrols within the farm;</li> <li>-Installation of closed-circuit cameras would aid to monitor the project area on a 24-hour basis;</li> <li>- Nests discovered on infrastructure within farm boundaries should not be removed or destroyed;</li> <li>- Pesticides and herbicides should not be used as far as reasonably possible;</li> </ul>		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>-If there is no other possibility, the relevant pesticides/herbicides/chemicals should be used by a professional/registered pest control company and the MSDS of the substance used should be followed closely;</li> <li>- Invasive plant species should be removed, and their spread should be monitored closely; and</li> <li>- Waste on-site should be well managed and removed from the site to less attract rodents, snakes and scorpions.</li> </ul>		
	<p>Potential removal of protected plant species land clearing activities.</p>	<p>To counteract the potential risk of removing certain protected plant species, the following control management measures should be implemented:</p> <ul style="list-style-type: none"> <li>-Prior to any land clearing event, site inspection should be conducted to determine the presence of any unique plant species;</li> <li>- Protected plant species should not be removed, without the relevant permission or permits;</li> <li>- Large trees or shrubs should not be removed (could be essential for breeding birds);</li> <li>-Where possible, rescue and relocate plants of significance;</li> <li>- Promote revegetation of cleared areas upon completion of construction activities; and</li> </ul>	<p>Daily, monthly</p>	<p>Farm Manager Foreman</p>

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		- All project equipment arriving on-site from elsewhere should have an internal weed and seed inspection completed prior to such equipment being used, this will prevent encroachment of invasive species.		
	Potential habitat destruction and disturbances of ecosystem functioning due to land clearing activities for the PV solar plants.	- Use existing roads to avoid new tracks and potentially destroying habitats or burrowing species; - Prior to land clearing, site inspections should be conducted to determine the presence of any unique nesting/ breeding site within the proposed project site; and - Minimise clearing areas through proper planning of construction and operational activities; and	Daily, monthly	Farm Manager Foreman
<b>Heritage</b>	Potential heritage discovery	In case of discovering or unearthing heritage sites, the following measures (chance-find procedure) shall be applied: - Works to cease and the area to be demarcated with appropriate tape by staff, and the Farm Manager to be informed; and - Archaeological/heritage artefacts/graves are to remain un-disturbed, until an investigation is conducted.	Daily	All staff members
<b>Soil Pollution control</b>	Emergency incidents/accidental release of	Since generators will be used during the construction phase, the following measures should be taken into	Daily, monthly and yearly	All staff members

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
	hazardous substances leading to soil contamination.	<p>consideration regarding storage, handling and spill management.</p> <p><b>Storage</b></p> <ul style="list-style-type: none"> <li>-Hazardous chemicals should be stored separate from non-hazardous chemicals;</li> <li>-Chemical containers should be labelled correctly-clear guidance on the compatibility of different chemicals can be obtained from the Materials Safety Data Sheets (MSDS) which should be readily available;</li> <li>- Store chemicals in a dedicated, enclosed, and secure facility with a roof and a paved/concrete floor;</li> <li>- Diesel tanks should be completely contained within secondary containment such as bundings; and</li> <li>- Fuels, lubricants, and chemicals are to be stored within appropriately sized, impermeable bunds or trays with a capacity not less than 110% of the total volume of products stored.</li> </ul> <p><b>Spills</b></p> <p>Spill kits with the following items as a minimum should be made available on site:</p>		



Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<p><b>Safety measures</b></p> <ul style="list-style-type: none"> <li>- Protective clothing should always be worn (e.g., gloves and overalls);</li> <li>- Major servicing of equipment shall be undertaken offsite or within appropriately equipped workshops;</li> <li>- For small repairs and required maintenance activities all reasonable precautions to avoid oil and fuel spills must be taken (e.g., spill trays, impervious sheets);</li> <li>- No refuelling is to take place within 50 m (meters) of groundwater boreholes, surface water bodies or streams;</li> <li>- Vehicles and machinery are to be regularly serviced to minimise oil and fuel leaks; and</li> </ul> <p><b>Spill management procedures</b></p> <ul style="list-style-type: none"> <li>- Do not come into contact with the spilt substance until it has been characterised and necessary personal protective equipment (PPE) is provided</li> <li>- Assess the situation for potential hazards;</li> <li>- Isolate the area as required.</li> <li>- Spills are to be stopped at the source as soon as possible (e.g., close valve or upright drum);</li> </ul>		

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>- Spilt material is to be contained to the smallest area possible using a combination of absorbent material, earthen bunds or other containment methods;</li> <li>- Spilt material is to be recovered as soon as possible using appropriate equipment. In most cases, it will be necessary to excavate the underlying soils until clean soils are encountered;</li> <li>-All contaminated materials recovered after a spill, including soils, absorbent pads and sawdust, are to be disposed off at an appropriately licenced facility; and</li> <li>-A written incident report must be submitted to the farm manager.</li> <li>- Should there be major petroleum product spills on site, (spill of more than 200 litres per spill) such incidences should be reported to the Ministry of Mines and Energy (MME) on Form PP/11 titled "Reporting of major petroleum product spill".</li> </ul>		
<b>Groundwater pollution control</b>	Possible nutrient enrichment of groundwater due to leakage of sewage into the groundwater. Potential risk associated with the discharge	<ul style="list-style-type: none"> <li>- Ensure compliance to section 68, 70 and 72 of the Water Resources Management Act No.11 of 2013.</li> <li>- Effluent waste discharge permits are in place and permit conditions should be adhered to;</li> </ul>	Daily and weekly	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
	of wastewater into watercourses.	<ul style="list-style-type: none"> <li>-The Bubbler greywater treatment system needs to be well inspected for leakages at all times;</li> <li>-Effluent water should be tested yearly or as required, to ensure that it complies with relevant legislation and standards;</li> <li>- Effluent should not be discharged into a sensitive habitat/ area (i.e., dam, river or stream);</li> <li>- Groundwater needs to be monitored and tested to ensure that there is no contamination; and</li> <li>- The kitchen fat trap should be well maintained and cleaned monthly or more regularly.</li> </ul>		
<b>Groundwater management</b>	Potential lowering of groundwater due to water abstractions during lodge construction and operation.	<ul style="list-style-type: none"> <li>- Abstraction permits should be in place;</li> <li>- Groundwater levels should be monitored regularly to understand the performance of the aquifers against lodge abstractions;</li> <li>-Turn off pumps when abstraction is not required;</li> <li>-Adopt a water wise mindset on site;</li> <li>- Water leakages or pipe burst should be reported and fixed as soon as possible;</li> <li>-Should there be a desire to plant ornamental plant on site, drought resistant species should be considered;</li> <li>- Eco-friendly and low water use equipment should be used i.e. eco-freindly showerheads and taps; and</li> </ul>	Daily and weekly	Farm Manager Foreman Employees

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		- Activities that require a lot of water should be monitored to ensure water is used efficiently.		
<b>Waste management</b>	Possible sewage discharge runs the risk of pathogen /diseases transmissions and odours.	-Ensure toilets are always clean and dry; - Provide adequate sanitary facilities, including clean water, soap, disposable paper towels; - Provide suitable personal protective equipment that may include waterproof/abrasion-resistant gloves, footwear, eye, and respiratory protection; - The monitoring of wastewater discharges should be conducted regularly.	Daily	All staff members
	Environmental pollution (littering and poor storage of solid waste)	Waste management should follow the International Finance Corporation (IFC) standards as follows: - Implement a waste management plan (from “cradle to grave” methodology) covering all aspects of waste generated on-site; - Ensure a high standard of housekeeping across/within farm boundaries; - Solid waste shall be stored in an appointed area in covered, tip-proof metal drums/skips for collection and disposal to an approved waste management site; - The waste storage areas shall always be kept clean and tidy; -The proposed compost site should always be inspected regularly;	Daily and weekly	All staff member

Aspect	Potential impacts	Management/mitigation measures	Monitoring requirements	Responsibility
		<ul style="list-style-type: none"> <li>- Ensure solid wastes on site are removed timeously to ward off unwanted scavengers; and</li> <li>- Implement the waste management hierarchy across the site: Avoid, reuse, recycle, then the disposal.</li> </ul>		

## 6 DECOMMISSIONING PHASE

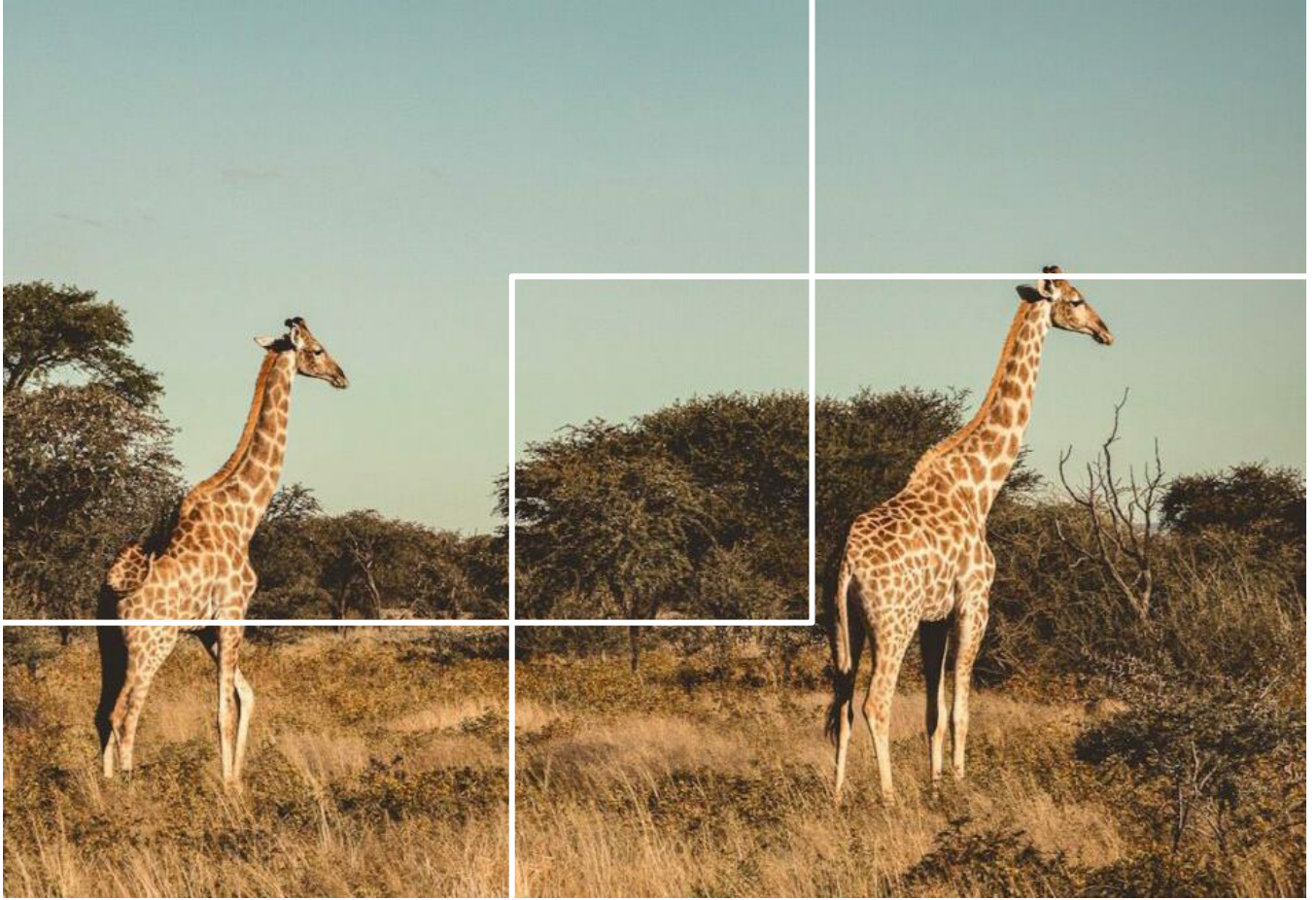
In the event that the Farm Manager plan to cease with lodge operation (and/or if ownership is transferred), the Proponent and the new owner should mutually agree on the way ahead for the farm and associated infrastructure. If the new owner intent not to use the infrastructure, the Proponent will be responsible to remove all equipment, machinery, chemicals, fuel and any other element from the farm. If infrastructure is removed at decommissioning stage, it is recommended that the Proponent implement a rehabilitation plan for the site to ensure that the site is returned to its natural state as feasibly possible and that no further degradation to the site is foreseen.

## **7 IMPLEMENTATION OF THE EMP**

The proposed tourism and hunting lodge construction completion and operation work will be carried out in compliance with the relevant regulations. Minor to moderately significant impacts are anticipated, hence management and mitigation measures are in place to eliminate or reduce the severity of potential impacts

This environmental management plan:

- A. Has been prepared according to a contract with the Proponent;
- B. Has been prepared based on information provided to ECC up to September 2023;
- C. Is for the sole use of the Proponent, for the sole purpose of an EMP
- D. Must not be used (1) by any person other than the proponent or (2) for any purpose other than an EMP;
- E. Must not be copied without the prior written permission of ECC.



Submitted to: Waldeck (Pty) Ltd

Attention: Mr Constantin Fugger

## REPORT:

# BACKGROUND INFORMATION DOCUMENT FOR THE PROPOSED DEVELOPMENT AND CONSTRUCTION OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO. 28, KHOMAS REGION, NAMIBIA

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PROJECT NUMBER: ECC-121-455-BID-04-A

REPORT VERSION: FINAL

DATE: 20 JUNE 2023

Prepared by:  
 **ECC**  
ENVIRONMENTAL  
COMPLIANCE CONSULTANCY



## **TITLE AND APPROVAL PAGE**

Project Name:	Background information document for the proposed Development and Construction of a Tourism and Hunting Lodge on Farm Waldeck No. 28, Khomas Region, Namibia
Client Company Name:	Waldeck (Pty) Ltd
Client Name:	Mr Constantin Fugger
Ministry Reference:	NA
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Status of Report:	Final
Project Number:	ECC-121-455-BID-04-A
Date of issue:	20 June 2023
Review Period	NA

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*Please note at ECC we care about lessening our footprint on the environment; therefore, we encourage that all documents are printed double sided.*

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# 1 BACKGROUND INFORMATION DOCUMENT

## 1.1 PURPOSE OF THIS DOCUMENT

Environmental Compliance Consultancy (ECC) has been contracted by Waldeck (Pty) Ltd to undertake an environmental scoping assessment. The proposed project involves the development and construction of a tourism and hunting lodge on farm Waldeck No. 28, located about 50 km south east of Windhoek, along the D1463, In the Khomas Region, Namibia.

The purpose of this Background Information Document (BID) is to provide Interested and Affected Parties (I&APs) a background to the proposed project and to invite I&APs to register as part of the environmental scoping assessment process.

Through registering for the project, all I&APs will be kept informed throughout the ESIA process, and a platform for participation will be provided to submit comments/ recommendations pertaining to the project.

This BID includes the following information:

- The proposed expansion of the plant and increased production activities and location;
- The necessity of the project, potential benefits or adverse impacts anticipated;
- The alternatives to the project that will be considered and assessed;
- How the ESIA process works;
- The public participation process and how to become involved; and
- Next steps and the way forward.

## 1.2 DESCRIPTION OF THE PROPOSED PROJECT

Environmental Compliance Consultancy (ECC) has been engaged by the proponent to undertake an ESIA and develop an Environmental Management Plan (EMP) in terms of the Environmental Management Act, 2007 and its regulations. An environmental clearance application will be submitted to the Ministry of Environment, Forestry and Tourism (MEFT) for the project, which is the relevant authority to make a Record of Decision (RoD) with regard to the proposed project.

## 1.3 LOCATION

Farm Waldeck No. 28 is located to the southeast of Windhoek next to the C23 road. It can be accessed from Windhoek by driving south along the B1 road and turning onto the D1463 road in an eastern direction. The farm is situated north of the road approximately 9 km from the junction. The location is shown in Figure 1.

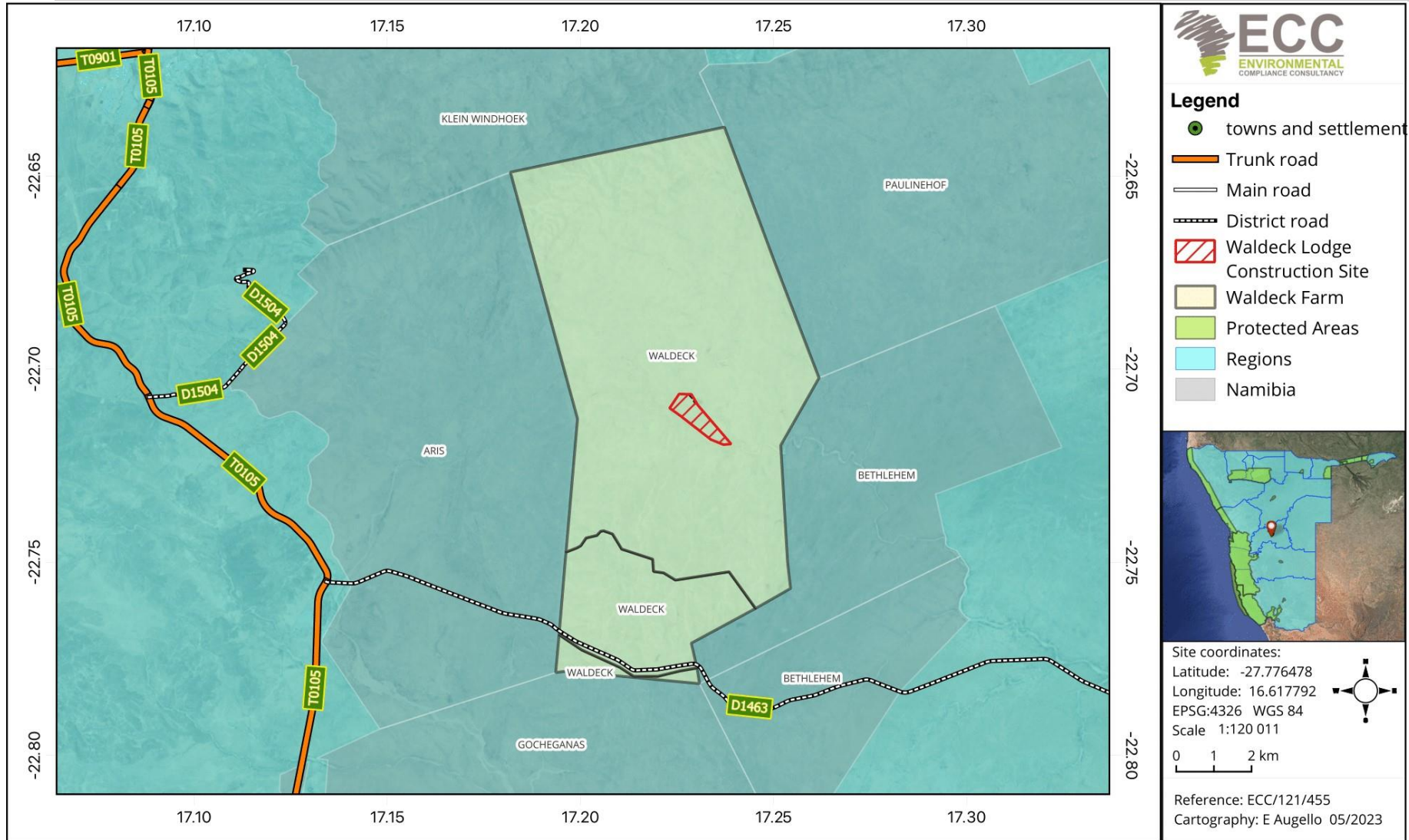


Figure 1 -Locality Map of the Proposed Project

## 1.4 WHAT IS PROPOSED

Waldeck (Pty) Ltd proposes to develop a tourism and hunting lodge approximately 36 km south of Windhoek on Farm Waldeck No. 28 in the Khomas Region, Namibia. The development involves the construction of 6 accommodation units, a main common core area, two solar plants, an activities area, a butchery, cold storage and an existing game fence around the farm. All work will fall within the boundaries of farm Waldeck No. 28.

## 1.5 NEED FOR THE PROJECT

Namibia is a tourism destination for people around the world due to various unique and popular features, attractions and sites across the country. The tourism and hunting industries are both big contributors to the Gross Domestic Product (GDP) of Namibia and play an important part with regard to socio-economics and conservation within the country. During the COVID-19 pandemic, these two sectors suffered greatly due to border closures around the globe. Since early 2021 more and more countries gradually started to reopen their borders for international travel which helped to reduce a bit of pressure on these sectors in Namibia. Up to 2023 tourism and hunting sectors, despite a constant growth, are not yet at full capacity.

New tourism and hunting projects will be beneficial in the sense that it attracts tourists and hunters to the country and will also result in the creation of employment opportunities since this project will create approximately 100 jobs during the construction phase of the project and approximately 12 jobs during the operational phase.

## 1.6 CONSTRUCTION AND OPERATIONAL PHASES

The following are envisioned during the proposed project:

- 6 accommodation units with a core area consisting of the following: restaurant, wellness centre (with gym, sauna and therapy room), pool, boma area, lounge, bar, dining area, cellar, media room, public bathrooms, staff bathrooms, offices, laundry and storerooms;
- Two solar plants with battery room (for a total peak demand of 200kWh); and
- A game fence around the farm;

## 1.7 POTENTIAL IMPACTS OF THE PROJECT

### 1.7.1 SOCIO-ECONOMIC

The potential social impacts are anticipated to be of low significance and those that may transpire shall be confined within the farm boundaries and neighbouring farms, these potential impacts may include the following:

- 
- Potential to unearth, damage or destroy undiscovered heritage remains;
  - Health and Safety on the farm with regards to firearms being used;
  - Noise generation by hunting rifles;
  - Minor disruption to the residents of neighbouring farms, including some potential increase in noise levels as a result of the use of aircraft (Helicopter and small planes) on the property;
  - Jobs will be created as a result of the project; and
  - There will be anticipated economic benefits on a regional and national scale.

#### 1.7.2 ENVIRONMENTAL

Some of the potential environmental impacts are anticipated to be of minor significance, and those that may occur shall be contained within the farm boundaries. These potential minor impacts may include the following:

- Minor risk of spillage of hydrocarbons from diesel tank may, that may potentially lead to localised ground contamination; this aspect will be controlled at all times.
- Potentially localised lowering of groundwater levels; and
- Potential erosion within cleared areas;

There may also be impacts of a more significant nature that may require further investigation during the ESIA process. The impacts proposed at this stage include, but are not limited to:

- Vegetation clearing with regards to all proposed construction on the farm;
- Groundwater usage for the lodge area, hunting activities and greenhouses, with the potential lowering of groundwater levels over a wider area;
- Potential mismanagement of game numbers and genetic make-up of game on the property;
- Lead poisoning (i.e. scavengers/predators could be impacted by lead used in ammunition);
- Impacts to biodiversity with regards to aircrafts landing and vehicles driving in the field; and
- Tourism and hunting activities may have impacts on birds during breeding/nesting periods.

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## **2 CONSIDERATION OF ALTERNATIVES**

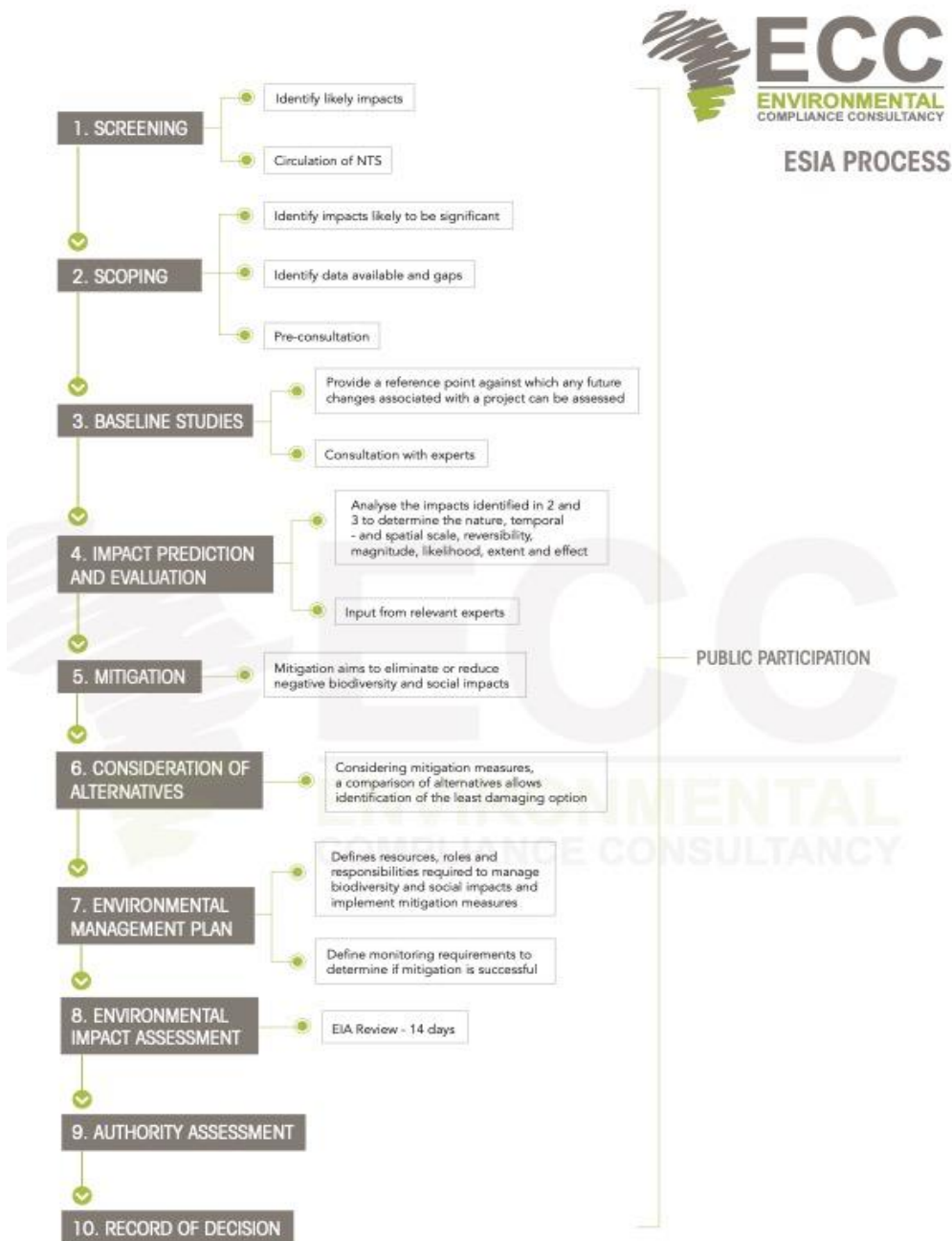
Best practice environmental assessment methodology calls for consideration and assessment of alternatives to a proposed project.

The proponent is the owner of farm Waldeck No. 28, renovations to existing structures and the lodge construction have already started. Thus, no locality alternatives have been considered for the proposed project.

During the ESIA assessment, alternatives will take the form of consideration of optimisation and using eco-friendly solutions to reduce potential impacts e.g., lead-free ammunition, renewable energy, water recycling etc.

### 3 THE ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT PROCESS

This ESIA, conducted by ECC, is undertaken in terms of the Environmental Management Act, 2007 and its regulations. The process followed in this ESIA is set out in the flowchart in Figure 2.



**Figure 2: Flowchart of the environmental and social assessment process**



### 3.1 SCREENING

A review of the planned project was undertaken and the screening findings against the listed activities were conducted; the findings of which are summarised in Table 1.

**Table 1 – Listed activities triggered by the proposed project**

<b>LISTED ACTIVITY</b>	<b>EIA SCREENING FINDING</b>
<p><b>ENERGY GENERATION, TRANSMISSION AND STORAGE ACTIVITIES</b></p> <p>(1.a) The construction of facilities for the generation of electricity;</p> <p>(1.b) The construction of facilities for the transmission and supply of electricity;</p>	<ul style="list-style-type: none"> <li>• A Solar plant and battery room will be constructed for the Lodge site and will cater for a demand of 200kWh.</li> </ul>
<p><b>WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES</b></p> <p>(2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste.</p> <p>(2.3) The import, processing, use and recycling, temporary storage, transit or export of waste.</p>	<ul style="list-style-type: none"> <li>• Septic tanks are installed on site, where effluent from septic tank will be treated further in grey water treatment.</li> <li>• Waste generated on-site, including construction waste will be removed from the site and disposed of at the Kupferberg landfill site.</li> </ul>
<p><b>FORESTRY ACTIVITIES</b></p> <p>(4.) The clearance of forest areas, deforestation, afforestation, timber harvesting or any other related activity that requires authorisation in term of the Forest Act, 2001 (Act No. 12 of 2001) or any other law.</p>	<ul style="list-style-type: none"> <li>• Construction of the lodge has already commenced. Thus, vegetation has been cleared for these areas. However, protected tree species and trees larger than 18 cm in diameter will not be part of the clearing.</li> <li>• Vegetation will be cleared for the construction of the lodge infrastructure, solar plants and activities areas.</li> </ul>
<p><b>LAND USE AND DEVELOPMENT ACTIVITIES</b></p> <p>5.3) Construction of veterinary protected area or game proof and international boundary fences.</p>	<ul style="list-style-type: none"> <li>• An existing game fence along the boundary of farm Waldeck.</li> </ul>
<p><b>TOURISM DEVELOPMENT ACTIVITIES</b></p> <p>(6.) The construction of resorts, lodges,</p>	<ul style="list-style-type: none"> <li>• The construction of 6 lodge units, and a wellness centre, with a core area, will consist of both hard</li> </ul>

hotels or other tourism and hospitality facilities.	<p>construction and canvas structures.</p> <ul style="list-style-type: none"> <li>• Construction of staff village for 12 staff.</li> </ul>
<p><b>WATER RESOURCE DEVELOPMENT</b> (8.1) The abstraction of ground or surface water for industrial or commercial purposes.</p> <p>(8.5) Construction of dams, reservoirs, levees and weirs.</p> <p>(8.6) Construction of industrial and domestic wastewater treatment plants and related pipeline systems.</p>	<ul style="list-style-type: none"> <li>• Water will be sourced from existing boreholes and pumped to reservoir of roughly 60m<sup>3</sup>.</li> <li>• The waste treatment system will be constructed to treat water to an acceptable (useable) greywater.</li> </ul>
<p><b>OTHER ACTIVITIES</b> (11.2) Construction of cemeteries, camping, leisure and recreation sites.</p>	<ul style="list-style-type: none"> <li>• The project intends to centre around the construction of a lodge and will include leisure and recreation activities.</li> </ul>

### 3.2 SCOPING

Due to the nature of the proposed project, and the implementation of industry best practice mitigation measures during the development, construction and operational phases, the effects on the environment and society are expected to be low to moderate and will be limited within the farm boundaries, with an exception to the potential impacts from groundwater levels.

### 3.3 BASELINE STUDIES

For the proposed project, baseline information was obtained through a desk-based study by focusing on the environmental receptors that could be affected by the proposed project. ECC will also engage with stakeholders, I&APs and the proponents to seek input into the assessment, and should it be required specialist studies will be initiated.

### 3.4 TERMS OF REFERENCE

Based on the stakeholder engagement through the defined public consultation process including any written correspondence and the baseline studies, the ToR for the impact assessment will be finalised and confirmed with the Environmental Commissioner.

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### 3.5 STAKEHOLDER ENGAGEMENT

The public and key stakeholders receive invitations to register as I&APs. After the presentation of the proposed project and ESIA process through the defined public consultation process, a period of time for input will be granted for the Environmental Assessment Practitioner (EAP) to receive any additional concerns or comments from registered I&AP's. All feedback from the initial public consultation process will be incorporated into the scoping report.

### 3.6 SCOPING REPORT

The scoping report will be drafted and made available to the registered I&APs for comment before being submitted to the competent authority and MEFT. The scoping report will contain a description of the project and the bio physical and socio-economic environments, the specialist baseline studies, stakeholder engagement report and the terms of reference for the ESIA.

### 3.7 IMPACT ASSESSMENT

Impacts will be assessed using the ECC ESIA methodology. The ESIA will be conducted in terms of the Environmental Management Act, 2007 and its regulations. ECC's methodology for impact assessments was developed using IFC standards in particular Performance Standard 1 'Assessment and management of environmental and social risks and impacts' (IFC 2012, 2017) and Namibian Draft Procedures and Guidance for ESIA and EMP (GRN, 2008) including international and national best practice with over 25 years of combined ESIA experience.

### 3.1 ENVIRONMENTAL MANAGEMENT PLAN

An EMP shall be developed for the proposed project setting out auditable management actions for Waldeck (Pty) Ltd to ensure careful and sustainable management measures are implemented for their activities in respect of the surrounding environment and community.

## **4 THE WAY FORWARD – PUBLIC PARTICIPATION**

Public participation is an important part of the scoping process. It allows you, the public and stakeholders to raise concerns or provide valuable local environmental knowledge that can benefit the assessment process as well as aid the planning process for the scoping phase of the defined assessment process. At this phase ECC will perform the following:

- Prepare and submit the application for the environmental clearance certificate in a prescribed manner
- Identify relevant key stakeholders, authorities, municipalities, environmental groups and interested or affected members of the public, hereafter referred to as I&APs
- Carry out a public consultation process in accordance with Regulation 21 of the EMA 2007 including:
  - Distribute the BID for the Proposed Project (this document)
  - Advertise the environmental application and call for registration of I&AP's in two national newspapers
  - Open a I&AP register and record all comments of I&APs and present such comments, as well as responses provided by ECC, in the comments and responses report, which will be included in the scoping report that shall submitted with the application
- Prepare a scoping report and provide the same to registered I&APs for comment
- Submit the scoping report and the I&AP comments to the competent authority and Environmental Commissioner for a record of the decision

The request for registration as an I&AP as well as any comments on the BID or Project must be submitted in writing and can be emailed using the details in the contact us section below. Registration as an I&AP for the project can be completed online on the ECCs website on the projects page, or by using this link: <https://eccenvironmental.com/download/the-proposed-development-and-construction-of-a-tourism-and-hunting-lodge-on-farm-waldeck-no-28-khomas-region-namibia/>

Registration as an I&AP should be submitted on or before 10 July 2023.

We welcome any enquiries regarding this document and its content. Please contact:

**Environmental Compliance Consultancy (ECC)**

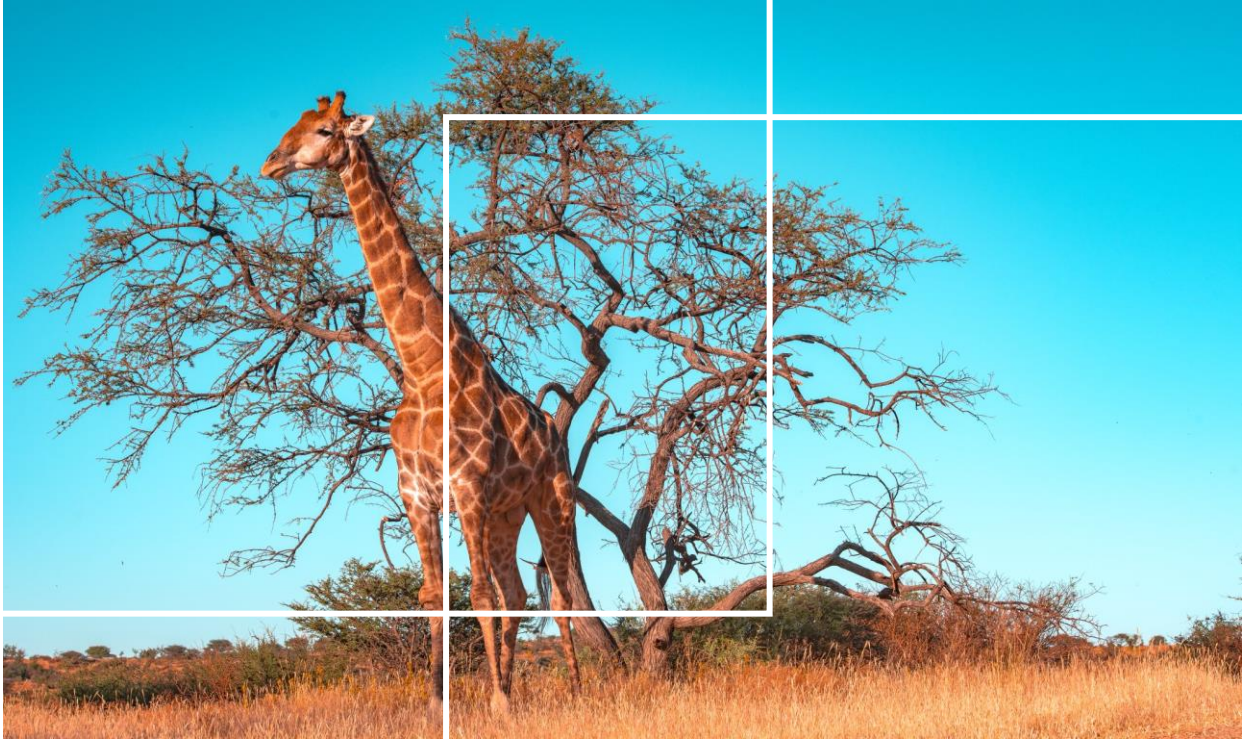
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At ECC we make sure all information is easily accessible to the public.

Follow our social pipes online to be kept up to date.



**Submitted to: Waldeck (Pty) Ltd**  
**Attention:** Mr. Constatin Fugger  
P O Box 21012  
Olympia, Windhoek  
Namibia.

## **ADDENDUM REPORT:**

# **IAPS COMMENTS AND RESPONSES ON THE SCOPING REPORT FOR THE PROPOSED CONSTRUCTION AND DEVELOPMENT OF A TOURISM AND HUNTING LODGE ON FARM WALDECK NO.28, KHOMAS REGION, NAMIBIA**

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**PROJECT NUMBER:** ECC-121-455-REP-11-A

**REPORT VERSION:** REV 01

**DATE:** 26 OCTOBER 2023

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**TITLE AND APPROVAL PAGE**

Project Name:	IAPs comments and responses on the scoping report for the Proposed construction and development of a tourism and hunting lodge on Farm Waldeck No.28, Khomas Region, Namibia
Client Company Name:	Waldeck (Pty) Ltd
Client Name:	Mr. Constatin Fugger
Ministry Reference:	APP-001593
Authors:	Samuel Shinyemba, Jessica Bezuidenhout and Stephan Bezuidenhout
Status of Report:	Final for Government submission
Project Number:	ECC-121-455-REP-11-A
Date of issue:	26 October 2023
Review Period	NA

**ENVIRONMENTAL COMPLIANCE CONSULTANCY CONTACT DETAILS:**

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**DISCLAIMER**

The report has been prepared by Environmental Compliance Consultancy (Pty) Ltd (ECC) (Reg. No. 2022/0593) on behalf of the Proponent. Authored by ECC employees with no material interest in the report's outcome, ECC maintains independence from the Proponent and has no financial interest in the Project apart from fair remuneration for professional fees. Payment of fees is not contingent on the report's results or any government decision. ECC members or employees are not, and do not intend to be, employed by the Proponent, nor do they hold any shareholding in the Project. Personal views expressed by the writer may not reflect ECC or its client's views. The environmental report's information is based on the best available data and professional judgment at the time of writing. However, please note that environmental conditions can change rapidly, and the accuracy, completeness, or currency of the information cannot be guaranteed.

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## ABBREVIATIONS

ABBREVIATIONS	DESCRIPTION
EAP	environmental assessment practitioner
ECC	Environmental Compliance Consultancy (Pty) Ltd
ESIA	environmental and social impact assessment
EMA	Environmental Management Act, No.7 of 2007
IAPs	interested and affected parties
MEFT	Ministry of Environment, Forestry and Tourism

## **INTRODUCTION**

### **1.1 PURPOSE OF THE COMMENTS CONSOLIDATED REPORT**

This document has been compiled to acknowledge comments received from registered interested and affected parties (IAPs) following the closure of the 7 days public review period of the draft scoping plus impact assessment report for the proposed Project. The public review period presented an opportunity to IAPs to comment in writing on the draft scoping plus impact assessment report. The Proponent propose to construct and develop a tourism and hunting lodge and associated infrastructure on Farm Waldeck No.28, Khomas Region, Namibia.

The draft scoping plus impact assessment report was completed for the proposed Project and undertaken in accordance with the requirements of the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulations of 2012 gazetted under the Environmental Management Act (EMA), 2007 (Act No. 7 of 2007).

Environmental Compliance Consultancy (ECC) prepared the scoping report and impact assessment report, which was provided to the public and registered IAPs for review for 7 days from the 27<sup>th</sup> of September – 3<sup>rd</sup> of October 2023.

This document compiles all comments received during the public review period; presents the responses from ECC as the appointed environmental assessment practitioner (EAP) for the project and the Proponent in the assessment.



## 2 SUMMARY OF COMMENTS FROM I&APS

### 2.1 INTRODUCTION

In accordance with the Regulations of the EMA 2007, on the 27<sup>th</sup> of September 2023 the scoping plus impact assessment report was circulated electronically to all registered interested and affected parties (IAPs) and identified key stakeholders. Comments received during the public review period are collated in the "Comment and Response" table presented in Table 1.

### 2.2 KEY FEEDBACK ON ISSUES OF CONCERN

The scoping plus impact assessment report was provided to all I&APs, identified stakeholders and made publicly available on ECC's website. The purpose of the public review period was to solicit out comments, feedback, and allow genuine participation in the final phase of the EIA process. Comments were received electronically from Mr Juergen Hoffmann and Ms Heide Hoffmann; the owners of Farm Unkenfels No. 73, who are directly affected neighbours. Farm Unkenfels No.73 is bordering Farm Waldeck No.28 to the southeast, therefore Mr and Ms Hoffmann will be directly affected by the proposed project activities. The key areas raised from the review of the comments received are summarised in the section below.

#### 2.2.1 THE SHORT PUBLIC REVIEW PERIOD

Mr Juergen Hoffmann expressed dissatisfaction with the short time allocated for registered IAPs to comment on the draft scoping plus impact assessment report. The EAP addressed this concern by emphasizing that the 7 days public review period was set in terms of Section 23(1) of the Environmental Impact Assessment Regulations of 2012. When comments are received after the public review closure date, the EAP always incorporate and address the comments in the final EIA report that is submitted to the competent authority.

#### 2.2.2 ECONOMIC REVENUE LOSSES

Mr Juergen Hoffmann pointed out that the erection of the game proof fence creates a barrier effect and game migration routes will be disrupted. As a result, Farm Unkenfels No.73 would likely incur direct economic revenues losses. The EAP addressed this comment by emphasizing that the Proponent has signed purchase contract agreements with the landowners of Farm Dornbaum No.74 and Farm No.27. Presently, the Project footprint isn't fully scoped out as these farm portions have not been fully transferred. However once fully procured and transferred, an amendment application will be launched with the competent authority which will take into account an impact assessment study on the acquisition of these portions and any related development activities.

### 2.2.3 IMPACTS ON THE SCHAAP RIVER CATCHMENT AREA

Mr Juergen Hoffmann highlighted that the project area entirely covers the largest portions of the Schaap River catchment area, which is the main origin of groundwater recharge for Farm Unkenfels No.73 and downstream farms. Additionally, IAPs expressed concerns that groundwater abstractions during the construction and operational phase will potentially lower the Schaff River groundwater levels and result in water shortages to downstream communities. The EAP acknowledges that the project area falls within a proclaimed groundwater control area. Water required from the construction and operational phase will be sourced from two existing boreholes, of which abstraction permits will be applied for. Water will be pumped to six 10 000 litres Jojo plastic reservoir tanks at the construction site to meet an estimate demand of between 6000 to 10 000 litres per day. During operations, between 9000 to 12 000 litres of water per day will be required. No new dams will be built, and the Proponent is committed to comply with the permits conditions and keeping abstraction track records and closely monitor the groundwater level trends as stipulated in the EMP.

### 2.2.4 CONCERNS RELATED TO THE PROJECT FOOTPRINT

Concern was raised by Mr Juergen Hoffmann that the Proponent is in contract agreement to purchase additional farm portions and that the project footprint will be extended. The EAP addressed this concern by narrating that the additional farm portions to be purchased by the Proponent are not fully transferred. However, once the land portions have been fully acquired by the Proponent, an amendment application will be launched with the competent authority which will assess the impacts of any land development that will be associated with these portions.

### 2.2.5 DIALOGUE WITH POTENTIALLY INTERESTED AND AFFECTED PARTIES

Mr Juergen Hoffmann pointed out that the Proponent should initiate a dialogue with directly affected parties (Farm Unkenfels No.73) to ensure a cooperative and sustainable neighbourhood. The Proponent will commit to engage with the I&APs should the responses not be sufficient.

### 3 DRAFT SCOPING REPORT – COMMENTS AND RESPONSES

**Table 1 - Comments and feedback from the scoping and impact assessment report public review received from: Mr Juergen Hoffmann**

Comment	EAP Response
The public reviewing period which is limited to only one week is insufficient.	The EAP set the 7 days public review period in terms of Section 23(1) of the Environmental Impact Assessment Regulations of 2012.
Important content/ information appears to be missing and the project boundaries appear to be incorrect.	The additional portions to be purchased by the Proponent are not fully procured and transferred, therefore were therefore not discussed in detail in the EIA report. An impact assessment study will be conducted and an application to amend the environmental clearance certificate will be launched with the competent authority once the land portions have been fully transferred.
The name and register number of our farm incorrectly recorded. Our farm is registered as Farm Unkenfels No. 73 (owner Mrs. H.M. Hoffmann) and we are the directly affected party of the project.	Thank you, this has been addressed. The correct map is presented in Chapter 2, page 20.
The significant environmental and economic impact that the project's game-proof fence and exotic game hunting activities will have on our farm and the ecosystem is not assessed. The fence and hunting area surrounds our farm and isolates it nearly completely from its natural surrounding and game migration routes. The planned common boundary between our farm and Farm Waldeck No.28 should be assessed. It is important to us as the landlocked affected party - now nearly entirely surrounded by your recent acquisitions of land - to	Habitat fragmentation impacts and related impacts are discussed in Chapter 7, section 7.4.2.  Presently, the Project footprint isn't fully discussed in the EIA report as the additional farm portions to be purchased have not been fully transferred. Upon land acquisition of these portions (Farm Dornabaum No.74 and Bethlehem No.27/Rem 3), an environmental clearance certificate amendment application will be launched with the competent authority. An impact assessment study will be undertaken related to the

Comment	EAP Response
make informed comments about your planned project and to provide qualified and valuable feedback for due consideration	acquisition of these portions and any planned development activities.
All relevant information should be assessed and communicated during the environmental impact assessment for the project. We wish for the proponent to fully understand the impact of its project on the environment and on our cordoned off land. This would ensure that informed decisions can be made when the proponent commits to and complies with an adequate environmental management plan for its project.	<p>The Proponent is committed to engage in transparent development activities that are assessed thoroughly by the appointed EAP. Formal meetings were held with the appointed EAP to fully understand the proposed scope of work.</p> <p>The Project specifications are provided in chapter 4 of the EIA report. Following acquisition Farm Dornbaum No.74 and Bethlehem No.27/Rem 3, the project footprint will likely expand. Therefore, the additional development activities that may be these portions will be assessed and an application to amend the environmental clearance certificate will be launched with the competent authority (MEFT).</p>
The project footprint must be well defined and should reflect the intended extent of the game-proof fence that is proposed to be erected.	The Project footprint will be fully defined following full land acquisition of the farm portions to be purchased. An assessment will be conducted further along with an application to amend the environmental clearance certificate.
The fence will permanently prevent and eliminate the movement of any wildlife along approximately 17km, or 80%, of the boundary of our farm. The significant environmental AND economic impact were not assessed.	These socio-economic impacts will be addressed in the ECC amendment application to be launched with the competent authority (MEFT) once the additional portions have been fully procured and transferred.

Comment	EAP Response
<p>The fence specifically aims to enclose the hunting operations and related infrastructure of the proponent where rhino, wildebeest and all other exotic game are bred and imported to Namibia for the purpose of securing special targets for hunting guests. What game density is planned with regard to each species? Our access road is covered by the planned rhino and other game hunting grounds, which may negatively impact our future use of the road.</p>	<p>The human – wildlife interaction mitigation management measures are addressed in the EMP, chapter 5, page 23-24.</p> <p>The import of rhinos and antelope species, their densities are not discussed in the current EIA study. This concept has been discussed as a limitation in chapter 6. This concept will be discussed thoroughly, and impacts will be addressed in the environmental clearance certificate amendment application once the additional farm portion are fully procured and transferred. The application to amend the environmental clearance certificate will be launched with the competent authority.</p>
<p>The project area entirely covers the largest portions of the catchment area of the Skaaprivier origin, which is the main origin of groundwater recharge for our farm. Upon acquisition of the land surrounding our farm, including structural aquifers, the proponent increased the storage capacity of one major dam already. What percentage or how many cubic meters of water will be retained by the proponent's dams in the rainy season before a single cubic meter is allowed to flow onward to the downstream farms beyond the project area and seep into and recharge the underlying rock formations and structural features (faults, fractures) downstream of the project, which comprise important aquifers.</p> <p>Regular rainwater recharge into the thick alluvium (sand and boulder beds) situated beneath the course of the Skaaprivier downstream from farms Waldeck, Iturea, Unkenfels, Doringboom, Bethlehem, Direlis etc. is</p>	<p>These impacts have been discussed in chapter 7, section 7.5, page 76-79. Mitigation management measures are also provided in the EMP.</p> <p>The project area falls within a proclaimed groundwater control area; therefore, the Proponent will apply for abstraction permits and is committed to comply to all permit conditions.</p> <p>Water required from the construction and operational phase will be sourced from two existing boreholes, of which abstraction permits will be applied for. Water will be pumped on planned schedules, but not concurrently to six 10 000 litres JoJo plastic reservoir tanks at the construction site to meet an estimate demand of between 6000 to 10 000 litres per day. The operation phase, between 9000 to 12 000 litres of water per day will be required. No direct pumping from the boreholes to</p>

Comment	EAP Response
<p>of critical longterm importance to all farming and other economic activities, as well as all wildlife, flora and fauna.</p> <p>Subsurface hidden rock formations beneath the alluvium of the Skaaprivier and other main stream courses form barriers and provide natural upward movement of water in the dry seasons, and therefore constitute important sources of water at numerous locations for all living organisms, including vegetation.</p> <p>The importance of subsurface storage of water in the subsurface aquifers along the entire Skaaprivier (and not only with isolated focus on the project area), fed and recharged by rainwater run-off cannot be overemphasised and should form the basis of a water management plan for the area. Such stored water is protected from the severe and extreme evaporation prevailing in Namibia.</p>	<p>existing dams will be required, however overflow of storage will be pumped to the dam as top up.</p> <p>No new dams will be built and there will be no enlargement of existing dams.</p> <p>The Proponent is further committed to engage in sound water management options by complying to all mitigation management measures as narrated in the EMP. By comply to the EMP recommendations and conditions, the Proponent is committed to develop a water management plan to ensure water is used sparingly and efficiently.</p>
<p>Are any new earth dams or enlargements of existing dams planned? Will excess water from any boreholes be pumped into any open dams?</p>	<p>No new earth dams will be construction and there will be no enlargement of existing dams. Water abstracted from existing boreholes will not be pumped directly into the dams. Instead, water will be pumped to six 10 000 Jojo tanks which will supply water required for lodge operations. Only excess water will be to the dams as top up.</p>

## 4 ACKNOWLEDGEMENTS

Through the ESIA process, the Proponent and ECC have endeavoured to provide a platform to hear and address all relevant comments put forward by I&APs. ECC would like to thank the I&APs and stakeholders for providing feedback during the scoping phase of the ESIA process. We acknowledge and appreciate the time required to review these documents and ECC genuinely appreciate the input provided by I&APs. The valuable feedback received during the scoping and impact assessment report review period has informed a robust impact assessment study which is submitted to the competent authorities for a record of decision to be made. ECC acknowledges that constructive feedback results in an improved ESIA and a project that is understood by the community and I&APs.