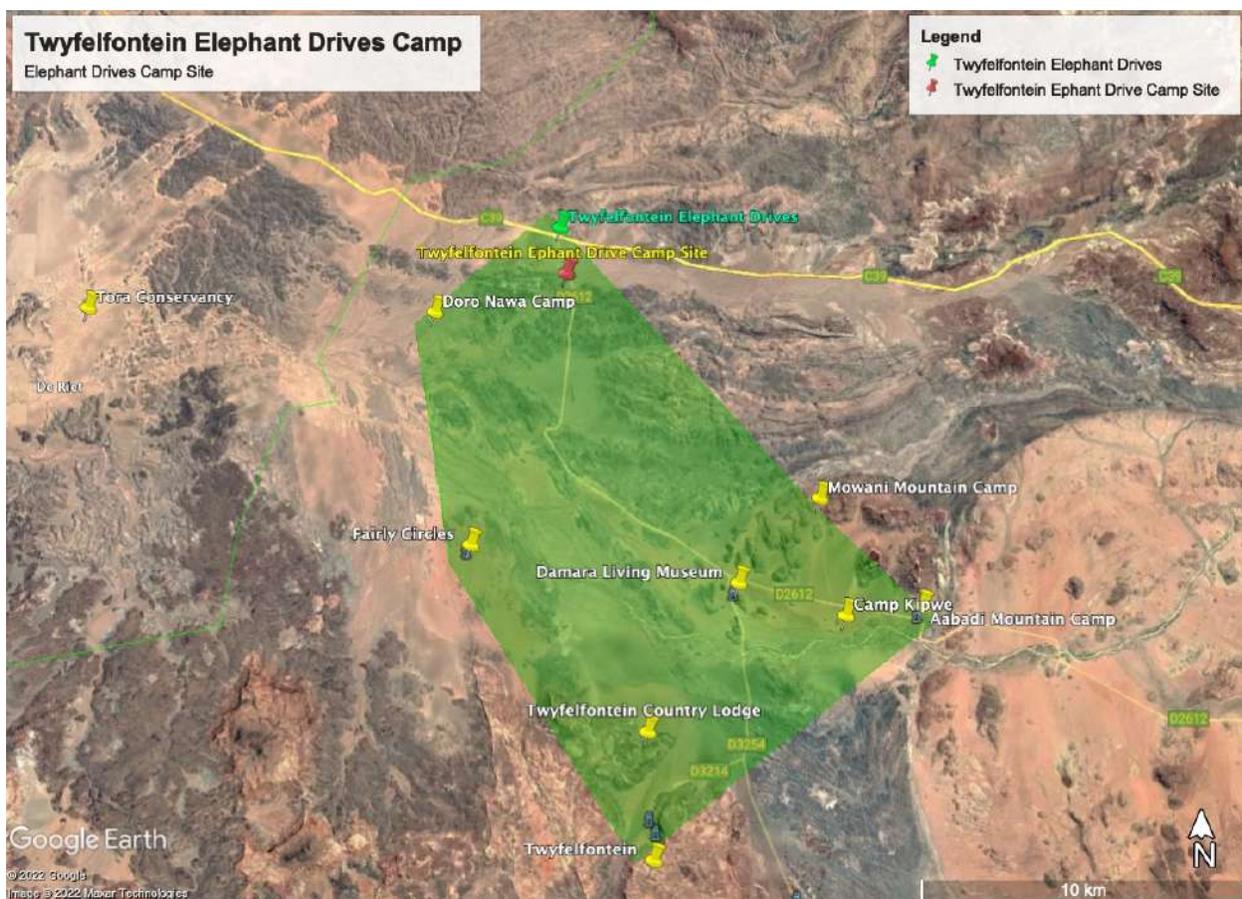




REF: 221018000136 / APP 000136

Scoping And Environmental Management Plan For Twyfelfontein Elephant Drives and Safari Camp Site, Located At Twyfelfontein Area, Khorixas Constituency, Kunene Region



CONSULTANT:

Mr. Ipeinge Mundjulu (BSC, MSc)

Red-Dune Consulting CC

P O Box 27623 Windhoek

Cell: +264 81 147 7889

PROPONENT

Mr. Eddy P. Rhyn

Twyfelfontein Elephant Drives

P O Box 411, Arandis



DOCUMENT INFORMATION

DOCUMENT STATUS	Final
APPLICATION NO:	REF: 221018000136 / APP 000136
PROJECT TITLE	Scoping And Environmental Management Plan For Twyfelfontein Elephant Drives and Safari Camp Site
CLIENT	Twyfelfontein Elephant Drives
PROJECT CONSULTANT	Mr. Ipeinge Mundjulu
LOCATION	Twyfelfontein Area, Khorixas Constituency, Kunene Region
DATE	31 October 2022

ACRONYMS

DEA	Department of Environmental Affairs
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
ECO	Environmental Compliance Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act (No. 7 of 2007)
EMP	Environmental Management Plan
MEFT	Ministry of Environment Forestry and Tourism
PPE	Personal Protective Equipment
RD	Red-Dune Consulting CC
SM	Site Manager

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1. Introduction

Twyfelfontein Elephant Drives and Safari CC is a 100% Namibian tourism company situated at the T-Junction of the Twyfelfontein Road (D2612) which connects into the Palmwag and Khorixas main road (C39). *“I was born just up the valley from where the Desert Elephants are found. As a young boy, I had to herd and look after my family's livestock and many times I literally bumped into these gentle Desert Giants on foot. We were told by our elders that if you see an Elephant, run for your life, as they will catch you and kill you, so as a young boy and doing as I was told I ran for my life every time I encountered these animals. However, as I grew up, I saw for myself that these animals don't really mind you unless you disturb them or they sense a threat” Mr. Charles, Owner.*

Currently, the company is offering tourists a 3 hour daily safaris to see Desert Elephants. The company prides itself as guardians of the Elephants through day by day by day observation which enables them to monitor their well-being such as health problems and importantly protecting them from poaching.

Through its business expansion strategy, the company has over the years planned to open a camp site which is planned to open from 1st November 2022.

2. Project Description

2.1. Location

The campsite is situated in a valley adjacent to the company's safari drive office at farm Bethanis, Twyfelfontein area, Kunene Region (-20.438889°S, 14.345°E).

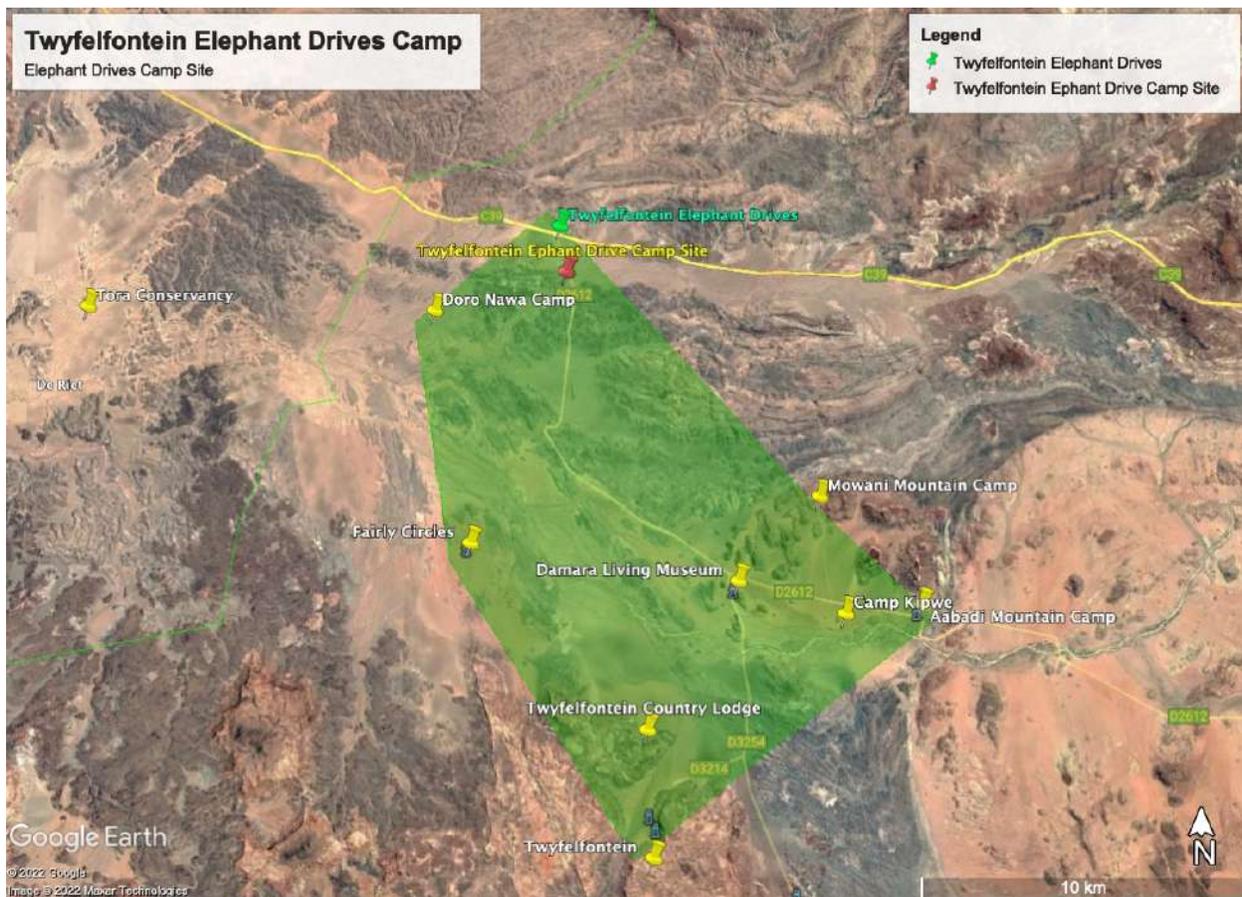


Figure 1. Twyfelfontein Elephant Drive and Safari Camp

2.2. Site description

The camp site is located in the dry valley of Aba Huab River Figure 2.

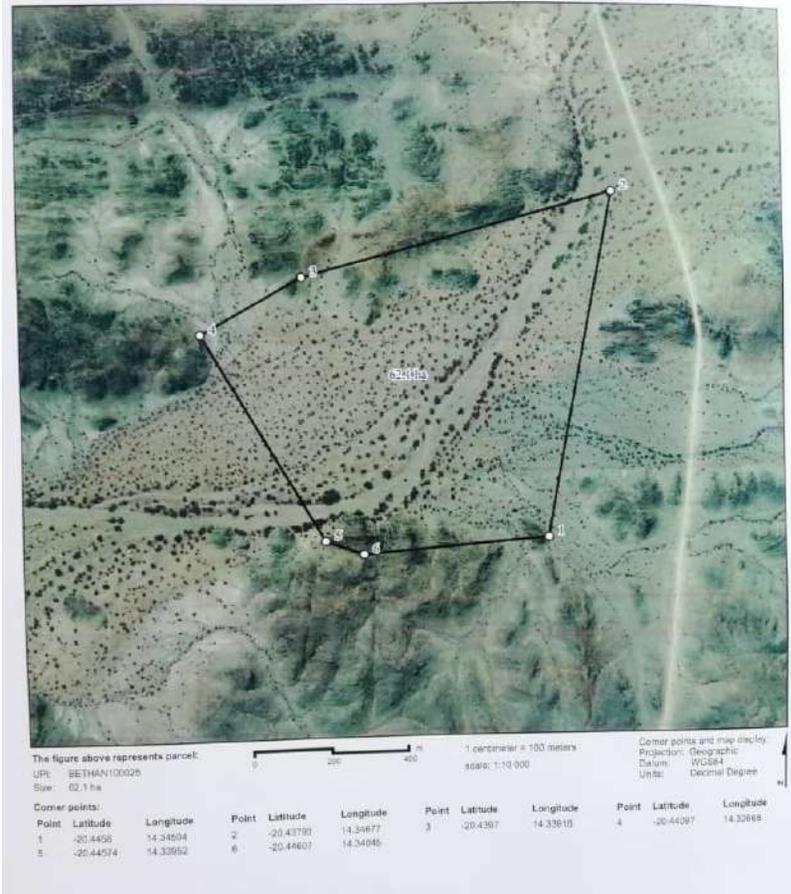


Figure 2. Aerial Site Map (Source: Ministry of Land Reform)

Generally Twyfelfontein area has one of the highest number of camp site, if not the highest per square kilometre in the country due to the attractive characteristic of Twyfelfontein and Desert Elephant in the areas. There are 7 camp site in the radius of about 12 kilometres.



Twyfelfontein, locally known as *!Ui-!Ais*, in *Damara Nama*, is a site of ancient rock engravings. According UNESCO, Twyfelfontein has one of the largest concentrations of rock engravings in Africa. The site forms a coherent, extensive and high-quality record of ritual practices relating to hunter-gatherer communities for over 2,000 years. The area is

also home to the petrified forest, which is known to be a deposit of large tree trunks that have "turned to stone" through a process of diagenesis. The Petrified forest is declared a National monument in Namibia since 1950.

2.3. Supporting infrastructure

Red-Dune prepared a project question for the proponent to outline critical components of the project supporting infrastructure of the project is presented below;



Reg No. cc2018/09606
Mobile: (+264 81) 147 7889
Email: reddunes18@gmail.com
Red-Dune Consulting CC
P O Box 27623
WINDHOEK
9000

Environmental Management | Socioeconomic Valuations | Fisheries and
Marine Resources Management | Wildlife Management

**QUESTIONNAIRE FOR SETTING UP A TOURIST CAMPSITE AND TENDED
ACCOMMODATION FACILITY AT TWYFELFONTEIN, KUNENE REGION**

1. PROJECT DESCRIPTION

1.1. Location (With GPS coordinates)
FARM Bethanis, Twyfelfontein AREA
GPS. 20°26'20"S - 14°20'41"E

1.2. Size of the area in square meters
62.5 Hectars / 625,000 square metres.

1.3. Camping Site Capacity (How many people can be accommodated, i.e. per night)
Between 50 - 70 Clients per night

1.4. Closed Camp / Open Camp (If closed, type of fencing to be used)
Open Camp

2. TENDED ACCOMMODATION FACILITY

2.1. Types of tents
Canvas on stilts, to cause minimum disturbance
to the environment.

2.2. Colour of tents
Brown Canvas or beige.



Reg No. cc2018/09606

Mobile: (+264 81) 147 7889
Email: reddunes18@gmail.com
Red-Dune Consulting CC
P O Box 27623
WINDHOEK
9000

Environmental Management | Socioeconomic Valuations | Fisheries and
Marine Resources Management | Wildlife Management

2.3. Tend Capacity

20 Clients per night

3. WASTE MANAGEMENT

3.1. Briefly describe the strategy / plans for household solid waste management (food and beverage containers etc), For the ^{and tented camps} Campsite, left over food will be given to the local people to give to their chickens, dogs etc. Beverages containers will be carefully kept and then be disposed off in the nearby town of Khorixas at the

3.2. Briefly describe the strategy / plans for liquid waste management (sewer and other household liquid waste), We will be building French drains ^{official dump site} for the Sewage and Shower waste water/French drains will be 3x4 metres and at least 3 metres deep.

4. SOURCE OF WATER (i.e. Boreholes and how much i.e. approximately 1000L per day)

Our water source is from our own drilled borehole and the Campsite should use around 10,000 Liters of water and the tented Camp around 20,000 Liters of water.

5. SOURCE OF ELECTRICITY (National Grid / Solar and Capacity i.e. 5mw)

We want to be as eco friendly as possible, so only solar power will be utilized.

6. CONSTRUCTION

6.1. Construction Materials (Bricks / Stones)

Construction will be done with stone (local) and brick (also made locally) this gives a lot of local people jobs and less transport cost, so more eco-friendly.



Reg No. cc2018/09606

Mobile: (+264 81) 147 7889
Email: reddunes18@gmail.com
Red-Dune Consulting CC
P O Box 27623
WINDHOEK
9000

Environmental Management | Socioeconomic Valuations | Fisheries and
Marine Resources Management | Wildlife Management

6.2. Flooring (Concrete / Stones / None)

Campsite toilets will be concrete flooring, but tented camp will be a mixture of concrete and wooden decks.

6.3. Equipment to be used during construction

We are using concrete mixer, brick making machine and general generators. We also use general building equipment for building.

7. SOCIO ECONOMIC CONSIDERATION

7.1. Is the project accepted by the local people (Yes / No, if No, state why)

Yes.

8. EMPLOYMENT: How many local people will be employed?

During construction of Campsite (20 local people)
During construction of Tented Camp (at least 30)

9. WILD LIFE MANAGEMENT

9.1. Is the area frequented by wild animals, particularly, Lions, Elephant and Rhinos?

Desert Elephants will pass by every 6 to 8 months once or so

10. ANY OTHER COMMENTS:

We as the part owner, has been in tourism for the last 23 years, so looking after the environment and our local communities is very vital part of our business plan and also very important to our future plans and operations.



Reg No. ec2018/99606

Mobile: (+264 81) 147 7809
Email: reddunes12@gmail.com
Red-Dune Consulting CC
P O Box 27623
WINDHOEK
9000

Environmental Management | Socioeconomic Valuations | Fisheries and
Marine Resources Management | Wildlife Management

Signed

Date

16 September 2022

Name: EDDY P. R. HYN
Position: Managing Director
Company Stamp:

TWYFELFONTEIN ELEPHANT
DRIVES
BOX 411, ARANDIS
081 378 7922
charles@desertelephants.com

3. Environmental Description

3.1. Climate

The climatic conditions of the area is influence by the Namib Desert, thus highly variable. The rainfall is relatively low, ranging between 150 to 200 mm per annum. Like many parts of the Namibia, evaporation rates are high at 2500 mm per annum, which makes the area extremely dry and reliant on groundwater.

In most cases, temperature exceeds 30°C throughout the year with an average maximum temperature between 32°C and 34°C. Low average temperatures ranging from 8°C to 10°C are only experience in May, June and July.

3.2. Biodiversity

Generally, Twyfelfontein area is home ana trees, camel thorn trees, mopane tress and mustard trees. The famous *Welwistchia mirabilis* is also found at several patches in the area. Plant diversity in the area is thus regarded as low.

Due to its location between Sorris Sorris and Tora Conservancies, wild life such as elephant, leopard, cheetah, spotted and brown hyena, jackal and on occasion nomadic lions and Black Rhinos are known to roam around the area. The black Rhino and the Desert Elephant are listed by IUCN as vulnerable and globally threatened species. Other animals known to roam the area included, giraffe, mountain zebra, kudu, gemsbok, springbok, duiker, steenbok, klipspringer, ostrich and baboons.

3.3. Population Demography

Twyfelfontein is located in the electoral constituency of Khorixas Rural which has a population of. The areas known as the Damaraland The Damara, were originally known as hunter-gatherers, but currently, livestock farming, cattle, goats and sheep has becoming an integral part of their lives.

Their most source of income is farming which is further supplemented by income from pension. Tourism activities has since became an important employer and a great source of income in the area.

4. Statutory Requirement

4.1. Listed Activities

Section 27 (2) of The Environmental Management Act 2007 (Act No. 7 of 2007) (EMA) and the annexure of the Environmental Impact Assessment Regulation has listed activities that may not be undertaken without an Environmental Clearance Certificate (ECC) (Table 1).

Table 1. Listed activities in relation to the camp site

Activity	Listed Activity under EMA
<ul style="list-style-type: none">• Tourism Development Activities	<ul style="list-style-type: none">• The construction of resorts, lodges, hotels or other tourism and hospitality facilities.

The proposed activities, construction of the camp site for tourism purposes is thus a listed activity that may not be undertake without an ECC as indicated in the table above. It is against this background that EDS contracted Red-Dune Consulting to undertake a scoping and develop an Environmental Management Plan (EMP) for the project.

4.2. Communal Land Reform Act (Certificate for lease)

The proponent was issued with the certificate of leasehold on April 2019 (fig 3).


REPUBLIC OF NAMIBIA
MINISTRY OF LAND REFORM

**CERTIFICATE OF LEASEHOLD FOR ANY PURPOSE OTHER THAN
AGRICULTURAL PURPOSES OUTSIDE A DESIGNATED AREA**
As in the Communal Land Reform Act, 2002 (Section 33, Regulation 16)

Certificate No: **KUNCLB-ROL-004893**

It is hereby certified that a Right of Leasehold has been granted to:

Right holder: **Eddy Paultjie RHYN**
National ID 77053010139
and
Marezia Petrina RHYN
National ID 74100310102

Residential address: Bethanie
Postal address: P.O. Box 411 Arandis
Nature of right holder: Married Couple

Description of portion of land in respect of which land right has been granted:

UPI:	BETHAN100025	Constituency:	Khorixas
Area:	Bethanie	Traditional Authority:	Aodaman
Parcel size:	62.1 ha	Traditional	Damaraland
Region:	Kunene	Administrative Area:	

Description of land right which has been granted:

Approved land use:	Tourism (Lodge, Campsite and Local Safaris)	approval date:	02.04.2019
Leasehold period:	02.04.2019 until 02.04.2029		
Other right on parcel:		approval date:	


Signature of CLB Chairperson/ Secretary


Date

Page 1 of 2

Figure 3. Certificate for Lease

5. Project Scope

The scope of this project is to undertake a scoping and develop an EMP for the proposed construction of the camp site. This EMP is guided by the Environmental Regulations 2012, which aims at identifying possible impacts, assessing the impact and formulate the optimum, practical mitigation measure to minimize the impacts. It addresses potential social and environmental impacts that the proposed project activities may cause to ensure environmental sustainability.

RD believes that, the information provided is sufficient to enable the Environmental Commissioner to issue the ECC for the construction and operation of the camp site.

6. Policy, Legal and Administrative Framework

Table 2. Regulatory framework applicable to the project

REGULATORY FRAMEWORK	SUMMARY	APPLICABILITY
The Namibian Constitution	The State shall actively promote and maintain the welfare of the people by adopting policies aimed at ... The maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future	Protection of the environment and biodiversity
Environmental Management Act No. 7 of 2007	This act aims to promote the sustainable management of the environment and the use of natural resources and to provides for a process of assessment and control of activities which may have significant effects on the environment; and to provide for incidental matters	The acts provide a list of activities that may not be undertake without an environmental clearance certificate to prevent environmental damages
Communal Land Reform Act, 2002 (Act No. 5 of 2002)	Provide for the allocation of rights in respect of communal land; to establish Communal Land Boards; to provide for the powers of Chiefs and Traditional Authorities and boards in relation to communal land; and to make provision for incidental matters.	The Proponent is required to obtain a Leasehold Certificate for the land parcel where the campsite will be established.

REGULATORY FRAMEWORK	SUMMARY	APPLICABILITY
Draft Pollution Control and Waste Management Bill	This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management	To protect the Environment from possible pollution
Traditional Authorities Act 25 of 2000	To provide for the establishment of traditional authorities and the designation, election, appointment and recognition of traditional leaders; to define the powers, duties and functions of traditional authorities and traditional leaders; and to provide for matters incidental thereto	The area is within the jurisdiction of the traditional authorities, customary laws should be observed and respected
Environmental Policy framework (1995)	This policy subjects all developments and project to environmental assessment and provides guideline for the Environmental Assessment.	Consideration of all possible impacts and incorporate them in the development stages
National Solid Waste Strategy	The strategy to control and manage solid waste in Namibia	To ensure adequate handling of solid waste
Regulations Related to the Health and Safety of Employees at Work. Reg No. 156	Promotes the Safety and Health of employees at the work place	To ensure a healthy working environment

REGULATORY FRAMEWORK	SUMMARY	APPLICABILITY
Public Health Act No. 1 of 2015	To Protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.	To ensure public health
Labour Act No. 11 of 2007	This Act outlines the labour laws which encompass protection and safety of employees at work.	Ensure that employees at work place are protected
Water Resource Management Act No.11 of 2011	Provide for the management, protection, development, use and conservation of water resources; to provide for the regulation and monitoring of water services and to provide for incidental matters.	Possibility of surface and groundwater contamination.
National Heritage Act No.27 of 2004	The Act gives provision of the protection and conservation of places and objects with heritage significance.	To ensure precaution and protection of Heritage Resources.

7. Impact Assessment

7.1. Impact Identification

During literature review and site assessment, possible impacts were listed. The criteria used to assess the impacts and the method of determining their significance is outlined in Table 3 below. This process conforms with the Environmental Impact Assessment Regulations of Environmental Management Act, 2007 (Government Gazette No. 4878) EIA regulations.

Impact significance is determined under two mitigation scenarios; **without mitigation** and **with mitigation**. The confidence of impact mitigation depends on the level of certainty based on available information to assess the impact. For the proposed campsite, there were no identified impacts which could create uncertainties. All impacts were assessed with the high level of certainty.

Table 3. Criteria for Impact Evaluation

Risk Event	Rating	Description of the risk that may lead to an Impact
Impact type	0	No Impact
	+VE	Positive
	-VE	Negative
Probability	The probability that an impact may occur under the following analysis	
	1	Improbable (Low likelihood)
	2	Low probability
	3	Probable (Likely to occur)
	4	Highly Probable (Most likely)
	5	Definite (Impact will occur irrespective of the applied mitigation measure)
Confidence level	The confidence level of occurrence in the prediction, based on available knowledge	
	L	Low
	M	Medium
	H	High
Significance (Without Mitigation)	0	None (Based on the available information, the potential impact is found to not have a significant impact)
	L	Low (The presence of the impact's magnitude is expected to be temporal or localized, that may not require alteration to the operation of the project)

	M	Medium (This is when the impact is expected to be of short term moderate and normally regionally. In most cases, such impacts require that the projects is altered to mitigate the impact or alternative method of mitigation is implemented
	H	High (The impact is definite, can be regional or national and in long term. The impact could have a no go implication unless the project is re-designed or proper mitigation can practically be applied
Mitigation	The applied measure / alternative to reduce / avoid an impact	
Significance (With Mitigation)	0	None (Based on the available information, the potential impact is found to not have a significant impact)
	L	Low (The presence of the impact's magnitude is expected to be temporal or localised, that may not require alteration to the operation of the project
	M	Medium (This is when the impact is expected to be of short term moderate and normally regionally. In most cases, such impacts require that the projects is altered to mitigate the impact or alternative method of mitigation is implemented
	H	High (The impact is definite, can be regional or national and in long term. The impact could have a no go implication unless the project is re-designed or proper mitigation can practically be applied
Duration	Time duration of the impacts	
	1	Immediate
	2	Short-term (0-5 years)
	3	Medium-term (5-15 years)
	4	Long-term (more than 15 years)
	5	Permanent
Scale	The geographical scale of the impact	
	1	Site specific
	2	Local
	3	Regional
	4	National
	5	International

7.2. Potential Positive Impact of the project

- Direct and indirect creation of employment opportunities
- Knowledge and technology transfer.
- Reduction of poverty to the local community through increase income generation.
- Increased local economic activities.

- Increase in National economy through payments of taxes.

7.3. Potential Negative Impacts of the Project

- Noise pollution from earth moving machinery
- Soil disturbance
- Loss of habitat and biodiversity from site preparations and occupation
- Health and Safety risk
- Risk of pollution from generated domestic solid wastes
- Risk of contamination of ground water from oil, grease and lubricants from heavy vehicles, and drilling activities.

8. Risk Assessment

8.1. Planning Phase

To ensure that the project is accepted by the public and avoid possible conflicts, the project obtained consent from the traditional authority, lease hold certificate from Ministry of Land Reform and consent / support / endorsement from various camp site operators in the area.

8.2. Construction Phase

Chapter 2, sub-section 2.3 above highlighted the extent to which construction will be undertaken. The following socio-environmental impacts were assessed for the construction phase.

8.2.1. Social Impact

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
Employment To ensure the jobs opportunity during construction are reserved for local people	1. Ensure that all general work is reserved for local people unless in circumstances where specialized skills are required. 2. Follow fair compensation and labour practice as per Namibian labour laws must be followed 3. Ensure skill transfer to the locals 4. Use local supplier for good and service where possible	Type	+VE
		Severity	Medium
		Scale / Extend	Local
		Probability	Definite
		Confidence level	High
		Without Mitigation	Medium
		With Mitigation	Low
HIV/AIDS, Alcohol and Drug abuse		Type	-VE

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
Namibia has high prevalence of HIV/AIDS and it is important to ensure that employees are sensitized about the pandemic.	<ol style="list-style-type: none"> 1. Provide awareness to the employees on danger of alcohol and drug abuse 2. Provide condoms at construction site 	Severity	High
		Scale / Extend	Local
		Probability	Definite
		Confidence level	High
		Without Mitigation	Medium,
		With Mitigation	Low
Health and Safety The Regulations Relating to the Health and Safety of Employees at Work, made under Labour Act of 1992 (Act No. 6 of 1992) place legal duty on employers to provide a health and safe working environment to the employees and any	Health; <ol style="list-style-type: none"> 1. Abide by the Occupational Health and Safety and Labour Act of Namibia and other statutory requirement such as International Labour Practise (ILO) 2. Ensure adequate first aid kit at every at construction site 	Type	-VE
		Severity	High
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	High
		With Mitigation	Low

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
<p>person other than the employees who might be affected by their operations.</p> <p>Operation of specialized equipment may increase safety risk if not executed correctly</p>	<p>3. Supervisors must undergo an occupational health and first aid course;</p> <p>4. Train employees on the possible health hazards to avoid potential risks</p> <p>5. Provide appropriate Personal Protective Equipment (PPE)</p> <p>6. Supply clean drinking water to the site;</p> <p>Safety</p> <p>7. Ensure that every employee goes through an induction course about safety;</p> <p>8. Employees must be equipped with all necessary Personal Protective Equipment (PPE). These includes, Helmet, Overall, Safety Shoes, Safety Glasses, Gloves, Earmuff etc;</p>		

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
	<p>9. During construction, minor accidents are eminent, hence there must be a first aid kit;</p> <p>10. Only qualified and licenced personnel must be allowed to operate machinery and vehicles;</p> <p>11. Adequate safety signs must be displayed on site;</p>		
<p>Preservation of Heritage Resources</p> <p>There are no known of possible heritage or archaeology materials on site</p>	<p>1. Employee must be trained on the possible find of Heritage Resources in the area;</p> <p>2. Implement a chance find and steps to be taken during Heritage material findings (rock painting and drawings, human remains or artefacts) are unearthed by;</p> <p>i. Stopping the activity immediately</p> <p>ii. Informing the operational manager or supervisor</p>	<p>Type</p> <p>Severity</p> <p>Scale / Extend</p> <p>Probability</p> <p>Confidence level</p> <p>Without Mitigation</p> <p>With Mitigation</p>	<p>-VE</p> <p>Medium</p> <p>Site</p> <p>Probable</p> <p>High</p> <p>Medium,</p> <p>Low</p>

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
	<ul style="list-style-type: none"> iii. Cordoned of the area with a danger tape and manager to take appropriated pictures. iv. Manager/supervisor must report the finding to the National Museum (+264 61 276800) or the National Forensic Laboratory (+264 61 240461). 		

8.2.2. Impact on Biophysical Environment

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
<p>Biodiversity</p> <p>Plant diversity in the area is low. It is mainly covered with grasses. Generally, domestic animals roams around the area. The wild animals such as desert elephant and rhinos are generally found area, but do not come near campsites in the area. The following are mitigation to ensure protection of flora and fauna during construction</p>	<ol style="list-style-type: none"> 1. Unless unavoidable, do not cut down mature mopani tree in the area. 2. Do not allow employee to carry weapon or snares or any type of animal traps that may lead into poaching. 3. Vehicle movements must be confined within the site 4. Plant local trees within the area to improve the aesthetic view of the are 	Type	-VE
		Severity	Medium
		Scale / Extend	Site
		Probability	Probable
		Confidence level	High
		Without Mitigation	High
		With Mitigation	Low
<p>Soil Erosion</p> <p>The level of construction will not constitute heavy construction where big trenched are dug which causes susceptibility of soil erosion. However, frequent movement of light vehicle loosen the soil and expose it to wind and water erosion.</p>	<ol style="list-style-type: none"> 1. Restrict movement of vehicle on site 2. After completion of construction, spray water where the soil has been loosen and apply minimal compaction that will allow revegetation of grasses 	Type	-VE
		Severity	High
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	Medium,
		With Mitigation	Low

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
<p>Noise and Dust</p> <p>It is eminent that construction activities produces noise and dust but it should be minimised to prevent it being nuisance to the surrounding environment, be it on animal or people.</p>	<p>Noise:</p> <ol style="list-style-type: none"> 1. Employees must NOT be exposed to noise levels above the required -85dB limit over a period of 8 hours. 2. Engines must be switched off when machinery is not in use 3. Provide workers with ear muffs to ensure to protect their hearing <p>Dust:</p> <ol style="list-style-type: none"> 1. Vehicle transporting sand must be covered during transportation 2. Use dust suppression measures such as water spraying to mitigate dust impacts. 3. Adhere to the Labour act, non-toxic human dust exposure levels may not 	Type	-VE
		Severity	Medium
		Scale / Extend	Site
		Probability	Probable
		Confidence level	High
		Without Mitigation	Medium
		With Mitigation	Low

Potential Environmental / Social Impact	Mitigation Measures	Significance of the Impact	
	<p>exceed 5mg/m³ for respiratory dust and 15mg/m³ for total dust.</p> <p>4. Avoid working during extreme windy times</p> <p>5. Avoid unnecessary movement of vehicles on site</p> <p>6. Provide employees with personal protective equipment such as dust mask, protective glass wear etc.</p>		
<p>Natural view of site, Construction materials such as paint and camping tents must have earth colors that resemble the soils of the area</p>	<p>1. Where possible and to a larger extent, use are stone to construct various component of the campsite such as fire place, shower and toilet etc.</p> <p>2. Avoid high rise bright lights, all lights must be short and facing down</p>	<p>Type</p>	<p>+VE</p>
		<p>Severity</p>	<p>Medium</p>
		<p>Scale / Extend</p>	<p>Site</p>
		<p>Probability</p>	<p>Definite</p>
		<p>Confidence level</p>	<p>High</p>
		<p>Without Mitigation</p>	<p>Medium</p>
		<p>With Mitigation</p>	<p>Low</p>

8.2.3. Waste Generation

<p>Building rubbles</p> <p>Construction activities produces concrete rubbles, empty bags of cement and all other containers that, if not well managed cause an eye sore.</p>	<ol style="list-style-type: none"> 1. Provide a skip bin to store all general solid waste 2. Maintain good housekeeping, do not let loose bags of cement and other containers to be blow away by wind 3. Dispose of waste at appropriate waste disposal site, i.e Khorixas waste disposal site 	Type	-VE
		Severity	Medium
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	High
		With Mitigation	Low
<p>Household waste</p> <p>Construction workers carries plastic bag with their lunch boxes and also will need toilet facilities during construction</p>	<ol style="list-style-type: none"> 1. Supply house waste bin 2. Provide two toilets for the workers 	Type	-VE
		Severity	Medium
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	Medium,
		With Mitigation	Low

8.3. Campsite Operation

During operation, eminent impact will be solid and liquid waste management, health and safety of the people / tourist,

<p>Health and Safety</p> <p>Health and Safety is number one priority of all business and work plac. This is to ensure that the client frequenting the place are safe as well as the employees operating and safeguarding the place.</p>	<ol style="list-style-type: none"> 1. Maintain hygiene and sanitation by ensuring that there are user friendly toilets and showers designated for males and females 2. Ensure that the toilet are well maintained and clean all the time 3. Ensure that the campsite is free of hard, such as broken glasses, sharp objects 4. Ensure that fireplace are not connected to grasses and that there must be a fire hydrant at each and every fire place to prevent wild fires 5. The camp site must be guarded by security personnel to ensure safety of the tourist 6. Install appropriate site notices such as be aware of baboons and warm 	Type	-VE
		Severity	High
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	High
		With Mitigation	Low

	<p>tourist / visitors of insect bites</p> <p>7. Install elephant / rhinos / lions deterrents</p>		
<p>Waste Management</p> <p>The operation will generate general household solid and liquid waste. No hazardous waste is expected to be generated.</p>	<p>1. Ensure maintenance of the toilet and shower. Manage odors from toilet</p> <p>2. Ensure that there are waste bins on the premises. It is encouraged waste bins that support recycling to be on the premises</p>	Type	-VE
		Severity	Medium
		Scale / Extend	Site
		Probability	Definite
		Confidence level	High
		Without Mitigation	Medium,
		With Mitigation	Low

9. Closure and Rehabilitation Plan.

The operation of the campsite is envisioned to be a generational business. In case of eminent closure, the following measure are recommended.

1. Prior to decommissioning, the proponent must inform the office of the Environmental Commissioner;
2. All work must be supervised by qualified and competent engineers;
3. It is recommended that an environmental specialist must monitor any possible contamination during decommissioning;
4. There must be clear signs to the public about the closure of the project;
5. The contractor must use the right tools and equipment;
6. Workers must be provided with all necessary PPE;
7. All wasted generated must be disposed of at approved sites.

10. Conclusion and Recommendation

10.1. Conclusion

The environmental assessment for this scoping study has successfully identified all possible impact during planning, construction and operation of the camp site. The developed mitigation measures has lowered all impacts to low levels. Most of the impacts will be short term during construction, site specific and insignificant. The Environmental Management Plan must should be used as the logical framework for the project to mitigate environmental threats at all times.

10.2. Recommendation

It is recommended to the approving authority that an environmental clearance certificate be issued for project.