



**B U S I N E S S   S U C C E S S   C O N S U L T I N G**

*Environmental Sustainability*

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**ENVIRONMENTAL MANAGEMENT PLAN (EMP) FOR GREEN ACRES PRIVATE  
SCHOOL AT ONAKATUMBE VILLAGE, EENHANA CONSTITUENCY OF  
OHANGWENA REGION, NAMIBIA**

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## ACRONYMS

OTA	Ondonga Traditional Authority
MAWF DAPEES	Ministry of Agriculture, Water and Forestry Directorate of Agricultural Production, Extension and Engineering Services
MAWF	Ministry of Agriculture, Water and Forestry
MEFT	Ministry of Environment Forestry and Tourism
MME	Ministry of Mine and Energy
NamWater	Namibia Water Corporation
NBRI	National Botanical Research Institute
NORED	Northern Regional Electricity Distributors
OEC	Office of the Environmental Commissioner
PPE	Personal Protective Equipment
BSC	Business Success Consulting
DEA	Directorate of Environmental Affairs
DSR	Draft Scoping Report
DWA	Directorate of Water Affair
EA	Environmental Assessment
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
F	Forestry Protected
GAPS	Green Acres Private School
GPS	Global Position Systems
Ha	Hectares
I & APs	Interested and Affected Parties

## I. Preface

The Green Acres Private School (GAPS, also previously known as S.T Francis Primary School) has commissioned Business Success Consulting cc (BSC), an independent EIA consultant to prepare an Environmental Management Plan (ESMP) for Green Acres Private School at Onakatumba village in Eenhana Constituency of Ohangwena Region. GAPS is an existing school.

The school (GAPS) is located in a communal area, 10 km from Eenhana Town's Central Business District. GAPS is registered with the Ministry of Education, Arts and Culture and has started its operation in January 2020.

GAPS is hereby applying for an Environmental Clearance Certificate (ECC) for the project. This will ensure that the operation activities are permitted as provided for by the Environmental Management Act (EMA), Act No. 7 of 2007 and related regulations. This EMP is therefore assessing the partial fulfillment in terms of compliance with the Environmental Management Act as required by the Ministry of Environment, Forestry & Tourism (MEFT).



The Green Acres Private School will be directly involved in the school operation and therefore GAPS will oversee, supervise, monitor and control all activities at the school thereby ensuring

that the school operation is conducted in an orderly, safe manner and adhering to the Environmental Management Plan and consequently safeguarding the environment.

## **II. Structure of the Report**

This report covers the following sections. It is worth noting that this is an existing school which is already operation and hence the purpose of this study is to prepare the EMP component and briefly touching on the baseline environment as highlighted below;

**Section 1: Background Information**

**Section 2: Biophysical Environment**

**Section 3: Environmental Impact**

**Section 4: Environmental Management Plan (EMP)**

### **1.0 PROJECT BACKGROUND**

#### **1.1. Introduction**

This report presents the Environmental Management Plan (EMP) for Green Acres Private School in managing the operational activities at Green Acres Private School **at Onakatumbe village in Ohangwena Constituency of Ohangwena Region.**

The land where the school is developed is allocated by the Ondonga Traditional Authority. Hence, the occupational land right in terms of the Communal Land Reform Act No. 5 of 2002 is vested in the school.

This EMP Plan assesses and evaluates those impacts which the school operation might have on the physical, natural and socio-economic environments. Where the activities poses negative impacts, mitigation measures are proposed to minimize such negative impacts and where the operation makes positive impacts, recommendations are made to maximize such benefits.

This EMP is developed in line with the Environmental Management Act, Act 7 of 2007. The Environmental Impact Assessment (EIA) Regulations No. 30 of 2012 as gazetted under the Environmental Management Act, (EMA), 2007, (Act No. 7 of 2007), requires that an Environmental Management Plan (EMP) for the existing project should be undertaken in order to apply for ECC from the Ministry of Environment, Forestry and Tourism (MEFT). Hence this EMP aims to aligns the project with Namibia's Environmental Law Framework.

#### **1.3. Purpose of the Environmental Management Plan**

The school operation is a listed activity which may not be undertaken without approved EMP have been prepared and approved by MEFT. The assessment process provides precautionary measures in the form of an Environmental Management Plan in which mitigation measures are provided.



The overall objective is therefore to ensure that the school operation is carried out in a manner which makes it technically sound, economically feasible, socially acceptable and environmentally sustainable. In this regard, the EMP process is expected to provide a mechanism whereby the overall environmental performance of the planned activity is enhanced through:

- i. Identification of sensitive environmental components likely to be affected by the operation activity.
- ii. Identification and evaluation of the potential impacts associated with the operation,
- iii. Preparation of recommendations regarding measures that minimize adverse impacts and enhance beneficial impacts.

In a nut shell, this phase of assessment determines the key elements of the Environmental Management Plan (EMP) for the Project and to anticipate, prevent, minimize and manage potential negative impacts that the school operation may have.

### **1.3 Description of Activities**

*Activities involved in the process of project implementation are indicated hereunder;*

- Operation

## Section 2

### 2. DESCRIPTION OF THE RECEIVING ENVIRONMENT

This section provides an overview of the aspects of the natural environment that that may be impacted by the operational activities from the site.

It is worth noting that this is a disturbed site were site clearance activities have already taken place. Hence the natural environment is disturbed. The land is allocated to the school for the purpose of constructing school facilities and hence it has long been cleared for that purpose.

No.	ASPECTS OF THE RECEIVING ENVIRONMENT
1	Location
2	Accessibility to the site
3	Topography
4	Climatic Conditions
5	Geological Aspects
6	Land Use and Capabilities
7	Hydrology (Surface and Underground water)
8	Air Quality & Dust Disturbances
9	Noise Disturbances
10	Visual Intrusions Aspects
11	Archaeological, Heritage & Cultural Aspects
12	The Ecosystem (Flora and Fauna) and
13	The Human Environment (the Social-economic Environment)

## 2.1 Location

The Green Acres Private School is located at Onakatumba village, within the communal land, about 10 km from Eenhana Town along the Eenhana –Oshigambo road. Given the increasing demand for education in the region, the school management would like to continue operating the school but at the same time preserving the environment.



GPS COORDINATES	
LATITUDE, S	LONGITUDE, E
17°35' 02''	16° 17' 51''
17° 35' 02''	16° 17' 55''
17° 35' 00''	16° 18' 00''
17° 34' 57''	16° 18' 00''
17° 34' 57''	16° 17' 55''
17°34'57''	16° 17' 51''

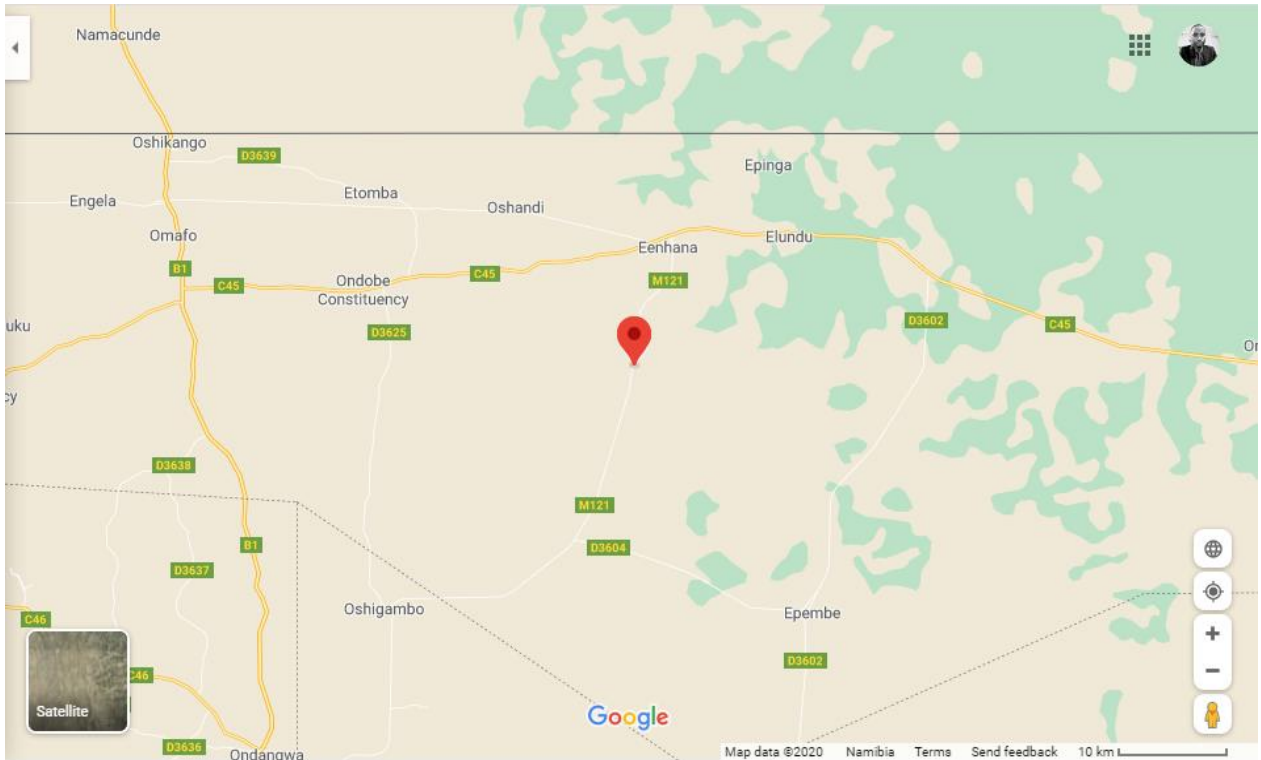


FIGURE 1: LOCATION OF GREEN ACRES PRIVATE SCHOOL (RED DOT)

## 2.2 Accessibility

In terms of accessibility, the school is next to the main road (Eeningana –Oshigambo) and therefore easily accessible.



FIGURE 2: EASE ACCESS TO THE SITE

### 2.3 Topography

The school is located on a flat topography without significance difference in the elevations across the entire site. Rainwater is likely to accumulate on the surface and to seep easily through the sand deposit with little chance of causing soil erosion.

### 2.4 Climatic Conditions

The climatic condition of Onakatumbé Village is similar to that of Eenhana. The project area receives an average of 400 mm of rain per year with the highest precipitation received in the summer months (December to February). There are no prevailing wind directions and wind blows in any direction with a slightly greater frequency from the east to the northwest. Calm conditions occur for 70% of the time.

In Eenhana, the wet season is mostly cloudy, the dry season is mostly clear, and it is hot year round. Over the course of the year, the temperature typically varies from  $49^{\circ}F$  to  $98^{\circ}F$  and is rarely below  $45^{\circ}F$  or above  $103^{\circ}F$ .

## **2.5 Geological Aspects**

There are no geological rocks encounters anywhere on the surface, near or around the site area.

## **2.6 Land Uses and Capabilities**

The entire site is a parcel of land allocated to the proponent in terms of the Communal Land Reform Act No. 5 of 2002 exclusively for the school operation. No environmental features of significance were observed on the proposed land.

## **2.7 Hydrology**

### **2.7.1 Surface Water**

There were no permanent potable sources of surface water observed around the site. The school and village is supplied with piped potable water by NAMWATER from which most residents in the village source water for everyday use.

### **2.7.2 Groundwater**

There are no known boreholes or any form of groundwater sources around the site identified.

## **3.11 The Ecosystem**

### **3.11.1 Flora observed**

The vegetation in the Ohangwena Region varies greatly from the north to the south and from the east to the west.

The project area is dominated by *Terminalia sercea* (*Omwoolo*) and *Acacia erioloba* (*thorn tree*) with a few other trees like *Combretum Collinum* (*Omupupwaheke*) and *Pechuel-loeschea leubnitziae* (*Iizimba*). This was observed by a site visit and comparing picture Field Guide to the Trees & Shrubs of Namibia using by Le Roux & Müller's. The area is also covered by

patches of grasses and was identified using the “Grasses of Namibia, by Müller”. The area is mostly dominated by one type of grass species of *Eragrostis trichophora* and grass species such as *Tribulus terrestris* (*eeshosholo*).

None of the tree species occurring at the site have been identified as having any special status of being restricted to the project site and as such no tree species will be threatened by the school operational activities. There are no forestry protected trees at the site. The table below indicates the trees identified during the day of site screening;

TABLE 1: EXPECTED & OBSERVED TREES

Scientific Name (Local Name)	Present	Occurrences
<i>Acacia erioloba</i> (Thorn tree)	Yes	Occasional
<i>Terminalia sercea</i> (Omwoolo)	Yes	Common
<i>Pechuel-loeschea leubnitziae</i> ( <i>iizimba</i> )	Yes	Few
<i>Berchemia discolor</i> (Omuye)	Yes	1
<i>Combretum Collinum</i> (Omupupwaheke)	Yes	Few
<i>Ximenia Americana</i> (Omipeke)	Yes	2
<i>Grewia flavescens</i> (Omushe)	Yes	1
<i>Hyphaene petersiana</i> (oivale/ omulunga)	Yes	2
<i>Terminalia pruinoides</i> (Ohama)	Yes	Few
Grass species ( <i>Eragrostis trichophora</i> )	Yes	Common
Grass species ( <i>Tribulus terrestris</i> )	Yes	Few



FIGURE 3: ACACIA ERIOLOBA (THORN TREE)





FIGURE 4: *TERMINALIA SERCEA* (OMWOOLO) & *COMBRETUM COLLINUM* (OMUPUPWAHEKE)

### 3.11.2 Animals and birds observed in the area

During the field visit, the team has observed birds in the project area around the water spots. According to Newman’s birds by colour, commonality in Southern Africa (Keneth Newman, 2000), the following birds are to be found in the area. However this list is not exhaustive because birds have no boundaries;

TABLE 2: BIRDS IN THE PROJECT AREA

Item No.	Birds
1.	Laughing dove
2.	Grey backed finchlark
3.	Palm swift
4.	Yellow canary

5.	Streaky headed canary
6.	Monteiro Hornbill
7.	Red eyed bulbul
8.	Black chested prinia
9.	Namaqua sandrouse
10.	Social Weaver
11.	Pied Crow

Besides birds, no livestock (cattle) were observed grazing around on the site during the site inspections. The short vegetation in the site, it does not provide suitable habitats larger animals but only for small animals like mouse, reptiles and snakes and are commonly observed on the in the area.

### **3.12 The Socio-economic Environment**

This section presents a description of the socio-economic receiving environment. The secondary information contained herein was sourced from various sources such as the 2011 Namibia Population and Housing Census, which states that like other parts of the country, the socioeconomic status of the project area is characterized by high unemployment rate at 32%, high level of poverty and slow economic growth due to slow rural development.

This specific site is closest to the towns of Eenhana which have growing populations which require infrastructures in the form of tarred streets, schools, health facilities, sport fields, water handling facilities, housing and office accommodation. The successful operation of the school is therefore expected to improve the socio-economic status of the surrounding populace through job creation and improved quality and access to education.

## Section 3

### 3. ENVIRONMENTAL IMPACTS

The main purpose of this section is to identify and assess the most significant environmental impacts by describing the measurable aspects of these impacts. The mitigation measures of these possible impacts will be provided in order to minimize the extent of the impacts resulting from various activities during the operational phase.

#### 3.1 Method of Assessment

The assessment is carried out in tabular form to facilitate the evaluation, followed by mitigation measures. In order to determine significance, each potential impact was subjected to a range of assessment criteria listed below.

TABLE 3: CRITERIA USED TO DETERMINE THE SIGNIFICANCE OF IMPACTS AND THEIR DEFINITIONS.

Nature	Reviews the type of effect that the proposed activity will have on the relevant component of the environment and includes “what will be affected and how?”
Extent: How far in terms of area will the impact reach. Indicates whether the impact will be within a limited area	
Local	limited to within 25km of the area
Regional	limited to ~200km radius
National	limited to the borders of Namibia
International	extending beyond Namibia’s borders
Duration: How long will the a particular impact least once in has occurred	
Short term	1-5 years
Medium term	5-10 years
Long term	longer than 10 years, but will cease after operation
Permanent	irreversible
Intensity: Determine whether the magnitude of the impact is destructive or innocuous and whether or not it exceeds set standards.	
Low	Where natural/ social environmental functions and processes are negligibly affected.
Medium	

High	Where the environment continues to function but in a noticeably modified manner. Where environmental functions and processes are altered such that they temporarily or permanently.
Probability: Determine the likelihood of the impact occurring	
Uncertain Improbable Probable Highly probable Definite	Low likelihood Distinct possibility Most likely Impact will occur regardless of prevention measures
Status of the Impact: A statement of whether the impact is;	
Positive Negative Neutral.	a benefit to the environment, society or the economy a cost to the environment, society or the economy

TABLE 4: DEFINITION OF THE VARIOUS SIGNIFICANCE RATINGS

Significance Rating	Criteria
Low	Where the impact will have a negligible influence on the environment and no mitigations are required.
Medium	Where the impact could have an influence on the environment, which require some modifications on the proposed project design and/or alternative mitigation.
High	Where the impact could have a significant influence on the environment and, in the case of a negative impact, the activity causing it, should not be permitted.

### **3.2 IMPACTS**

The following potential impacts on the environment have been identified:

- i. Socio-economic
- ii. Water pollution
- iii. Soil pollution & salination
- iv. Site Topography and Soil erosion
- v. Noise pollution
- vi. Air quality
- vii. Dust emission
- viii. Loss of biodiversity
- ix. Health and safety
- x. Visual intrusion
- xi. Archaeological and cultural heritage sites
- xii. Solid waste and hazardous waste management

These identified potential impacts have been assessed. There have been no threats to the birds that have been identified in this study. Mitigation measures are proposed for each identified impacts in the subsequent section of Environmental and Social Management Plan.

## Section 4

### 4. ENVIRONMENTAL MANAGEMENT PLAN FOR GREEN ACRES PRIVATE SCHOOL AT ONAKATUMBE VILLAGE, EENHANA CONSTITUNCY OF OHANGWENA REGION

#### 4.1 EMP Administration

This section of the report serves to prescribe mitigation measures to reduce, limit, eliminate or compensate for impacts, to acceptable or insignificant levels. In setting mitigation measures, the practical implications of executing these measures are considered. With proper EMP adherence, both the cost and the impacts can be effectively eliminated or minimized to insignificant levels.

This section also outlines the roles and responsibilities of all stakeholders to ensure that the EMP is fully implemented. The Green Acres Private School will ensure the successful implementation of the EMP and its administration.

#### 4.2 Socio-economic impacts and mitigation

The proposed project will support the socio-economic development of the surrounding villages and town of Eenhana by providing employment creation, infrastructure development and enhance access to quality education.

TABLE 5: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE SOCIO-ECONOMIC DEVELOPMENT

Impact	Employment opportunities during the school operation and enhanced quality education.
Nature	The school created job opportunities and has a positive economic impact on surrounding communities.
Extent	Regional
Duration	Long term
Intensity	n/a
Probability	Highly probable

Status of the Impact	Positive
Significant rating before mitigation	Low
Timing	Operation
Mitigation	<ul style="list-style-type: none"> <li>• Capacity building of the local people</li> <li>• Support local businesses by sourcing goods &amp; services from them (books and stationeries)</li> <li>• Hire employees from within the local community</li> <li>• Support and contribute to local social upliftment programs</li> <li>• Attend to any possible complaints from the community regard the operation.</li> <li>• Comply with the EMP.</li> </ul>

### 4.3 Water quality and mitigation

There may be possibility of surface water contamination resulting from water runoff containing chemical residues of oil from the operational equipment and school bus. On ground water will be affected since communities rely on rain water.

TABLE 6: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE WATER POLLUTION

Impact	Water pollution
Nature	Petroleum handling at the site specifically the handling of diesel, oils spills, oils from school buses. The fuel and oil spills if not properly handled can be washed way into oshana's during the rainy season reducing the water quality.
Extent	Regional
Duration	long term
Intensity	Medium
Probability	Definite
Status of the Impact	Negative

Significant rating before mitigation	Medium
Timing	Operational
Mitigation	<ul style="list-style-type: none"> <li>• There are no permanent water bodies near the project area however it is advisable to check and control the parameters for water quality during the rainy season.</li> <li>• An effective drainage system will be put in place to capture all waste water from ablutions.</li> <li>• Oil spillages from vehicles will be avoided on site. Compliance with the Hazardous Waste Regulations will be priority.</li> <li>• A good and effective monitoring system will be put in place during operations. Drip trays will be used when removing used oils from school buses or school vehicles awaiting servicing.</li> <li>• Comply with EMP</li> </ul>

#### 4.4 Soil quality and mitigation

TABLE 7: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE SOIL POLLUTION

Impact	<ul style="list-style-type: none"> <li>• soil pollution</li> </ul>
Nature	Poor management of new and used engine oils will result in soil pollution. It is also possible that soil pollution may occur due to inappropriate handling of chemicals such as engine oils, unserviceable /old buses.
Extent	Local
Duration	Short term
Intensity	Medium
Probability	Definite
Status of the Impact	Negative



Significant rating before mitigation	Medium
Timing	Operational
Mitigation	<ul style="list-style-type: none"> <li>• Drip trays will be used when removing used oils from buses or vehicles awaiting servicing.</li> <li>• Maintenance and servicing and inspections for oil leaks</li> <li>• Compliance with EMP</li> </ul>

#### 4.5 Soil erosion, soil topography and mitigation

Soil erosion may be caused by storm water and or high velocity winds. However, this impact will be local as it will be restricted to the school. Soil erosion will eventually result into poor soil fertility as the nutrients will be leached out.

TABLE 8: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE SOIL EROSION

Impact	<ul style="list-style-type: none"> <li>• Loss of Soil Fertility and natural nutrients</li> <li>• Loss of cultivable land</li> <li>• Vegetation &amp; plant clearing</li> <li>• Land surface disturbance through excavation</li> <li>• Soil erosion</li> <li>• Deterioration of water resources on cultivable land</li> </ul>
Nature	Poor soil management will result in loss of soil fertility.
Extent	Local
Duration	Permanent
Intensity	Medium
Probability	Probable
Status of the Impact	Negative
Significant rating before mitigation	Medium
Timing	Operation

Mitigation	<ul style="list-style-type: none"> <li>• Confine vehicle movement strictly to the site section for parkings</li> <li>• Topography rehabilitation to be done consistently</li> <li>• All surface areas to be profiled and covered with topsoil and re-vegetated</li> <li>• Allow vegetation to grow on topsoil stockpiles</li> <li>• Comply with EMP</li> </ul>
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#### 4.6 Noise pollution and mitigation

The noise levels from school buses transporting children might increase especially if they are not regularly serviced. Noise will also have an impact on animals like insects and birds that temporary migrate to other areas.

TABLE 9: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE NOISE POLLUTION

Impact	Increase in noise levels
Nature	Noise and vibration can become a nuisance to school children, animals and nearby shops. The health of the teachers and children might be at risk if they are subjected to continuous noise above 85 dh.
Extent	Local
Duration	Short term
Intensity	Medium
Probability	Definite
Status of the Impact	Negative
Significant rating before mitigation	Medium
Timing	Operation
Mitigation	<ul style="list-style-type: none"> <li>• Operation of school buses will have little impact on the local surrounding community as the noise levels to be emitted will be within the acceptable audible levels.</li> </ul>

	<ul style="list-style-type: none"> <li>The school vehicles that will be used will be well serviced to avoid generating noise levels that are above the recommended limit.</li> </ul>
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#### 4.7 Air Pollution and mitigation

The gaseous emissions from the buses used in the operation are expected to impact negatively on the ambient air quality. However, the operation is conducted in an open air environment (not a confined space like underground) which allows emissions to escape to the atmosphere.

The environmental Impact Significance Rating for this activity is therefore low to negligible with mitigation.

TABLE 13: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE AIR POLLUTION

Impact	<ul style="list-style-type: none"> <li>Noxious emissions from buses and therefore health hazard to teachers, learners and community</li> </ul>
Nature	The gas emission has long term repercussions on the greenhouse layer and a health hazard for communities
Extent	Local
Duration	Medium term
Intensity	Medium
Probability	Definite
Status of the Impact	Negative
Significant rating before mitigation	Low
Timing	OPERATION
Mitigation	<ul style="list-style-type: none"> <li>Ensure that all the buses used in the operation are regularly serviced and well maintained.</li> <li>Limit speed on internal routes within school to 20km/hr</li> </ul>

#### 4.8 Dust and mitigation

The movement of buses, vehicles and people will certainly generate negligible amount of dust. The barren land being blown away by the wind and can create a dusty atmosphere at the school.

TABLE 10: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE DUST EMISSION

Impact	The health effect of dust to the site teachers, learners, effect of dust on the ecosystem and nearby residents.
Nature	High wind velocities may also result into dust generation from the bare land that has been cleared of its vegetation.
Extent	Local
Duration	Medium term
Intensity	Medium
Probability	Definite
Status of the Impact	Negative
Significant rating before mitigation	Medium
Timing	Operation
Mitigation	<ul style="list-style-type: none"> <li>Limit speed on internal routes within site to 20km/hr</li> </ul>

#### 4.9 Loss of biodiversity and mitigation

**Flora:** There is no protected plant species that was observed onsite. The frequent movement of vehicles and people within area will destroy the habitat of other various forms of biodiversity in this area. However, the impact will be low due to the fact that the area is partially cleared during initial construction phase. There are no plants and animal species that are endemic to the area. All plant species found here also occur in other areas of Namibia.

**Fauna:** Grazing is relatively poor over at the site largely considering the fact that sandy soils do not retain water for longer periods of time. There is livestock mostly cattle, goats and donkeys in the village. No animals classified as endangered species are reported or encountered in the study area.

TABLE 11: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE LOSS OF BIODIVERSITY

Impact	<p>Loss of Biodiversity</p> <ul style="list-style-type: none"> <li>• Loss of grazing</li> <li>• Loss of habitat</li> </ul>
Nature	The movement of vehicle and people will result in the destruction of fauna and flora, other forms of biodiversity.
Extent	Local
Duration	Permanent
Intensity	Medium term
Probability	Definite
Status of the Impact	Negative
Significant rating before mitigation	Minimum
Timing	Operation
Mitigation	<ul style="list-style-type: none"> <li>• The proponent should avoid clearing of vegetation to minimise direct and indirect disturbance to the flora and fauna within the site and surrounding area.</li> <li>• Fencing reinforcement of the area being constructed should be considered</li> <li>• Worked out areas should be profiled and rehabilitated</li> <li>• No littering of plastics and papers. All waste must be disposed off at approved dumping sites</li> </ul>

#### 4.10 Health and safety impacts and mitigation

The health and safety of the learners, teachers and admin employees and the villagers should be taken into consideration during the operation phase as it may negatively affect them and the environment.

TABLE 12: ASSESSMENT OF IMPACTS ASSOCIATED WITH THE HEALTH AND SAFETY

Impact	Injuries to employees or other health risk associated with accidents by movement objects such as buses and vehicles. Occupational accident's to gardening and school operators may also occur.
Nature	The potential impacts on human health and safety resulting from project activities could include occupational accidents, injuries and vehicle accidents, fire etc
Extent	Local
Duration	Short term to medium term
Intensity	Low
Probability	Highly probable
Status of the Impact	Negative
Significant rating before mitigation	Medium
Timing	Operation
Mitigation	<ul style="list-style-type: none"> <li>• Develop a Health and Safety Plan and train all employees on such a safety plan</li> <li>• Develop an Emergency Response Plan and Procedure incase of fire and other immedegencies</li> <li>• Suitable PPEs should be provided and worn by gardeners etc</li> <li>• Ensure that buses used are road worthy with all the necessary permits and licences</li> <li>• Procedures for dealing with injuries or accidents must be in place and all contact details for emergency personnel available.</li> <li>• School should have first aid kit and protective equipment such as helmets, safety shoes, gloves and eye glasses as appropriate.</li> </ul>

#### 4.11 Visual Intrusion

The impact Significance Rating for this activity is very low with and without mitigation as there are new structure to be erected.

#### 4.12 Archaeological and Cultural Heritage Sites

There are no known sites of Archaeological interests or cultural heritage on the site, near and around the site. The environmental Impact Significance Rating for this activity is very low with and without mitigation

#### 4.13 Solid Waste Pollution and sewage

TABLE 13: IMPACTS ASSOCIATED WITH THE SOLID WASTE POLLUTION AND SEWAGE MITIGATION MEASURES

Description	Both solid waste and sewage will be generated by the employees during the operational phase. It is therefore very important to maintain appropriate infrastructure to management both waste types.
Mitigation measures	<ul style="list-style-type: none"><li>• Sewer drainage system should be maintained as part of the infrastructure and be connected to a septic tanks.</li><li>• The sewer lines should be regularly inspected for any leakages.</li><li>• An appropriate/ registered contractor should be contracted to empty the septic tanks and dispose of at the waste water treatment plant.</li><li>• Waste bins should be provided and should be clearly labelled for recycling proposes</li><li>• Waste bins/ containers must be emptied on a regular basis and disposal of this solid waste should be done by a competent contractor dumped at an approved landfill.</li><li>• Solid waste generated should minimised as far as practicable</li><li>• Introduce cleanup program to ensure waste is removed from open areas or school premises</li></ul>

Monitoring	Develop a Solid Waste Management Plan with schedules inspection
Responsible party	Environmental officer

## **5. DECOMMISSIONING**

A separate EIA process should be conducted before considering at all the decommissioning of the project.



## 6. CONCLUSION AND RECOMMENDATIONS

### 10.1 Conclusion

The successful operation of the school is important to the development goals and aspirations of the receiving communities and Green Acres Private School as well as to Namibia as a whole. It is the intention of the school operators to live harmony with the environment.

Overall, the economic benefits of the project outweigh the limited negative impacts on the natural environment. The project is expected to perform positively if all mitigation measures are adhered to.

### 10.2 Recommendations

It is recommended *that the Ministry of Environment, Forestry and Tourism issue an Environmental Clearance Certificate to Green Acres Private School in order to implement the EMP.*

**The Green Acres Private School** will oversee, supervise, monitor and control all operational activities at the school and thereby ensuring that the operation is conducted in an orderly and safe manner, hence safeguarding the environment in the interest of the current and future generations to come.

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