ENVIRONMENTAL SCOPING REPORT FOR THE REZONING OF ERF 1423 WALVIS BAY FROM "SINGLE RESIDENTIAL" WITH A DENSITY OF 1 DWELLING UNIT PER 500M<sup>2</sup> TO "GENERAL BUSINESS" WITH A BULK FACTOR OF 2.0 FOR THE DEVELOPMENT OF AN OFFICE/BUSINESS BUILDING.

# **ENVIRONMENTAL SCOPING REPORT. V1**

06 JUNE 2025





First Floor 122 On Main 122 Sam Nujoma Avenue Walvis Bay P.O. Box 2095 Tel: (064) 280 770 Email: mario@sp.com.na

**Project title:** Rezoning of Erf 1423 Walvis Bay from "Single Residential" with a

density of one dwelling unit per 500m<sup>2</sup> (1:500m<sup>2</sup>) to "General

Business" with a maximum bulk factor of 2.0 for the

development of offices.

**Date:** 06 June 2025

Reference: 1423WB

**Report Status:** Scoping Report

1423 WB\_Scoping Report.V1

**Proponent:** Mr Alwyn Jacobus Maass

Walvis Bay Namibia

**Consultant:** Stewart Planning – Town & Regional Planners

PO Box 2095 Walvis Bay Namibia

**EAP/Author:** Mario Mberira

mario@sp.com.na +264 64 280 770

**Competent Authority:** Municipality of Walvis Bay

Civic Centre Street Private Bag 5017 Walvis Bay

Namibia

**Attachments** 

Annexure A: Environmental Management Plan

Annexure B: Locality and Zoning Plan

Annexure C: CV of EAP

Annexure D: Proof of Consultation
Annexure E: Registered I&APs

# 1. Non-Technical Summary

The owner of Erf 1423 Walvis Bay – Mr Alwyn Jacobus Maass (the Proponent) – intends to obtain land use rights for an office development on the site

The proposed office development requires rezoning from residential to business in terms of the Urban and Regional Planning Act. This rezoning has been submitted to the Municipal Council of Walvis Bay (Town Planning Section) for a decision, before being submitted to the Urban and Regional Planning Board for a final decision/approval. An Environmental Clearance Certificate (ECC) is also required for the rezoning application (change in land use from residential to business) before it is submitted to the Urban and Regional Planning Board.

The purpose of this report is to apply to the Environmental Commissioner for an ECC as per the provisions of the Environmental Management Act, 2007 and regulations.

The Proponent has appointed Stewart Planning to undertake an Environmental Scoping Report (EIA) for the proposed rezoning and to prepare an Environmental Management Plan (EMP) for consideration/evaluation by the Environmental Commissioner.

Erf 1423 Walvis Bay is situated along Nangolo Mbumba Drive, to the middle of 16<sup>th</sup> Road and 17<sup>th</sup> Road among a variety of land uses according to the Walvis Bay Zoning Scheme.

The site is occupied by a dwelling house and typical outbuildings (garage and a granny flat) and is currently used for residential purposes only. In the immediate short term, the owners intend to convert the existing dwelling house into offices with the required on-site parking.

In the long term, all the existing on-site developments will be re-developed/re-purposed into an office/business building.

No site development plan has been prepared to date. Therefore, the intensity of the future development will be subject to the provisions of the Walvis Bay Zoning Scheme.

A scoping exercise was undertaken to determine all potential impacts (positive or negative) associated with the proposed rezoning and potential development using primary and secondary sources of information. For each impact, proposed mitigations were given in the Environmental Management Plan to reduce the significance of negative impacts and enhance the significance of positive impacts.

The proposed re-conversion of the existing onsite developments into an office/business building, due to its central urban location, its limited scale and proposed land use, is not expected to create significant negative impacts on the receiving urban environment, provided that the mitigations are implemented during all phases of development. Based on the findings of the EIA and EMP, it is recommended that the Environmental Commissioner, issue an ECC for the proposed rezoning application.

#### 2. Introduction

The owner of Erf 1423 Walvis Bay has appointed Stewart Planning to apply to rezone the property and to apply for an Environmental Clearance Certificate for the proposed rezoning from Single Residential to General Business.

The proposed rezoning has been submitted to the Municipal Council of Walvis Bay (Town Planning Section) on 24 January 2025 for a decision. The purpose of this report is to obtain an ECC for the proposed rezoning as recommended below:

- [1] That an Environmental Clearance Certificate be issued to Mr Alwyn Jacobus Maass for the rezoning of Erf 1423 Walvis Bay from "Single Residential" with a density of 1 dwelling unit per 500m<sup>2</sup> to "General Business" with a maximum bulk factor of 2.0 for the development of an office/admin complex.
- [2] That the following conditions apply to the Environmental Clearance Certificate:
  - a. The proponent shall address all potential impacts resulting from the construction and operational activities and implement the mitigation measures as contained in the Environmental Management Plan.
  - b. Regular environmental monitoring and evaluation of environmental performance should be conducted and targets for improvements should be established and monitored from time to time. and
  - c. The Environmental Commissioner (with delegated authority to the Municipal Council of Walvis Bay) reserves the right to attach further legislative and regulatory conditions during the operational activities of the project.

The following report will describe the site, the proposed rezoning, the need and desirability of the application and statutory/policy support for the application for further consideration.

#### 3. Terms of reference

The following terms of reference set out the approach the proponent intends to follow in undertaking the assessment in accordance with the Environmental Management Act of 2007 and its Regulations:

- a) a description of the proposed project, location and receiving environment, and alternative proposals.
- b) identify relevant laws and policies for the project.
- c) advertise and consult potential I&APs to provide an opportunity to submit comments, representations and/or objections to the proposed project.
- d) identify potential impacts the project activity will have on the receiving environment and assess their significance level.
- e) provide possible mitigation measures to be included in the EMP to reduce negative impacts and/or enhance positive impacts on the receiving environment.

# 4. Project Description

## 4.1. Proposed project

The site is occupied by a dwelling house and typical outbuildings (garages and a granny flat) and is currently used for residential purposes only.

In the immediate short term, the owners intend to convert the existing dwelling house into offices with the required on-site parking.

In the long term, all the existing on-site developments will be re-developed/re-purposed into an office/business building.

No site development plan has been prepared to date. Therefore, the proposed office/business building any other intended future development will be subject to the provisions of the Walvis Bay Zoning Scheme.

#### 4.2. Alternative proposals

Alternatives concerning the proposed activity imply different means of meeting the general development objectives of the project which may include alternatives to the site location, a non-rezoning alternative and alternative designs of the building itself. The following alternatives were considered for the proposed activity.

#### 4.3. Site alternatives

The Proponent considers the current site very suitable for the purpose and requirements of the proposed activity. The chosen site meets with the Proponent's development objectives. Lastly, the site, type of activity (office/business) and operational aspects of the proposed development are supported by the Walvis Bay Urban Structure Plan and therefore an alternative site is not considered.

#### 4.4. No rezoning alternative

This alternative implies that the property remains zoned "Single Residential" with a density of 1 dwelling unit per 500m<sup>2</sup>. This zoning does not permit any type of office/business development.

Therefore, the no rezoning alternative will not be suitable for the Proponent's long term development objectives and the Walvis Urban Structure Plan which is consequently linked to the National Spatial Development Framework.

## 4.5. Design alternative

The existing residential building is suitable to be converted to a business use from an architectural and structural point of reference. Detailed alteration building and structural plans will be submitted for evaluation and approval (to the Walvis Bay Municipal Council), prior to the commencement of any on-site development.

## 5. Description of receiving environment

This section will describe the receiving environment that may be affected by the proposed activity, or which could influence or impact the development proposal. The tables in this report summarise the activity, receptor (the receiving environment) and the potential impact on the receptor.

The site is located along Nangolo Mbumba Drive which is an important collector road that links the CBD to the outer edge of the Walvis Bay town and residential areas. Nangolo Mbumba Drive is a busy east-west traffic route.

The site is level/flat and well above the water table. There are no on-site features of an aesthetic, historical, cultural or environmental nature that require retention. The site has been an integral part of the urban area for a very long time.

The current dwelling house and outbuildings and the site itself are in good condition/well maintained. Physically and structurally, it is possible for the house, garage and granny flat to be converted into offices/business buildings.

The dwelling house/dwelling unit is situated close to the Nangolo Mbumba Drive frontage and the outbuildings are at the rear of the site. There is a large open space area between the dwelling house and outbuildings, and which is used for open parking, garden and manoeuvring space for cars.

The site measures 1,125m² in extent. It is currently zoned "Single Residential" with a density of 1 dwelling unit per 500m² in terms of the Walvis Bay Zoning Scheme.



Figure 1: Location of the Erf 1423 Walvis Bay (red boundary).

The site is situated in an old historically residential neighbourhood on the edge of the Walvis Bay CBD. Most homes/flats are well maintained but others are in a slow state of decline. The land use of the wider area is slowly changing as houses are converted into offices and/or businesses. This is due to the proximity of the site to the existing central business district of Walvis Bay, the port/harbour and the northern/eastern industrial area.

From

**Figure 2** below, it can be seen that the amenity of the surrounding and nearby properties are being zoned to General Business along Nangolo Mbumba Drive, allowing for a mix of land uses in the wider area.





Figure 3 are photos of the site:



Figure 4: Site viewed close from Nangolo Mbumba Drive.



Figure 3:Side view from open area (Erf 1426-vacant) on the eastern side of the site.



Page 8 of 21

Figure 4:Side view from vacant Erf 1426 looking towards Nangolo Mbumba Drive.

Table 1 provides a summary of the property.

Table 1: Summary of property description.

Registered Name	Erf No. 1423, Walvis Bay
Size	1,125m²
Street Address	260 Nangolo Mbumba Drive
Location	See Locality Plan GPS Co-ordinates: <u>22°57'06.48 S</u> , 14 <u>°30'45.59 E</u> ,
<b>Current Zoning</b>	Single Residential
Density	One dwelling unit per 500m² (1:500m²)
Bulk Factor	No building may exceed a bulk of 0.5 (or floor area of 562,50m²)
Registered Owner	Alwyn Jacobus Maass
<b>Local Authority Area</b>	Municipality of Walvis Bay

# 6. Identification of laws and policies

Table 2 provides an overview of legislation and its application to the proposed project whereas Table 3 summarises relevant policies that apply to the project.

Table 2: Laws or legislation applicable to the project.

Law or Policy	Provision or application	Authority
Namibia Constitution	Article 95(I): The State shall actively promote and maintain the welfare of the people by promoting sustainable development.	National Government
Walvis Bay Zoning Scheme as underwritten by the Urban and Regional Planning Act, 2018 (Act No.5 of 2018).	The proposed rezoning requires approval from the Local Authority (LA) and Urban and Regional Planning Board (URP Board).	LA & URP Board.
Environmental Management Act, 2007 (Act No.7 of 2007) and EIA Regulations.	The rezoning of land from residential to commercial is a listed activity which requires an Environmental Clearance Certificate to be undertaken. The Ministry of Environment, Forestry and Tourism (MEFT) is the custodian of this Act with certain powers delegated to the Local Authority (LA).	LA & MEFT
Labour Act, 2007 (Act No.11 of 2007), as amended.	The proponent and Contractor need to adhere to the provisions of this law. This Act provides regulations to protect employees from unfair labour practices and prescribes labour disputes in the workplace.  Employers must adhere to minimum wages and promote a healthy working environment, free from	MLIREC

Law or Policy	Provision or application	Authority
	discrimination. The Ministry of Labour, Industrial Relations and Employment Creation (MLIREC) is the custodian of this Act.	
Atmospheric Pollution Prevention Ordinance, 1976 (APPO:1976).	Provides general guidance on pollution control such as dust. This ordinance requires any construction site to adopt the best practicable method to prevent dust from spreading and causing health issues.	MEFT
Public and Environmental Health Act, 2015 (Act No.1 of 2015).	To promote public health and well-being and to protect individuals and communities from public health risks, including the latest COVID-19 Regulations. The proposed development is subject to the provisions of the Act and inspections from the Local Authority.	LA
All relevant Local Authority Regulations	The project is subject to all relevant regulations (relating to health, building control etc) as required by the various departments of the Local Authority.	LA

Table 3: Policies or guidelines relevant to the project.

Policy	Provision or application	Authority
Walvis Bay Urban Structure Plan (IUSDF)	This plan indicates the future growth and structure plan of Walvis Bay up to 2030 with policies on land use planning. The IUSDF was reviewed to determine whether the proposed activity is broadly in line with the future planning of Walvis Bay.	LA
Walvis Bay Strategic Plan	Steering the Walvis Bay ship from the present to a progressive future through transformational leadership.	LA
Draft Procedures and Guidelines for EIA and EMP of 2008.	A procedure and guideline document and serves as a reference and supportive text only	MEFT
Walvis Bay Biodiversity Report of 2008 (WBBR:2008).	Provides a comprehensive summary and map of sensitive biodiversity areas and zoning in the local district. It was determined that the project is not located within or close to a sensitive biodiversity area.	LA
Walvis Bay Climate Strategic Action Plan.	Provides action plans on how Town Planning can help mitigate climate change. Promote redevelopments, reduce urban sprawl, and minimise land consumption.	LA
Sustainable Urban Energy Planning: A handbook for cities and towns in developing countries. (SUEP: 2004).	Provides a comprehensive list of case studies to implement energy-saving measures to conserve natural resources with city planning.	ICLEI & UN- Habitat

## 7. Public Consultation Process

## 7.1. Steps taken to notify potential interested and affected parties

Neighbours and the public were notified on 25 October 2024 of the rezoning application and to notify potential interested and affected parties to register.

## 7.2. Proof of consultation

The application was advertised as required between 25 October 2024/22 November 2024.

Proof of consultation, with the necessary supporting documents is attached.

# 7.3. List of registered interested and affected parties

No written objections were received on/before the closing date of 22 November 2024.

# 7.4. Summary of issues raised by interested and affected parties

Not applicable – no issues raised by interested and affected parties.

# 8. Identification of Potential Impacts

During the scoping exercise, potential impacts were identified which are linked to the proposed activity and/or a sensitive receptor. The potential impacts have been identified among four phases namely:

- 1. Planning Phase
- 2. Construction Phase
- 3. Operational Phase
- 4. Decommissioning Phase

Table 4: Planning Phase: List of Potential Impacts Numbered P1 to P6.

	IMPACT IDENTIFICATION: PLANNING PHASE			
No.	Activity	Receptor	Potential Impact	
P1	Proposed building height of one storey. No changes to the current.	Surrounding single storey residential and double storey business.	Land Use Compatibility Positive: The proposed business use and height are considered compatible with nearby existing residential and business land uses and heights.	
P2	Notification of proposed rezoning and land use and public participation.	General public and neighbouring properties.	Public Input Positive: to-date, public or neighbours did not raise any objections or concerns to the proposed development.	
P3	Appointment of subcontractor(s) for building alterations.	High unemployment rates in Walvis Bay.	Employment Creation Positive: Creates short-term employment opportunities for local contractors and workers.	
P4	Payment of compensation fee and monthly payments.	Poor Council revenue sources for general upkeep and maintenance.	Council Revenue Generation Positive: Increase in Council revenue due to payment of compensation fees and increased business rates, taxes and service charges.	
P5	Short term alteration of dwelling house and outbuildings.	No heritage or architectural status or cultural value of building or site.	Cultural Impacts Positive: No heritage, architectural or cultural significance.	
P6	Loss of dwelling house and outbuilding.	The current owner has purchased the site for the proposed activity.	Promote Mixed-Use Development Positive: Alteration and redevelopment of site into office/business building will create a much-needed service in the area and Walvis Bay town in general.	

Table 5: Construction Phase: List of Potential Impacts Numbered C1 to C7.

	IMPACT IDENTIFICATION: CONSTRUCTION PHASE			
No.	Activity	Receptor	Potential Impact	
C1	Loud noise is generated from vehicles, machinery and compactors.	Adjacent residents and construction workers without PPE.	Construction Noise Impacts Negative: Construction activity will generate noise and potentially disturb residents and businesses and can be harmful to persons working with heavy machinery and equipment without PPE.	
C2	Improper disposal of building waste and rubble.	Site, street and neighbourhood.	Solid Waste Management Negative: Generation of construction waste (cement, plastics, ceramics, bricks, and wood) can pollute the urban environment.	
C3	Accidental spillage of hazardous waste such as oil, paint or wet cement.	Site, street and neighbourhood.	Hazardous Waste Management Negative: Water paint, oil leakages, from heavy vehicles or equipment, and spillage of wet cement can pollute the environment and be a health risk to construction workers and residents.	
C4	Lack of ablution facilities, potable water, warning signs and safety training.	Construction workers and visitors from the public.	Health and Safety Impacts Negative: Lack of sanitation and potable water can create a health risk. Lack of first aid training/ awareness of injuries can create a safety risk.	
C5	Generation of dust particles from compaction or release of dry cement.	Construction workers without PPE.	Negative: Generation of dust during compaction and/or particles from cement or other related	

	IMPACT IDENTIFICATION: CONSTRUCTION PHASE			
No.	Activity	Receptor	Potential Impact	
			construction activity can negatively impact the health and safety of workers.	
C6	Labour disputes, proper wages, gender discrimination, and unsafe working environments.	Construction workers especially female workers.	Socio-economic Impacts Negative: Lack of proper compensation and/or unsafe working sites, and unfair gender recruitment, can be harmful to the well-being and health of employees.	
C7	Movement of heavy vehicles to and from the site. Delivery of building material.	Busy centrally located urban environment.	Construction Traffic Impacts Positive: Heavy vehicles delivering material are unlikely to disturb the neighbourhood who already experience higher levels of traffic and noise. No diversion of traffic or street closures are required.	

Table 6: Operational Phase: List of Potential Impacts Numbered O1 to O7.

	IMPACT IDENTIFICATION: OPERATIONAL PHASE			
No.	Activity	Receptor	Potential Impact	
01	Operation of an office/business premises.	Adjacent residents.	Operational Noise Impacts Positive: The office/business land use is not expected to create a disturbance for neighbours or other businesses.	
O2	Appointment of permanent employees to operate and work in the business.	High unemployment rates in Walvis Bay.	Employment Creation Positive: Creates long-term employment opportunities in the local area. Employment indirectly reduces poverty and crime in general.	
O3	Increase in water and electrical consumption.	Scarce water and energy resources.	Water and Energy Management Negative: The proposed development will marginally increase electrical and water consumption which are scarce resources in Namibia.	
O4	Lack of proper toilet facilities or lack of cleaning/maintenance.	General public health and convenience.	Public Sanitation Impact Negative: A potential lack of clean toilets within the proposed building can create a public health risk for visitors and occupants.	
05	Increase in traffic due to office use generating more vehicle trips.	Capacity of local streets to accommodate additional traffic.	Increased Traffic Impacts Positive. Local roads can cope with additional load without any problems or upgrading.	
O6	Property access and sight lines.	Busy Nangolo Mbumba Avenue and associated traffic risks.	Access and Traffic Impacts Positive: Access remains from Nangolo Mbumba Drive. Nangolo Mbumba Drive is wide enough, and any additional traffic impact will be insignificant.	
O7	Employee and client parking requirements.	Large erf size and road reserves	Parking Impacts Positive: All parking can be provided on-site. Additionally, provision has been made on the main road reserve for on-street parking as well.	

Table 7: Decommissioning Phase: List of Potential Impacts Numbered D1 and D2.

	IMPACT IDENTIFICATION: DECOMMISSIONING PHASE			
No	Activity	Receptor	Potential Impact	
D1	Potential long-term alterations or structural changes to the dwelling house and outbuildings.	No architectural, heritage status or cultural value of building or site.	Cultural Impacts Positive: No architectural, heritage or cultural significance will be destroyed.	
D2	Future decommissioning of the building by the proponent or new owner.	Neighbouring properties and residents.	Decommission Impacts Negative: Similar construction-related impacts have been identified in Table 5.	

For impact assessment before any mitigation, please refer to Table, Table, Table 12 and Table 13. For proposed mitigations, please refer to the Environmental Management Plan.

## 9. Need and desirability of the project

The proposed rezoning can be supported from a town planning point of view due to the following reasons:

- [1] Most properties along Nangolo Mbumba Drive have already been rezoned and/or have been redeveloped/converted into businesses.
- [2] The site is large enough (1,125m²) to support offices/business complex with on-site parking as required by the Walvis Bay Zoning Scheme.
- [3] Offices/business land uses will contribute to compact city development, promote walkable neighbourhoods and are more environmentally friendly.

In conclusion, the proposed land use and rezoning are considered needed and desirable and can be supported in principle.

The development proposal will comprise "Offices Premises" and/or "Business Premises" which are defined in terms of the Walvis Bay Zoning Scheme. All these land uses are not permitted in the current "Single Residential" zone hence the need to rezone the property. To permit the above land uses, the "General Business" zone is considered most appropriate.

The proposed bulk is 2.0 as this is the generic bulk permitted in the "General Business" zone.

In conclusion, the proposed "General Business" zoning is considered a suitable zoning to permit an office/business land use development.

#### 10. Impact assessment

The following section will contain a description and assessment of the significance of any effects, including cumulative effects, that may occur because of undertaking the activity.

#### 10.1. Methodology

The assessment of impacts is based on methods published in Namibia and South Africa (Directorate of Environmental Affairs, 2008: 42; DEAT, 2002). Each identified impact is evaluated systematically in terms of its magnitude and extent in area, the duration and frequency of occurrence, the reversibility on the environment, and the acceptability from interested and affected parties. The average grading is then multiplied by the probability of and direction to determine a final numerical value.

This value determines the significance which ranges from highly negative (-3) to highly positive (+3) as indicated on the following scale:



Table 8 provides a definition and overview of each significance level and Table 9 is a summary of the criteria used, their definition and the grading scale.

Table 8: Definition of each significance level.

SIGNIFICANCE LEVEL	DEFINITION	GRADE
-VERY LOW or +VERY LOW	Impacts that affect a tiny area or population and hardly modify the environment. Biological and socio-economic aspects continue to function normally. Positive or negative effects are trivial and non-existent, and no mitigation is required.	±0
-LOW or +LOW	Impacts that affect a small area or population and slightly modify the environment. Biological and socio-economic aspects continue to function sustainably without mitigation. Positive and negative effects are minor and almost unnoticeable. Mitigation is cost-efficient and easy to implement.	±1
-MEDIUM or +MEDIUM	Impacts affect a larger area or population and modify the environment to some extent.  Biological and socio-economic aspects continue to function sustainably with mitigation.  Positive and negative effects are noticeable and important. Mitigation is costly but can be implemented.	±2
-HIGH or +HIGH	Impacts that affect a wide area or population and heavily modify the environment. Biological and socio-economic aspects continue to function on an unsustainable basis for negative impacts. Both positive and negative impacts are major and apparent. Mitigation is expensive and sometimes impossible to implement.	±3

Table 9: Summary of criteria, definition and grading.

CRITERION	DEFINITION	GRADE
MAGNITUDE	Magnitude defines the scale and ability of an impact to cause a change in the environment which is from a very low (0) to a very high (5) scale of change.	measured
Very Low	The impact has little to no change in the size or value of an environmental feature.	1
Low	The impact has a small change in the size or value of an environmental feature.	2
Moderate	The impact has a moderate and noticeable change on the environment.	3
High	The impact has a large and noteworthy change in the size or value of an environmental feature.	4
Very High	The impact has a major and significant change in the size or value of an environmental feature.	5
EXTENT	Extent defines the ability of an impact to affect a certain geographic area which can range from on- international (5) level.	site (1) to an
On-site	The impact is limited to the boundaries of the project site within a 50-meter radius.	1
Local	The impact affects the local surrounding environment within a 500-meter radius.	2
Urban	The impact affects the wide urban area within a 5 km radius	3
Regional	The impact is extensive and felt on a regional or national scale within the borders of the country.	4
International	The impact is widespread, cross-border cutting, and felt on an international level.	5
DURATION	Duration specifies how long an impact and effect will endure which can last from very short (1) to viduration.	ery long (5)
Very Short	The impact can last less than a day or week.	1
Short	The impact can last a few months or less than a year or during the construction phase only.	2
Medium	The impact can last between 1 to 10 years or during the operational phase only.	3
Long	The impact can last more than 10 years and close to the end of the operational phase.	4
Very Long	The impact can last from up to 100 years or more and beyond the decommissioning phase.	5
FREQUENCY	Frequency defines how many times an impact will occur over time which can range from a very low very high (5) rate of occurrence.	(1) to a
Very Low	The impact occurs only once or has a very low number of occurrences over the project life cycle.	1
Low	The impact occurs infrequently or has a low number of occurrences in a year.	2
Medium	The impact occurs occasionally or has a medium number of occurrences in a month.	3
High	The impact occurs often or has a high number of occurrences in a few days or a week.	4
Very High	The impact occurs frequently with a very high number of occurrences in an hour or day.	5
REVERSIBILITY	Reversibility is the ability of the receiving environment to restore itself with or without human interver measured from a low (1) to high cost (5).	ention and is
Low Cost	The impact has a high rate of reversibility, or the environmental health will restore itself to its natural state at a fast rate with little to no cost.	1
Medium Cost	The impact has a medium rate of reversibility, or the environmental health can be restored to its natural state but with human intervention at a reasonable rate and cost.	3
High Cost	The impact has a low rate of reversibility (if not irreversible) or the environmental health can be restored to its natural state at a slow rate, but it will be difficult or expensive to rehabilitate.	5
ACCEPTABILITY	Acceptability shows the level of tolerance from the public which can range from being acceptable (a unacceptable (5) depending on the response received from interested and affected parties.	I) to
Acceptable	The impact is acceptable when no objections or concerns have been noted during public participation and/or the impact does not pose a potential risk to public health and safety.	1
Manageable	The impact is manageable when a small number of objections or concerns have been noted during public participation and/or the impact has a small potential risk to public health and safety.	3

CRITERION	DEFINITION	GRADE
Unacceptable	The impact is unacceptable when many objections or concerns have been noted during public participation and/or the impact poses a major potential risk to public health and safety.	5
PROBABILITY	Probability is the likelihood of a potential impact happening as predicted which can range from a verto a very high (100%) chance of occurring. The probability is multiplied by the average grading.	ry low (0%)
Very Low	The impact will not occur with a probability of 0%.	0%
Low	The impact is unlikely to occur with a low probability of say ±25%.	25%
Medium	The impact is expected to occur with a medium probability of say ±50%.	50%
High	The impact is likely to occur with a high probability of say ±75%.	75%
Very High	The impact will occur with a probability of 100%.	100%
DIRECTION	Direction determines whether an impact will have a positive (+) or a negative (-) impact on the environment an is multiplied by the average grading to determine whether the impact is beneficial or not.	
Positive	Positive impacts have beneficial, useful, and desirable effects on the receiving environment.	(+)
Negative	Negative impacts have adverse, costly and undesirable effects on the receiving environment.	(-)

# 10.2. Assessment of potential impacts

The identified impacts are evaluated according to their magnitude, extent, duration, frequency, reversibility and acceptability to obtain an average grading. This grading is multiplied by the probability and direction to calculate the final grading and significance level before mitigation measures are implemented.

Table 10 lists the planning impacts numbered P1 to P6 and their associated evaluation and significance level.

Table 10: Planning phase and assessment of potential impacts before mitigation.

IMPACT ASSESSMENT BEFORE MITIGATION: PLANNING PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation
P1	Moderate 3	Local 2	Long 4	High 4	Medium Cost 3	Acceptable 1	2.83	High 75%	Positive (+)	+2.1	+MEDIUM
P2	Low 2	On-site 1	Short 2	Very Low 1	Low Cost 1	Acceptable 1	1.33	Very High 100%	Positive (+)	+1.3	+LOW
Р3	Low 2	Urban 3	Short 2	Very Low 1	Medium Cost 3	Manageable 3	2.33	High 75%	Positive (+)	+1.7	+MEDIUM
P4	Low 2	Urban 3	Short 2	Medium 3	Low Cost 1	Acceptable 1	2.00	Very High 100%	Positive (+)	+2.0	+MEDIUM
P5	Very Low 1	On-site 1	Long 4	Very Low 1	High Cost 5	Acceptable 1	2.16	High 75%	Positive (+)	+1.6	+MEDIUM
P6	Moderate 3	Local 2	Short 2	Very Low 1	Low Cost 1	Manageable 3	2.00	High 75%	Negative (-)	-1.5	-LOW

Table lists construction-related impacts numbered C1 to C7 and their associated evaluation and significance level.

Table 11: Construction phase and assessment of potential impacts before mitigation.

	IMPACT ASSESSMENT BEFORE MITIGATION: CONSTRUCTION PHASE												
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation		
C1	High 4	Local 2	Short 2	Very High 5	High Cost 5	Manageable 3	3.50	High 75%	Negative (-)	-2.6	-HIGH		
C2	High 4	Local 1	Short 2	Very High 5	Medium Cost 3	Manageable 3	3.00	Very High 100%	Negative (-)	-3.0	-HIGH		
С3	Very High 5	On-site 1	Short 2	Medium 3	Medium Cost 3	Unacceptable 5	3.17	Very High 100%	Negative (-)	-3.2	-HIGH		
C4	High 4	On Site 1	Short 2	Very High 5	Medium Cost 3	Man <mark>ageabl</mark> e 3	3.00	Very High 100%	Negative (-)	-3.0	-HIGH		
C5	Moderate 3	On-site 1	Short 2	High 4	High Co <mark>st</mark> 5	Mana <mark>geable</mark> 3	3.00	Very High 100%	Negative (-)	-3.0	-HIGH		
C6	Very High 5	On Site 3	Short 2	Very Low 1	Medium Cost 3	Unacceptable 5	3.17	Very High 100%	Negative (-)	-3.2	-HIGH		
C7	Low 2	Urban 3	Short 2	Very High 5	Medium Cost 3	Manageable 3	3.00	High 75%	Positive (+)	+2.25	+MEDIUM		

Table 12 lists operational-related impacts numbered O1 to O7 and their associated evaluation and significance level.

Table 12: Operational phase and assessment of potential impacts before mitigation.

	IMPACT ASSESSMENT BEFORE MITIGATION: OPERATIONAL PHASE												
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation		
01	Low 2	Local 2	Long 4	High 4	Low Cost 1	Acceptable 1	2.33	High 75%	Positive (+)	+1.8	+MEDIUM		
O2	High 4	Urban 3	Medium 3	Medium 3	Medium Cost 3	Acceptable 1	2.83	Very High 100%	Positive (+)	+2.8	+HIGH		
О3	Low 2	Regional 4	Medium 3	Low 2	Medium Cost 3	Manageable 3	2.83	High 75%	Negative (-)	-2.1	-MEDIUM		
04	Low 2	On-site 1	Medium 4	Low 2	Low Cost 1	Ma <mark>nagea</mark> ble 3	2.17	Medium 50%	Negative (-)	-1.1	-LOW		
O5	Low 2	Local 2	Long 4	High 4	Low C <mark>ost</mark>	Man <mark>ageab</mark> le 3	2.66	High 75%	Positive (+)	+2.4	+MEDIUM		
O6	High 4	Local 2	Medium 4	Very High 5	Low Cost 1	Acceptable 1	2.83	High 75%	Positive (+)	+2.1	+MEDIUM		
07	Moderate 3	Local 2	Medium 4	Low 2	Low Cost 1	Manageable 3	2.50	Medium 50%	Positive (+)	+1.25	+MEDIUM		

Table 13 lists decommissioning related impacts numbered D1 and D2 and their associated evaluation and significance level.

Table 13: Decommissioning phase and assessment of potential impacts before mitigation.

	IMPACT ASSESSMENT BEFORE MITIGATION: DECOMMISSIONING PHASE											
Impact No.	Magnitude	Extent	Duration	Frequency	Reversibility	Acceptability	Average grading	Probability	Direction	Final grading before mitigation	Significance level before mitigation	
D1	Low 2	Local 2	Long 4	Low 2	Low Cost 1	Acceptable 1	2.00	High 75%	Positive (+)	+1.5	+MEDIUM	
D2	High 4	Local 2	Short 2	Low 2	High Cost 5	Manageable 3	3.00	High 75%	Negative (-)	-2.2	-HIGH	

In conclusion, there are more positive than negative impacts during the planning, operational and decommissioning phases. Most negative impacts have been identified during the construction phase and will need standard construction-related mitigation measures.

Overall, the development proposal will not create a major or unacceptable negative impact on the receiving environment.

# 11. Environmental Management Plan

Please refer to Annexure A for the Environmental Management Plan (EMP) and recommended mitigations for each potential impact.

#### 12. Conclusion

Given the proposed land use activity and the limited size of the development, the proposed development is not expected to generate a significant negative impact on the receiving urban environment. The proposed activity can be supported from an environmental point of view as no negative comments or objections were received during the public consultation exercise.

If all mitigation measures are implemented as provided in the EMP, it is expected that all the negative impacts can be reduced and, in some cases, the positive impacts can be enhanced.

The EMP document should be provided to all responsible stakeholders and be used as an on-site reference document during all phases of the proposed development.

#### 13. Recommendation

Based on the findings of this report, the following is recommended:

- [1] That an Environmental Clearance Certificate be issued to Mr Alwyn Jacobus Maass for the rezoning of Erf 1423 Walvis Bay from "Single Residential" with a density of 1 dwelling unit per 500m² to "General Business" with a maximum bulk factor of 2.0 for the development of an office/business building only.
- [2] That the following conditions apply to the Environmental Clearance Certificate:
  - a. The proponent shall address all potential impacts resulting from the construction and operational activities and implement the mitigation measures as contained in the Environmental Management Plan.
  - b. Regular environmental monitoring and evaluation of environmental performance should be conducted and targets for improvements should be established and monitored from time to time. and
  - c. The Municipality of Walvis Bay reserves the right to attach further legislative and regulatory conditions during the operational activities of the project.

Yours sincerely,

Mario Mberira

STEWART PLANNING