PROPOSED REZONING OF ERF 3123 WALVIS BAY FROM “SINGLE RESIDENTIAL” TO “LOCAL BUSINESS” AND SUBSEQUENT CONSOLIDATION OF ERVEN 3123 AND 6434 WALVIS BAY.

# ENVIRONMENTAL IMPACT ASSESSMENT REPORT

30 April 2026


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|---|---|
| **Project title:** | Proposed rezoning of Erf 3123 Walvis Bay to "Local Business" and subsequent consolidation with Erf 6434 Walvis Bay. |
| **Date:** | 30 April 2026 |
| **Reference:** | 3123.6464 WB |
| **Report Status:** | Scoping Report<br>3123.6434 WB_Scoping Report. V1<br>Version 1 |
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## Abbreviations

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|---|---|
| ANSI: | American National Standards Institute |
| CBD: | Central Business District |
| CRAN: | Communication Regulatory Authority of Namibia |
| CV: | Curriculum Vitae |
| EAP: | Environmental Assessment Practitioner |
| EC: | Environmental Commissioner |
| ECC: | Environmental Clearance Certificate |
| ECNS: | Electronic Communications Network Service |
| ECS: | Electronic Communication Service |
| EMF: | Electromagnetic Field |
| EMP: | Environmental Management Plan |
| FCC: | Federal Communications Commission |
| GHz: | Gigahertz |
| HF: | High Frequency |
| I&AP: | Interested and Affected Party |
| IEEE: | Institute of Electrical and Electronics Engineers |
| IUSDF: | Integrated Urban Spatial Development Framework |
| LA: | Local Authority |
| MEFT: | Ministry of Environment, Forestry and Tourism |
| MHz: | Megahertz |
| OSHA: | Occupational Safety and Health Administration |
| PPE: | Personal Protective Equipment |
| RF: | Radiofrequencies |
| SAR: | Specific Absorption Rate |
| VHF: | Very High Frequency |
| WBM: | Walvis Bay Municipality |
| WHO: | World Health Organization |

## Attachments

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|---|---|
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## 1. Introduction

Radio Electronic (Pty) Ltd relocated their business from the industrial area to Erf 6434 Walvis Bay in the CBD area IN 2023/2024. The proponent now intends to rezone the neighbouring Erf 3123 and consolidate it with Erf 6434 Walvis Bay (current location of Radio Electronic) to assemble a larger erf for future additions/alterations to their existing double-storey building containing a retail showroom and offices with a related workshop and training centre.

The proposed rezoning and consolidation has been submitted to the Municipal Council of Walvis Bay (Town Planning Section) for a decision. The purpose of this report is to obtain an Environmental Clearance Certificate (ECC) for the proposed rezoning as recommended below:

> [1] That an Environmental Clearance Certificate be issued to Radio Electronic (Pty) Ltd for the following listed activities:
>
> a. Rezoning of Erf 3123 Walvis Bay from "Single Residential" with a density of 1 dwelling unit per 300m² to "Local Business" and subsequent consolidation with Erf 6434 Walvis Bay to permit future alteration/additions to the operation on site.

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

## 2. 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 the EIA Regulations:

a) A description of the proposed project, location and receiving environment.
b) Identify relevant laws and policies for the project.
c) Advertise and consult potential I&APs, such as the Municipality of Walvis Bay and neighbours 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 (Annexure A) to reduce negative impacts and/or enhance positive impacts on the receiving environment.

## 3. Project Description

### 3.1. Proposed project

Radio Electronic (Pty) Ltd is situated at the corner of on Erf 6434 Walvis Bay (Consolidated Erven 3109 and 3124 Walvis Bay), they bought the adjoining Erf 3123 Walvis Bay to assemble a larger erf that can accommodate future additions/alterations. They intend to construct additions and/or make alterations to the existing facilities in the long term.

Figure 1: Front view of current Radio Electronic building (Source: Google Earth, March 2024).


Figure 2: Side view of current Radio Electronics building.(Source: Google Earth, March 2024).

The intention is to rezone Erf 3123 Walvis Bay from “Single Residential” with a density of 1 dwelling unit per 300m² to “Local Business” and subsequently consolidate Erven 6434 and 3123 Walvis Bay into Portion X in terms of the Walvis Bay Zoning Scheme and Urban and Regional Planning Act (Act No.5 of 2018). The proposed “Local Business” zoning will permit the subsequent consolidation and desired alterations/additions in the long term.

The proponent specialises in marine electronics, radio and satellite communications, power systems, broadband services and consumer electronics. Current development on site comprises of a retail showroom, offices and a small workshop for service repairs. The intention of the application is assembling a large enough erf for the proponent to expand operations as needed.

There are no preliminary development plans available, however all additions/alteration to the existing facilities will be fully in accordance with the Walvis Bay Zoning Schemes requirements such as coverage, density, bulk, height, building lines and parking in terms of the “Local Business” zone.

### 3.2. Listed activities

The proposed project has been evaluated in terms of the list of activities that may not be undertaken without an Environmental Clearance Certificate as promulgated under Notice 29 of Government Gazette No.4878 dated 6 February 2012. The proposed project triggers the following listed activities:

**LAND USE AND DEVELOPMENT ACTIVITIES**

5.1. The rezoning of land from -

(a) residential use to industrial or commercial use.

## 4. 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. Table 6 on page 13 summarises the activity, receptor (the receiving environment) and the potential impact on the receptor.

Erven 6434 and 3123 Walvis Bay are located on the corner of Johnson Mabakeng and Sixth Street and within the wider Central Business District of Walvis Bay as shown in Figure 3 below (Locality Plan attached as Annexure E). The site coordinates are: -22°57'30"S 14°29'50"E


Figure 3: Location of Erven 6434 and 3123 Walvis Bay (in red).

Erf 6434 Walvis Bay is situated on the corner and measures 2 084m² in extend whereas adjacent Erf 3123 Walvis Bay measures 1 134m², resulting in a total site size of 3 218m². This provides sufficient space to support any new additions or alterations to the existing facilities on site.

Erf 6434 Walvis Bay is zoned “Local Business”, while Erf 3123 Walvis Bay is zoned “Single Residential” in terms of the Walvis Bay Zoning Scheme as depicted in Figure 4 below. The “Single Residential” zoning only permits a dwelling unit (house) with the usual outbuildings. Neighbouring erven are zone “Single Residential”, “Local Business” and “General Business” and the location is situated on the edge of the existing CBD of Walvis Bay.


Figure 4: Current zoning of Erven 6434 and 3123 Walvis Bay and surrounding properties.

The property is well located to existing shops, businesses and offices such as, for example:

- M&M Signs (a printing shop on Erf 3110 Walvis Bay);
- Learning Nation Namibia (a toy/gift shop and house on Erf 3111 Walvis Bay);
- Bay Wash Cleaning (a chemical retailer/wash bay on Erf 3104 Walvis Bay);
- Atlantic Sea Products (offices on Erf 3212 Walvis Bay);
- Katulife Mall (offices with apartments above on Erf 3105 Walvis Bay); and

The property is also located close to the following residential properties:

- Katulife Mall Apartments (on Erf 3105 Walvis Bay).
- House above Leaning Nation Namibia (on Erf 3111 Walvis Bay).

The receiving urban environment has a mixture of commercial and residential land uses that vary in terms of scale and variety. There is an existing trend of residential properties being converted into shops, offices and businesses. Therefore, the proposed extension of commercial land use and proposed design of the building will integrate well with the receiving environment.


Figure 5: View of surrounding properties (Date: 06 Oct 2022).

The Radio Electronic facilities are situated on Erf 6434 Walvis Bay as shown in Figure 1 on page 6 and Erf 3123 Walvis Bay is currently undeveloped as shown in Figure 5 on page 7. Any new development on the site will help improve the aesthetic appearance of the urban environment and make residents excited about development happening in the town.

Table 1 below provides a summary of the property.

Table 1: Property description.

| **Registered Name** | **Erf No.6434 Walvis Bay** | **Erf No.3123 Walvis Bay** |
|---|---|---|
| **Size** | 2084m² | 1134m² |
| **Street Address** | C/o Sixth Street and Johnson Fwafwa Mabakeng Street (previously 9th Road) | Along Sixth Street (No.88) |
| **Location** | GPS Co-ordinates: -22.9581441, 14.4974907 | GPS Co-ordinates: -22.9584255, 14.4972552 |
| **Current Zoning** | Local Business | Single Residential |
| **Density** | N/A | One dwelling unit per 300m² (1:300m²) |
| **Land Use** | Radio Electronic retail showroom, offices and related facilities | Vacant/undeveloped |
| **Proponent** | Radio Electronic (Proprietary) Limited. Company Number 2020/0233. | Radio Electronic (Proprietary) Limited. Company Number 2020/0233. |
| **Local Authority Area** | Municipality of Walvis Bay | |

## 5. 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(l): 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 discrimination. The Ministry of Labour, Industrial Relations and Employment Creation (MLIREC) is the custodian of this Act. | MLIREC |
| 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 serves as a reference and supportive text only | MEFT |

| Policy | Provision or application | Authority |
|---|---|---|
| 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 |

## 6. Public Consultation Process

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

The following steps were taken to notify potential interested and affected parties of the proposed application:

i. **Notice in the Gazette for 1 Week.**
A notice was published in Government Gazette No.8835 dated 30 January 2026.

ii. **Notices in 2x Newspapers for 2 Weeks.**
Notices were published in the Namibian and the Namib Times on 23 and 30 January 2026.

iii. **Notice on Site.**
A 60 cm x 40 cm notice was placed on the corner of Sixth Street and Johnson Mabakeng Street and was on display from 24 January 2026 to 23 February 2026.

iv. **Notice at the Local Authority**
A notice was placed on the notice board of the Walvis Bay Municipality and was on display from 24 January 2026 to 23 February 2026.

v. **Notice to neighbouring landowners**
The owner/occupants of Erven 3105, 3104, 3110, 3111, 3112, 3214, 3213, 3212 and 3057 Walvis Bay were notified by registered mail and email before or on 30 January 2026.

### 6.2. Proof of consultation

The application was advertised as required between 23 January and 23 February 2025. Proof of consultation, with the necessary supporting documents are attached.

### 6.3. List of registered interested and affected parties

No written objections were received on/before the closing date 20 February 2026. The list of I&APs is attached as Annexure E.

## 7. Identification of Potential Impacts

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

1. Planning & Decommission Phase (see Table 4 below);
2. Construction Phase (see Table 5 on page 12).
3. Operational Phase (see Table 6 on page 13).

Table 4: Planning & Decommission Phase: List of Potential Impacts Numbered P1 to P10.

| **IMPACT IDENTIFICATION: PLANNING PHASE** | | | |
|---|---|---|---|
| No. | Activity | Receptor | Potential Impact |
| P1 | Proposed additions and/or alterations to existing double-storey building height. | 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 no member of the public or neighbours raised 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 | Alteration of dwelling house and outbuildings. | No heritage or architectural status or cultural significance of building or site. | **Cultural Impacts** Positive: No heritage, architectural or cultural significance. |

Table 5: Construction Phase: List of Potential Impacts Numbered C1 to C8.

| **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. | **Dust Impacts** Negative: Generation of dust during compaction and/or particles from cement or other related construction activity can negatively impact the health and safety of workers. |

| IMPACT IDENTIFICATION: CONSTRUCTION PHASE | | | |
|---|---|---|---|
| No. | Activity | Receptor | Potential Impact |
| C6 | Labour disputes, proper wages, gender discrimination, and unsafe working environments. | Construction workers especially female workers. | **Socio-economic Impacts**<br>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**<br>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 O11.

| IMPACT IDENTIFICATION: OPERATIONAL PHASE | | | |
|---|---|---|---|
| No. | Activity | Receptor | Potential Impact |
| O1 | Operation of an office/business premises. | Adjacent residents. | **Operational Noise Impacts**<br>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**<br>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**<br>Negative: The proposed development will marginally increase electrical and water consumption which are scarce resources in Namibia. |
| 04 | Increase in traffic due to office use generating more vehicle trips. | Capacity of local streets to accommodate additional traffic. | **Increased Traffic Impacts**<br>Positive. Local roads can cope with additional load without any problems or upgrading. |
| O5 | Property access and sight lines. | Busy Sixth Street and associated traffic risks. | **Access and Traffic Impacts**<br>Positive: Access remains from Sixth Steet. Sixth Street is wide enough, and any additional traffic impact will be insignificant. |
| O6 | Employee and client parking requirements. | Large erf size and road reserves | **Parking Impacts**<br>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

| 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**<br>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**<br>Negative: Similar construction-related impacts have been identified in **Table 13.** |

For impact assessment before any mitigation please refer to Table 8 and 9. For proposed mitigations, please refer to the Environmental Management Plan.

## 8. Impact assessment

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

## 8.1. 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:

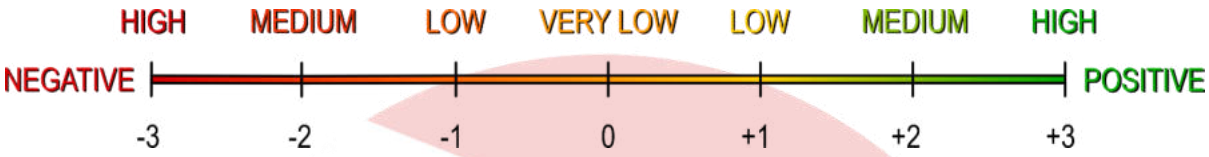



Table 8 provides a definition and overview of each significance level and Table 9 is a summary of the criteria used, their definition and the grading scale.

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 |
| **-VERY HIGH** or **+VERY HIGH** | Impacts that affect a massive area or large population and severely modify the environment. Biological and socio-economic aspects will stop functioning or continue on an unsustainable basis for negative impacts. Both positive and negative impacts are foremost and apparent. The cost of mitigation will outweigh the benefits. | ±4 |
| **-MAJOR** or **+MAJOR** | Impacts that affect a regional or international scale and a massive population. It will completely change the environment and biological and socio-economic aspects will completely change and discontinue to function, even with mitigation. Both positive and negative impacts have major implications which warrant special consideration. Negative impacts may be too difficult and expensive to mitigate and does should not continue. | ±5 |

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 measured from a very low (0) to a very high (5) scale of change. | |
| 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-site (1) to an international (5) level. | |
| On-site | The impact is limited to the boundaries of the project site within a 50-meter radius. | 1 |

| CRITERION | DEFINITION | GRADE |
|---|---|---|
| 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 very long (5) duration. | |
| 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 (1) to a very high (5) rate of occurrence. | |
| 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 intervention and is measured from a low (1) to high cost (5). | |
| 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 (1) to unacceptable (5) depending on the response received from interested and affected parties. | |
| 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 |
| 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 very low (0%) to a very high (100%) chance of occurring. The probability is multiplied by the average grading. | |
| 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 and 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. | (-) |

## 8.2. 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 and decommission impacts numbered P1 to P8 (see Table 4 on page 12) and their associated evaluation and determination of significance level before any mitigation.

Table 10: Planning and decommission phase and assessment of 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** |
| P3 | 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** |

Table 11 lists construction-related impacts numbered C1 to C9 (see Table 5 on page 12) 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** |
| C3 | 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 | Manageable 3 | 3.00 | Very High 100% | Negative (-) | **-3.0** | **-HIGH** |
| C5 | Moderate 3 | On-site 1 | Short 2 | High 4 | High Cost 5 | Manageable 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 O11 (see Table 6 on page 13) 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 |
| O1 | 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 |
| O3 | Low 2 | Regional 4 | Medium 3 | Low 2 | Medium Cost 3 | Manageable 3 | 2.83 | High 75% | Negative (-) | -2.1 | -MEDIUM |
| O4 | Low 2 | Local 2 | Long 4 | High 4 | Low Cost 1 | Manageable 3 | 2.66 | High 75% | Positive (+) | +2.4 | +MEDIUM |
| O5 | High 4 | Local 2 | Medium 4 | Very High 5 | Low Cost 1 | Acceptable 1 | 2.83 | High 75% | Positive (+) | +2.1 | +MEDIUM |
| O6 | 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 impact 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.

## 9. Environmental Management Plan

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

## 10. Conclusion

Given the proposed land use activity and the positive impact of 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 objections were received during the public consultation exercise.

If all mitigation measures are implemented as provided in the EMP, it is expected that all of 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.

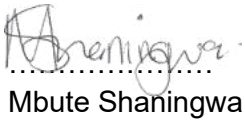
## 11. Recommendation

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

[2] That an Environmental Clearance Certificate be issued to Radio Electronic (Pty) Ltd for the following listed activities:

a. Rezoning of Erf 3123 Walvis Bay from "Single Residential" with a density of 1 dwelling unit per 300m² to "Local Business" and subsequent consolidation with Erf 6434 Walvis Bay to permit future alteration/additions to the operation on site.

Yours sincerely,



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Mbute Shaningwa

**STEWART PLANNING**