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SCOPING REPORT:

Subdivision, Closure as a Public Place, and Rezoning of a portion of Lübbert Street, Swakopmund.

Prepared for / Proponent: Erongo Regional Electricity Distribution Company (Pty) Ltd

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Date 10 October 2025

Title	**ENVIRONMENTAL SCOPING REPORT Subdivision, Closure as a Public Place, and Rezoning of a portion of Lübbert Street, Swakopmund.**
Scope of Work	**Creation of a new erf to accommodate the existing Electrical Substation situated on Lübbert Street.**
Proponent	**Erongo Regional Electricity Distribution Company (Pty) Ltd** **Contact Number: +264 (64) 2019010** **Contact Person: Mr. Nico Niemand** **Email: nniemand@erongored.com.na**
Environmental Assessment Practitioner	**Andrew van der Westhuizen**
Author of Report	**Andrew van der Westhuizen**
Date	**10 October 2025**
Signature of EAP	

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1. INTRODUCTION

The Municipality of Swakopmund and Erongo Regional Electrical Distributor Company (Pty) Ltd entered into an agreement which will allow the aforesaid entity to transfer all substation onto its name. Due to the complexity of historical events, it is in most cases necessary to subdivide both Municipal owned and privately owned properties in order to create a separate property for the substations. Only once the properties have been subdivided and/or rezoned can the transfer of the substations be affected.

The Electrical Substation known as Lüderitz Substation is existing and situated in the road reserve and as such it is needed to subdivide the Streer. The Closure and rezoning of a street portion is a listed activity and thus requires an Environmental Clearance Certificate in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012). Attached as **Annexure A** is the Local Authority Support Letter.

This scoping report will deal with both the natural and urban characteristics of the property itself and that of the surrounding area. The scoping report is based on two site visit that was conducted and other informative information concerning the land and the surrounding area.

This scoping report will form the baseline study for the identification of potential impacts, as foreseen that may occur, and thus giving support to the compilation and effectiveness of the EMP. It is the intention of this Scoping report to Identify and mitigate any foreseen impacts during the Planning Phase, Application Phase and Construction Phase.

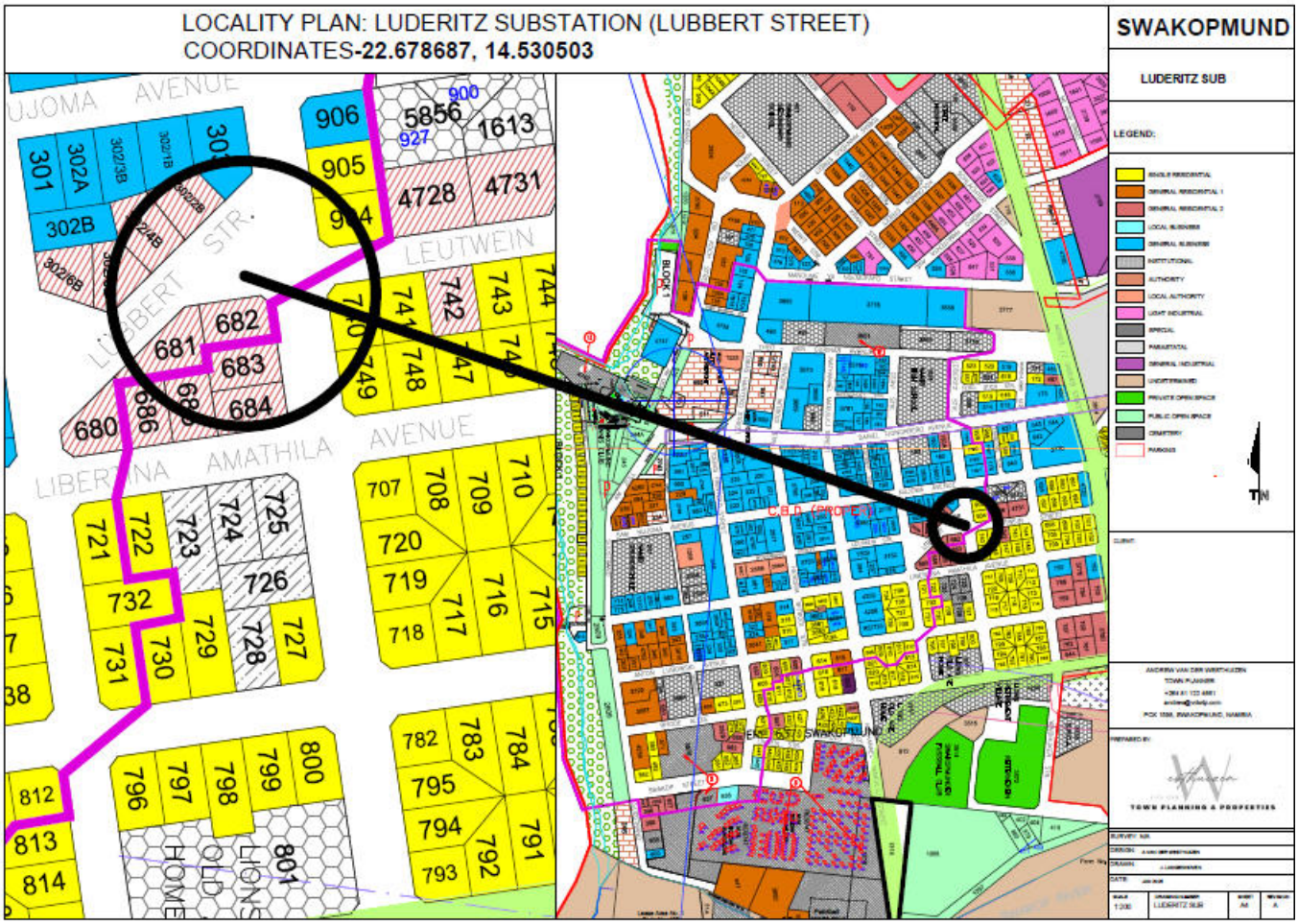
As with all Environmental Impact Assessment processes, the Environmental Management Plan is the most important document to effectively mitigate any potential or foreseen negative impacts on the natural and urban fabric.

2. SITE ANALYSES AND INVESTIGATION

As with all EIA's the most important part of the process is a thorough site investigation and analysis that will ultimately lead to the correct mitigation methods be applied for identified potential impacts. The major points of impact in most urban developments are of a social nature, especially in Swakopmund, since very little natural Fauna and Flora are found within the Swakopmund Townlands. In this case, we are merely creating and erf for an existing substation situated on an undeveloped Public Open Space, and the only construction that is envisaged is a boundary wall along the perimeter some time in future.

2.1. Locality and Erf Size

Lüderitz Substation is located on the corner of Lübbert street and Lüderitz Street. The approximate size of the substation is approximately 70m². The substation can be found at the **Coordinates: -22.678687, 14.530503**. The site is located within what is known as the CBD of Swakopmund also referred to as Swakopmund Proper.



2.2. Ownership and Current Status

All streets and roads on the Townlands of Swakopmund belong to the Municipality of Swakopmund. As mentioned previously in this document, all substation used to belong to the Swakopmund Municipality and as such may substations were constructed on street portions. As it currently stands Erongo Red cannot take possession of the substation as the substation and land on which the substation is situated on belongs to the Municipality.

2.3. Zoning

The current zoning of the land is Street and as such the existing Electrical Substation is conflict with the allocated use of the property. It is thus required to perform the necessary statutory procedures to create a separate erf and allocate the correct zoning to the newly created portion. According to the Swakopmund Town Planning Scheme it is required to provide the new portion with a Parastatal zoning.

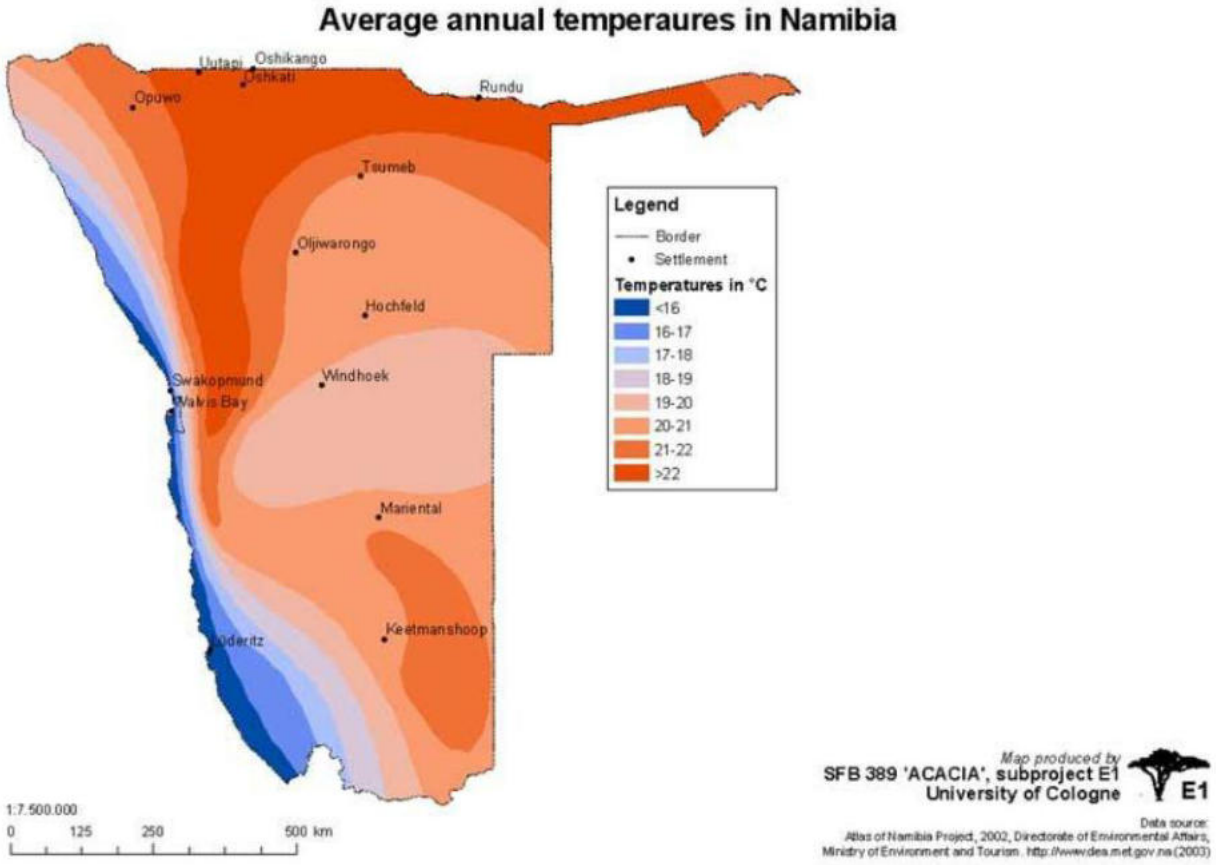
Proposed Portion A will be rezoned to Parastatal in order to comply with the provisions of the Swakopmund Town Planning Scheme No. 12.

3. Environmental Analysis

In this section we discuss the natural and urban environment as established by all the relevant documentation and, most importantly, what was noticed on site after two site inspections. The sections below will focus more on the natural environment rather than the urban setting.

3.1. Climate

Surrounded by the Namib Desert on three sides and the cold Atlantic waters to the west, Swakopmund has a desert climate (BWk, according to the Köppen climate classification) with mild conditions year-round. Precipitation is virtually absent during the year. The climate is classified as BWh according to Köppen and Geiger. In Swakopmund, the average annual temperature is 18.6 °C. Swakopmund is situated in the southern region of the globe. The commencement of summer is observed at the conclusion of January and its culmination takes place in December. The months that constitute this season are known as December, January, February, March.



The image above indicates the Average Temperatures for Namibia

3.2. Precipitation

In terms of precipitation, the month with the lowest amount of rainfall is June, recording a mere 0 mm in its entirety. The highest amount of precipitation occurs during the month of February, with an average reaching up to 7 mm. Occasionally Swakopmund receives rain in excess of 7mm but these events are few and far apart and is somewhat unpredictable. Due to the fact that the annual rainfall is so low there are no significant effects that can be associated or caused by precipitation

within Swakopmund. There is very little stormwater drainage systems installed throughout Swakopmund. When it does rain abnormally hard then flooding of certain streets and areas become evident but as mentioned earlier these events are randomly and far apart and not of a major concern to the site.

3.3. Topography and Soil

The land itself is very flat with no gradient. Due to the fact that the substation is situated in the road reserve and within an already built-up area topography will play no role in this case. There exist no natural features that will impact on the intentions or be of any significance to the intentions.

The fact that the land has been occupied for many years by the substation, it is assumed that soil conditions are relative stable and suitable for the existing use. All surrounding properties have also been developed and this provides clear evidence that the soil conditions are favourable for the intentions.

The soil consists mainly of fine dry sandy soil with scattered rocks ranging from fine sand cm to 0.5cm in size. The soil has a very high salt quantity present. The subsoil consists of hardened clay banks that is situated on hard granite formations as the bedrock.

The property is relatively flat and there exist no natural features that would prohibit the proposed intentions to be approved.

3.4. Ground and Surface Water

Due to the location of the site within the already developed urban environment no natural streams are present and it is highly unlikely that any natural stream will ever exist on the premises. No ground water is to be found within the developed areas of the CBD of Swakopmund.

In terms of water, it is our professional opinion that there exists no threat to any waterbodies or water courses on or around the property on both the surface or underground, if any exist at all.

3.5. Fauna and Flora

In terms of **Fauna and Flora**, there was very little noticed on the property when the site visit and analysis was done. Numerous bird species visit the surrounding area due to the fact that they have coexisted with and adapted to the urban environment over the years. These species include the Cape Sparrow (*Passer melanurus*), Cape Wagtail (*Motacilla capensis*) and Common Doves (*Streptopelia senegalensis*). These birds were picked up by their sounds in the area although none were spotted on the site itself.

No Flora is present on the site or the surrounding area. The only flora to be found are on private properties in the surrounding area.

Due to the nature of circumstances and the fact that the property is situated in a built-up area it is not expected that there should be any red listed species on the property in need of protection.

4. INFRASTRUCTURE AND SERVICES

Important factors to take into consideration are the location and availability of infrastructure and services. These are important as any negative impact by the proposed intentions may cause interruptions to other neighbouring properties thus having a direct impact on the social well-being of the resident.

4.1 Infrastructure

Currently the existing Electrical Substation is seen as a necessity for the neighbourhood, as it is responsible for the electricity supply and distribution to both residential homes and business in the area. It forms part of the larger infrastructure grid of Erongo Red. The substation is already in service and requires no infrastructure needs.

4.2. Access

Access to the newly created property, for the electrical substation, will remain from Lubbert Street There will be no need for any additional access provision to the site as the proposed Portion A, accommodating the substation as proposed, already enjoys direct access from Lubbert Street.

4.3. Infrastructure Services

Due to the nature of use as an electrical substation there will be no need for Municipal Services. The substation is currently supplying electricity to an area of the CBD. Any additional requirements that might arise will be communicated to the relevant parties and dealt with accordingly. There will be no water connections made to the Municipal water reticulation system.

5. SOCIO ECONOMIC EFFECT OF PROPOSED INTENTIONS

Since the intention is purely to create a separate Erf and allocate the correct land use to an existing substation, to conform to the provisions of the Swakopmund Town Planning Scheme, there is very little Socia Economic benefit for the general public in terms of long-term employment opportunities.

The surrounding community will benefit in the continuation of electricity supply to the area and this in itself is the single most imports socio economic benefit that is to be enjoyed by the community. Other than that, there will be short term employment opportunities related to the construction of boundary walls and the painting of the facility. The maintenance of these structures might provide for more opportunity in the long-term sector.

Due to the nature of activity that is taking place on Lubbert Street, there is very little socio- economic benefit to be derived from the intentions other than what has previously been mentioned. The structure and use are in existence and should continue to remain as such for the benefit of the community.

The approval being applied for is in the best interest of the public. It will ensure that the current Substation continue to maintain an uninterrupted power supply to the surrounding area of the CBD and beyond. This will greatly impact on the social wellbeing of the community of the surrounding area.

6. PUBLIC PARTICIPATION

6.1. Process

In terms of the Environment Management Act of 2007, it is required by the applicant/proponent to perform the Public Participation Process. It is thus required to advertise the Notice of Intention in two Newspapers for two consecutive weeks. Such Notices were placed in the Republikein and New Era on the 3rd and 10th September 2025 **(See Public Participation Document)**.

It is also required to place a site notice on the site/property concerned with the application and such Notice was placed on the site upon commencement of the process. Such notice was also placed on the Municipal Notice Board **(See Public Participation Document)**.

It is also required to notify neighbouring properties of the intention to apply for Environmental Clearance. In this case the only neighbouring property was sent via registered mail **(See Public Participation Document)**.

As per the requirements it is needed to conduct a site meeting for interested and affected parties to raise their concerns and give their input. Such meeting was advertised and held on the 16th of September 2025 at 11:45 – 12:15 at the site. No persons attended the meeting **(See Public Participation Document)**.

Closing date for comment/objection to the proposed intentions were on the 1st of October 2025. By the closing of the comments/objections period, **NO** comments/objections were received against the proposed intentions.

7. INTENTIONS OF CLIENT

As previously indicated in the introduction, there is a transfer agreement in place between the Municipality of Swakopmund and Erongo Regional Electricity Distribution Company (Pty) Ltd to transfer all Electrical Substation to the name of Erongo Red.

As with many substations in Swakopmund, they are situated on street portions belonging to the Municipality of Swakopmund. In order to take transfer of this specific substation it is needed to create a separate erf with its correct zoning to accommodate the substation and use.

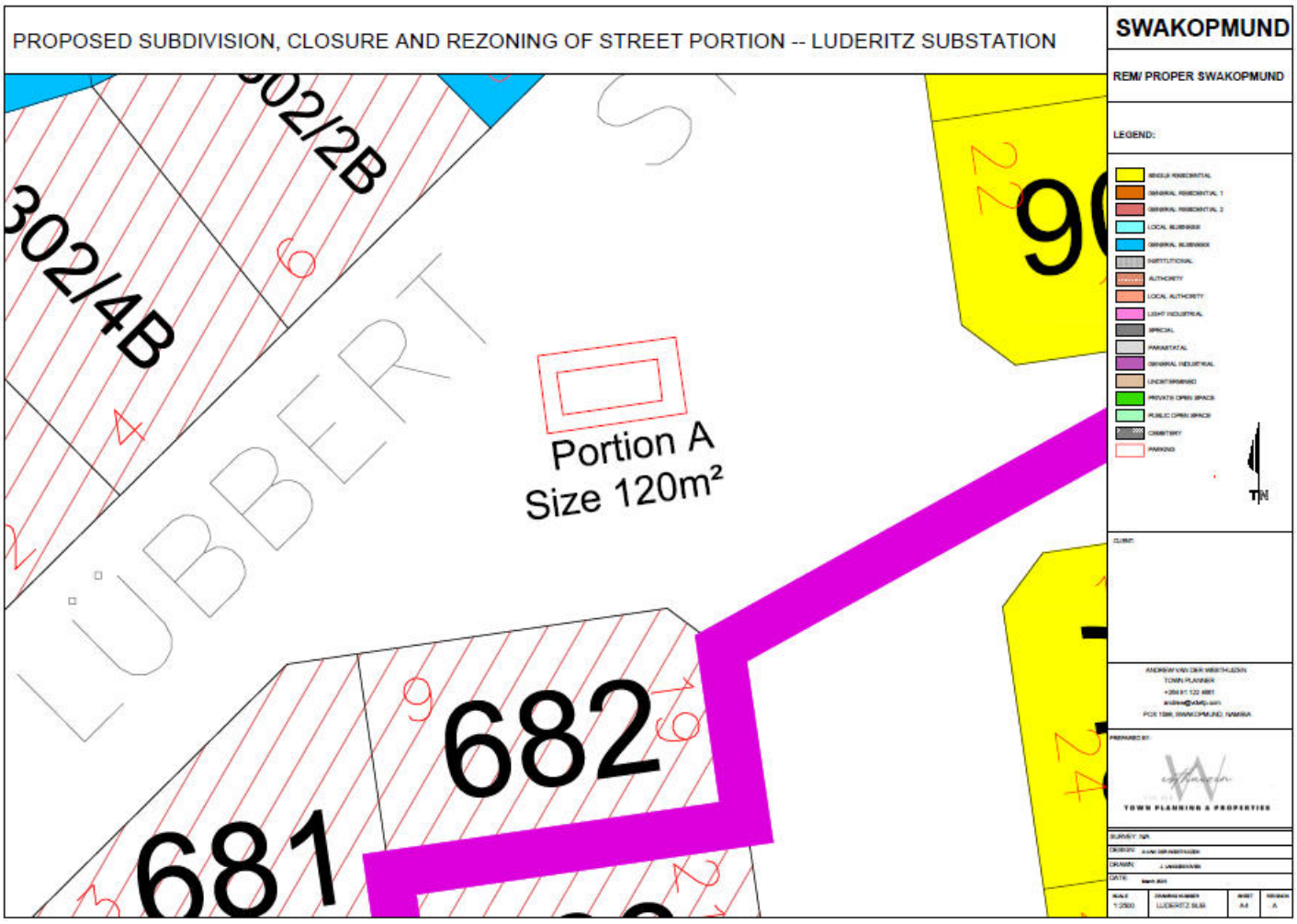
It is thus the intention to Subdivide Lubbert Street, into proposed Portion A (120m²) and Remainder, close proposed Portion A as a Public Space and Rezone proposed Portion A from Street to Parastatal in order to provide the existing substation with its correctly zoned property.

This will effectively allow for the transfer of the property to the name of Erongo Red as per the intention of the Transfer Agreements between the Municipality of Swakopmund and Erongo Red Electrical Distributors.

The long existing Electrical Substation that provides electricity to the area, is seen as a necessity in terms of access to service provision. Now that the substation is in need of transfer to another entity, it is needed to perform the necessary statutory procedures to create such erven for transfer to Erongo Regional Electrical Distribution Company or allocate existing erven with the correct land use in terms of the Swakopmund Town Planning Scheme.

7.1. Subdivision of Lubbert Street into Portion A and Remainder

As previously indicated in this document, it is needed to Subdivide Lubert Street, into proposed Portion A and Remainder. Proposed Portion A will be approximately 120m² in extent while the Remainder remains the entire road network for the area and remains the property of the Swakopmund Municipality.



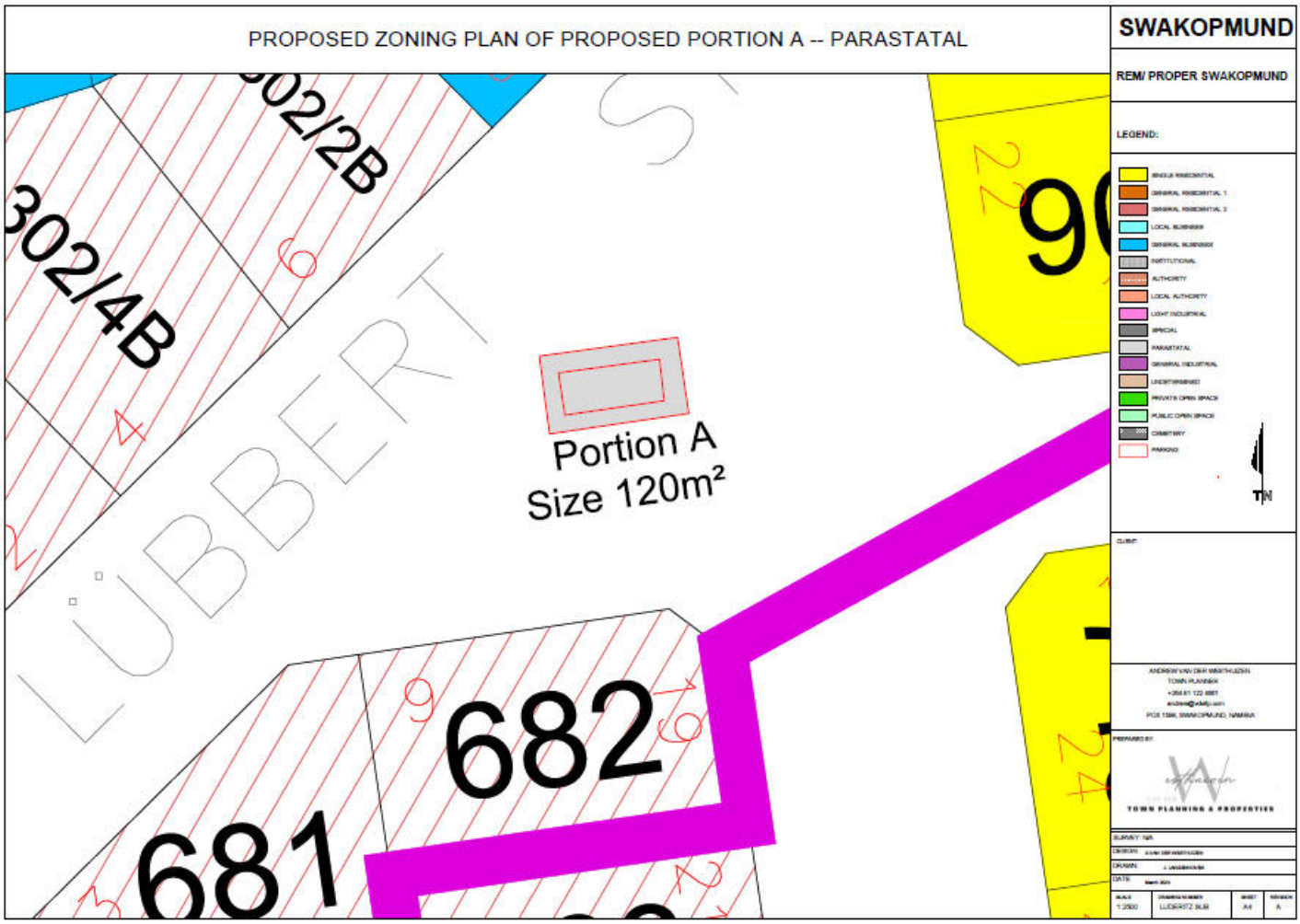
Subdivision Plan

7.2. Closure of Proposed Portion A as a Public Place

Due to the fact that Proposed Portion A has a zoning of Street it is needed to close proposed Portion A as a Public Space. This means that a public participation process is needed to be administered in order to obtain any comments from the general public and direct neighbours. This process was also concluded hence the application for ECC.

7.3. Rezoning of Proposed Portion A from Street to Parastatal

Simultaneous with the closure of proposed Portion A as a Public Space it is needed to perform a rezoning of the newly created Portion A in order to allocate its correct land use. It is thus necessary to rezone proposed Portion A from Street to Parastatal to conform with the provisions of the Swakopmund Town Planning Scheme.



Proposed Zoning

8. MOTIVATION FOR INTENTIONS

It is the intention to Subdivide Lubbert Street, into proposed Portion A (120m²) and Remainer, close proposed Portion A as a Public Space and Rezone proposed Portion A from Street to Parastatal in order to provide the existing substation with its correctly zoned property.

This will effectively allow for the transfer of the property to the name of Erongo Red as per the intention of the Transfer Agreements between the Municipality of Swakopmund and Erongo Red Electrical Distributors.

The Municipality of Swakopmund and Erongo Regional Electrical Distribution Company entered into a transfer agreement that lists various substation to be transferred to Erongo Red, and as a result of this, many properties have to be subdivided and rezoned in order to allocate the substation and individual erf with the correct land use or zoning.

The long existing Electrical Substation that provides electricity to the area, is seen as a necessity in terms of access to service provision. Initially the Municipality of Swakopmund was the Electrical Supplier for the town and the location was chosen by the Engineers of that time. Since the land is owned by the Municipality of Swakopmund and they were the suppliers of electricity there was no need for the creation of a separate Erven for the Substations. Now that the substation is in need of transfer to another entity, it is needed to perform the necessary statutory procedures to create such erven for transfer to Erongo Regional Electrical Distribution Company

or allocate existing erven with the correct land use in terms of the Swakopmund Town Planning Scheme.

9. RESPONSIBILITIES OF DIFFERENT ROLE-PLAYERS

Erongo Regional Electrical Distributor Company (Pty) Ltd (Proponent/Developer) is ultimately responsible for the implementation of the EMP. The Proponent may delegate this responsibility at any time, as they deem necessary, from construction, operation and maintenance before handover of infrastructure. The implementation of this EMP requires the involvement of several key individuals, each fulfilling a different but vital role to ensure sound environmental management during each phase of these developments. The following positions and their respective responsibilities are outlined below:

9.1. The Developer/Proponent (Erongo Regional Electrical Distributor Company (Pty) Ltd)

Responsible for the implementation of the final EMP document, as approved by the Environmental Commissioner, before the commencement of the Construction phase and to ensure that the proposed development complies with the Environmental Management Act's requirements and the Environmental Clearance given.

9.2. The Proponent's Representative

If the Proponent does not manage all aspects of the planning & design, construction, and operation & maintenance phase activities, referred to in this EMP, they should assign this responsibility to a suitably qualified individual to oversee the activities. The Proponent may decide to assign the role of a Proponents Representative to one person for all phases. Alternatively, the Proponent may decide to assign a separate PR for each developmental phase of the project.

During the Planning & Design (tender preparation) Phase, the Representative will have the following responsibilities regarding the implementation of this EMP:

- Ensuring that the necessary legal authorizations have been obtained.
- Developing, managing, implementation of, and maintaining all Development Guidelines.
- To ensure the contractor signs the EMP before the commencement of the development.
- Ensure that the management requirements inform the planning and design of the relevant infrastructure developments (i.e., that these requirements are considered during the Planning and Design Phase, not as an afterthought); and
- Ensure that the management requirements inform the preparation of tender documents for the construction of the relevant infrastructure developments.

During the Construction, Operation and Maintenance Phases the Proponent Representative shall assist the Environmental Control Officer where necessary and will have the following responsibilities regarding the implementation of this EMP:

- Ensuring that the necessary legal authorizations and permits have been obtained by the Contractor.

- Assisting the Contractor in finding environmentally responsible solutions to problems with input from the Environmental Officer where necessary.
- Management and monitoring of individuals and/or equipment on-site in terms of compliance with the EMP.
- Issuing fines for the transgression of site rules and penalties for contravention of the EMP; and
- Providing input into the Environmental Officers ongoing internal review of the EMP. This review report should be submitted every month to the Proponent.

9.3. Environmental Control Officer

The Environmental Control Officer should be a competent person appointed by the Proponent. The Environmental Control Officer is the Developer's on-site representative primarily responsible for the monitoring and review of on-site environmental management and implementation of the EMP by the Contractor. If no Environmental Control Officer or Proponents Representative is appointed then all duties will fall upon the Proponent.

Responsibility:

- Assisting the Proponent / Proponents Representative in ensuring that the necessary legal authorizations have been obtained.
- Management and facilitation of communication between the Proponents Representative, Proponent, the Contractor, and I&APs about this EMP and matters incidental thereto.
- Conduct monthly site inspections of all construction and/or infrastructure maintenance areas about compliance with this EMP.
- Monitor and verify adherence to the EMP (audit the implementation of the EMP) and verify that environmental impacts are kept to a minimum.
- Taking appropriate action if the specifications of the EMP are not adhered to.
- Assisting the Contractor in finding environmentally responsible solutions to problems.
- Advising on the removal of person(s) and/or equipment not complying with the provisions of the EMP in consultation with the Proponents Representative.
- Recommending the issuing of fines for transgressions of site rules and penalties for contraventions of the EMP; and
- Undertaking an annual review of the EMP and recommending additions and/or changes to the document.

9.4. The Contractor & Sub-contractor/s

It is envisaged that various contractors might be appointed at various times for various tasks throughout the life cycle (construction through to operation & maintenance phase) of this project. To ensure sound environmental management, the relevant sections of this EMP should be included in all contracts of work outsourced thus legally binding all appointed contractors and sub-contractors.

Responsibility:

- To comply with the Environmental Clearance / Authorization and undertake construction activities in an environmentally sensitive manner and rehabilitation of the site.
- To undertake good housekeeping practices during the duration of the project.
- To ensure that adequate environmental awareness training takes place in the employees' language of choice.
- Report any environmental concerns noticed on and around the primary site of concern to the Site Manager, Proponent, Proponent's Representative and/or Environmental Officer.

9.5. The Environmental Assessment Practitioner

The Environmental Assessment Practitioner is responsible to conduct the required Environmental Application which includes compiling an EMP for the proposed development. The EMP is to be submitted with the scoping EA report as supporting documents to the application for an ECC to the Environmental Commissioner of the Ministry of Environment and Tourism. This EMP will be used by Contractors and Engineers as well as the Proponent in guiding them during the construction and operation to ensure that the impacts on the environment are limited or avoided altogether.

10. ENVIRONMENTAL AWARENESS TRAINING

All contractors should ensure that adequate environmental awareness training of senior site personnel takes place and that all construction workers and new employees receive an induction presentation on the importance and implications of the EMP before the work commencing. The presentation should be conducted by the ECO, in the employees' language of choice. Regular awareness meetings before commencement of work in the morning is recommended to ensure a constant awareness on and around the site.

11. APPLICABLE LEGISLATION

As with any formal application to the Local Authority, Ministry of Urban and Rural Development and Ministry of Environment and Tourism is imperative to follow the correct procedures. Each of these institutions have a set of requirements that have to be fulfilled in order to accomplish the desired result in terms of an application.

The legislative document that had to be taken into consideration while performing this exercise of applying for Environmental clearance were the following:

11.1. The Environmental Management Act of 2007

The Environmental Management Act specifically deals with the requirements for Environmental applications. It's objective is to: "To promote the sustainable management of the environment and the use of natural resources by establishing principles for decision making on matters affecting the environment; to establish the Sustainable Development Advisory Council; to provide for the appointment of the Environmental Commissioner and environmental officers; to

provide for a process of assessment and control of activities which may have significant effects on the environment; and to provide for incidental matters".

11.2. The Urban and Regional Planning Act of 2018

The Urban and Regional Planning Act deals with the spatial development of land within Namibia and provides the framework for spatial development. The aim of the Act is to: "consolidate the laws relating to urban and regional planning; to provide for a legal framework for spatial planning in Namibia; to provide for principles and standards of spatial planning; to establish the urban and regional planning board; to decentralize certain matters relating to spatial planning; to provide for the preparation, approval and review of the national spatial development framework, regional structure plans and urban structure plans; to provide for the preparation, approval, review and amendment of zoning schemes; to provide for the establishment of townships; to provide for the alteration of boundaries of approved townships, to provide for the disestablishment of approved townships; to provide for the change of name of approved townships; to provide for the subdivision and consolidation of land; to provide for the alteration, suspension and deletion of conditions relating to land; and to provide for incidental matters".

11.3. The Swakopmund Town Planning Scheme No. 12

"The general purpose of the Scheme is the coordinated and harmonious development of the area of Swakopmund including where necessary the redevelopment of any part thereof which has already been subdivided and built upon, in such a way as will most effectively tend to promote health, safety, order, amenity, convenience and general welfare as well as efficiency and economy and conservation of the existing character of the town, in the process of such development".

11.4. The Swakopmund Structure Plan

The purpose of this document is to provide guidelines to the Swakopmund municipality in dealing with issues of urban sprawl; integration of urban areas; stimulation of mixed-use development areas and residential densification; guiding the urban form through building height restrictions in development areas; development of the beach area for the use of all and re-connecting the town to the beach; defining the urban edges; improving permeability and mobility; maintaining and enhancing the character of the historic town centre; promoting the tourism, education, medical and cleaner technology sectors and encourage environmentally sustainable and visionary development.

It is imperative that the proposed development is initiated and steered within the legal framework of these documents in order for fulfilment of the requirements and the best possible outcome for the intended actions as being applied for.

12. PROJECT PHASES: IMPACTS, MITIGATIONS AND MANAGEMENT REQUIREMENTS / ACTIONS

The following will clearly define the possible impacts, mitigations and responsibilities concerned with the Planning and Design Phase, Construction Phase and the Maintenance and Operation Phase of project.

12.1. Possible Impacts, Mitigations & Management Requirements: Planning and Design Phase

12.1.1. Possible Impacts

Due to the nature of events surrounding the planning phase it is not foreseen that there will be any negative impacts exerted onto the natural environment or the general public in a socio-economic sense. This is due to most of the planning being done by means of telecommunication, emails and meetings between the different stakeholders in the project. The only negative effects that will be created by these operations will be emission of motor car fumes from driving to meeting. People drive every day for various reasons and submit large amounts of emissions. The only way to curb this to rely more on email and telecommunication but this can also prove to be problematic as face-to-face meetings opens the room for more effective discussions. A wider range of ideas and decisions can be actively discussed and formulated in face-to-face means.

The constant paper trail that results from emails that are sent back and forth can result in large amounts of paper to be used unnecessarily when face to face meetings will have far less paper to be filed.

In terms of this phase of the project, the most important negative impacts that is foreseen is the noncompliance with the laws governing the proposed intentions of the client. This will have a direct impact general public and Interested and Affected parties due to un-procedural acts and misrepresentation of information.

Mitigation

The relevant Acts to be identified and to effectively comply with the regulating laws pertaining the intentions of the client. Establish direct lines of communication to enhance the coordination between the different role player. To ensure that the correct information is presented to the General Public and Interested and Affected Parties. To ensure that the correct procedures are followed during the public participation process with correct information in order to ensure transparency.

Summary of Impacts for Planning and Design Phase of Project

POTENTIAL IMPACT	DURATION	MONITORING	IMPACT LEVEL
Non-compliance with Laws	Ongoing	Constant	High
Channels of Communication	Ongoing	Constant	High
General observation	Ongoing	Constant	Medium

Flora and Fauna (Biodiversity)	Ongoing	Constant	No impact
Interested and Affected Parties	Ongoing	Constant	Low

12.1.2. Management Requirements / Actions: Planning and Design Phase

During the planning and design phase of the project the following proposed Management Requirements / Actions should be attended to by the Management Team as part of the mitigation measures.

Feature	Management Requirements/Actions
Applications and approval	• Obtain all the relevant approvals from the relevant Authorities. The include the following: ➢ Environmental Clearance Certificate (MEFT) ➢ Council Approval for intentions ➢ Ministerial Approval for intentions (MURD) ➢ Obtain Approved Diagrams (Surveyor Generals Office) ➢ Transfer new Erf to Erongo Red (Deeds Office)
Channels of Communication	• Clear channels of communication to be established between the various role player. • The various role-players should be clearly identified
General observation	• The management team be response the ensure compliance with the EMP.
Flora and Fauna (Biodiversity)	• None for this site (the area forms part of the road reserve)
Interested and Affected Parties	• Communication with I & AP's

12.2. Possible Impacts, Mitigations & Management Requirements: Construction Phase

12.2.1 Possible impacts

The development of infrastructure involves significant investment in assets which last over a long period and often sits within wider-ranging plans for development. New or increased infrastructure development can bring significant benefits, including the opportunity to build in such a way as to meet the challenges posed by climate change and to enhance sustainability.

It can, however, also have significant costs on the environment, both in its construction and use. Some costs can be addressed and reduced through the planning and design processes, and opportunities should be sought to maximize both direct and indirect benefits.

In this case the only construction that is foreseen is a possible boundary wall around the substation so the benefit to the community is very low in terms of employment and high in terms of the social value of the substation.

12.2.1.1. Earth works Installation of infrastructure

With the construction phase it is inevitable that the site will be experiencing some amount of disturbance. In order to supply services, that will be vital for effective service delivery, it will be needed to dig trenches to accommodate the aforesaid. No development in modern times will be complete without these essential services being installed.

When excavating the land for the installation of services or foundations, it is at times found that contractors damage the existing infrastructure services due to ignorance and not making sure of the correct location of such service. This can have a direct effect on the socioeconomic well-being of an area.

In this case the only construction that is envisaged is a boundary wall once the transfer of the property is concluded. The fact that the Electrical Substation is existing, no further development is foreseen in the near future.

Mitigation

If any earthworks for infrastructure additions or upgrades are planned for the future, then it is imperative that the contractor appointed for such work predetermine the exactly location of existing services.

That the initial planning phase be followed correctly as to avoid unnecessary disturbance of the land that might cause unstable soil conditions in the construction phase. Plan the construction of these services in phases to avoid a clash of movement for the different services.

Perform regular checks on the demarcation of areas in order to avoid unnecessary cut and fill actions to be performed. Demarcate all trenches and stockpiles to avoid injury or loss of life. Limit the time for trenches and excavations to be open. Preapproval of actions to be cleared by the onsite Environmental Consultant.

12.2.1.2. Building Rubble

A major cause of pollution is construction. Building rubble is not only unsightly but can also pose a threat to the residents of the area. The improper storage of building rubble on site can cause not only injury but also loss of life. Improper storage of building rubble may cause topsoil pollution on both the site and the surrounding properties.

Mitigation

The site should be supplied with appropriate approved disposal facilities for the various materials generated on site (skip/s and bin/s). Building rubble that is situated on the ground must be clearly demarcated with hazardous tape for clear demarcation and visibility. This should be done to avoid unnecessary injury or loss of life. Rubble and waste should be regularly disposed of to avoid unnecessary negative impact that might emanate from its presence on site. This will contribute to the visual quality of the area. Identify designated dumping areas of the Municipality of Swakopmund to dump unwanted debris in large volumes. Regular site inspections and meetings to ensure that the site is being kept clean. The onsite Environmental Officer should do regular checks and actively organize the removal of such bins and materials to the satisfaction of the Municipality of Swakopmund.

12.2.1.3. Hazardous Waste

The lack of disposal sites and areas will greatly contribute to the overall pollution of the area directly impacting the natural environment and the surrounding community. It is good practice to ensure the availability of sufficient disposal sites that are controlled and monitored. On site facilities are of great importance in this sense and also designated areas identified by the Municipality of Swakopmund for large volumes when the onsite disposal sites are reaching the capacities. Hazardous waste, if any is generated this site, could greatly destroy the topsoil of the site and surrounding area and pose as a health concern to the community. Lack of awareness can cause unwanted spillage or dumping of hazardous waste which should be avoided at all cost.

Mitigation

Ensure that the site is well supplied with waste containers in order to reduce the possibility of unnecessary dumping. Hazardous waste should be removed from site as soon as possible and only disposed of at a location preapproved by the Municipality of Swakopmund. All contractors and workforce to be supplied with the correct PPE to ensure safety of the workers. Handling and exposure to hazardous materials should be kept to a minimum and should only be done in the manner as prescribed by the proponent. The handling of hazardous waste should only be done by the person or persons suitably qualified to do so.

12.2.1.4. General Waste

General waste can be generated by either the public or workers working in a specific area. This form of pollution is not site specific but is generated by workers leaving their plastic and paper bags, cans, bottles, etc. on the site and in some case on adjacent sites. Sometimes the public, due to the site being under construction, use the site as a dumping site. These actions will as a matter of fact detract from the visual quality of the area.

Mitigation

Do regular check-ups and clean-ups on the site to main a certain level of cleanliness that is socially acceptable. Extend the cleanliness to the adjacent area to ensure a broader spectrum of cleanliness that is not just site specific. Supply proper disposal facilities for general waste created by the site (bags & skip). The disposal facilities should be regularly emptied and contents disposed of at a predefined and approved facility of the Swakopmund Municipality.

12.2.1.5. Road Safety

With construction on any site, it is often noticed that contractors cause blockages in road ways or streets and at times during peak traffic times. Some of these actions are done during times of the day or year that could have been avoided through better planning. Poor visual representation clearly indicating the construction actions can lead to accidents by the general public. The lack of proper road signs and personnel directing the flow of traffic can also have great repercussions in terms of safety to the workers and general public.

Mitigation

It is always good practice to clearly demarcate the site and display clear road signs indicating to the public that construction activities are taking place. Avoid closing off roads for construction activities during peak times of traveling to reduce the negative impact on the general public. If and when a road is to be closed off then such approval must be obtained from the Swakopmund Municipality and in collaboration with its s traffic department. It is always good practice the provide personnel that is specifically employed to deal with the traffic and road safety, if any road encroachments by the building activities are planned.

12.2.1.6. Safety around work site

The lack of safety awareness on site may lead to possible injury or loss of life in certain cases. The possible future excavations for the foundations of the boundary wall can cause great harm to both the work force and the general public. Most accidents happen due to poor judgement and a lack of safety analysis on site. Incorrect procedures in terms of specialised jobs can lead to serious injury or loss of life. The lack of appropriate PPE can also contribute to personal injury to the work force on site.

Mitigation

It is suggested that a Safety talk is held in the morning before work commence in order to update all works on the requirements and latest development. A proper site analysis and plan analysis to be done to predetermine the possible areas with high and medium possibility of injury. These areas to be visually demarcated. In this case it will be the trenches for the foundations and as such it should be clearly demarcated. Building material stored on the ground should demarcated or fenced off to avoid possible injury. Again, proper PPE to be supplied to the work force.

12.2.1.7. Ablution facilities

Lack of proper ablution facilities can pose as a serious health risk. It may cause workers to relieve themselves at various places creating bad odours and unhygienic surroundings. In some cases, workers use adjacent properties to relief themselves.

Mitigation

As part of the service contract between the developer and the contractors it should be ensured that proper onsite sanitation facilities are present to avoid any unwanted acts of self-releasement to occur at any given place on the site. If you have both genders on site then one toilet per gender should be supplied to the workforce.

12.2.1.8. General Health and Safety

Not wearing the correct protective clothing on site could result in injury or even loss of life. The lack of awareness on site can lead to unwanted accident of the workforce.

Mitigation

Provide Health and Safety training to ensure that all workers are informed of the correct manner to use the different types of Personal Protective Equipment (PPE). All workers should have access to the appropriate PPE in order to ensure the safety of the workforce.

12.2.1.9. Noise Impact

Noise pollution is inevitable on any construction site but if unmanaged it can be a cause of concern to the surrounding area. Noise from heavy machinery can be a great cause of noise pollution.

Mitigation

Plan and coordinate the use of machinery as to allow for minimal use. Proper planning should eliminate the unnecessary running of machines. Ensure that all personnel have the required PPE at their disposal at all times to protect their hearing.

12.2.1.10. Dust Pollution

Dust pollution is always a concern on site as dry loose sand creates dust clouds when driven over multiple times by vehicles and trucks. In this case, with the prevailing South West winds, very little dust pollution is foreseen and the wind will be of a very low nature due to blockage of wind from neighbouring buildings and properties.

Mitigation

It is suggested that the roads being used within the development site be dampened with water to decrease the dust clouds that might arise from vehicular movement. Any alternative effective means also be applied if so desired. PPE is also of importance to the contractors and it must be ensured that all personnel have the required PPE at their disposal at all times.

12.2.1.11. Service Infrastructure

With the need to excavate the land for trenches, contractors often damage the existing infrastructure due to ignorance. Any damage to the surrounding infrastructure has a direct impact of the social well-being of the neighbourhood.

Mitigation

The contractor on site must first determine the correct locations of all the services in and around the site. Care should be taken not to disturb the existing current service provision to the neighbourhood. In this case the Municipality must be consulted for the correct position of the services.

12.2.1.12. Storage of Building Materials

The improper storage of building materials could pose as a potential risk in terms of safety to both the workers and the general public. The topsoil can also be contaminated by placing certain materials directly on the ground.

Mitigation

All building material to be safely stored in containers or where potentially harmful materials are placed on the ground it be properly demarcated to ensure visibility to the workers and general public. Only the necessary building materials be kept on site for the shortest possible time. No excessive stockpiling to take place.

12.2.1.13. Vehicular Movement

Unregulated vehicular movement to, from and around the sight could disturb the surrounding natural landscape causing unsightly irreparable damage. It can also have a negative effect on the local traffic flow.

Mitigation

Clearly demarcate the access to the site to avoid creating unnecessary an unregulated access. Have the site demarcated in order to contain movement within the site. Proper consultation to be done with the different role-players to ensure that only site disturbance takes place and no unnecessary movement is allowed outside the demarcated site.

If traffic is to be impacted by the proposed intentions, then such impact should be well planned for minimal disruption. In such cases the it is advised to appoint a person or persons, depending on the extent, to manage traffic flow in such cases.

Summary of Impacts during the Construction Phase of the Project.

POTENTIAL IMPACT	DURATION	MONITORING	IMPACT LEVEL
Weekly Visual inspection	Length of Project	Constant	High
Building rubble	Length of Project	Daily	Medium
Hazardous waste	Limited	Time Specific	Low
General waste	Length of Project	Daily	Low
Road safety	Length of Project	Daily	High
Safety around work sites	Length of Project	Daily	High
Ablution facilities	Length of Project	Daily	Medium
General health and safety	Length of Project	Daily	High

Noise	Length of Project	Daily	Low
Dust	Length of Project	Daily	Low
Service Infrastructure	Short interval	Time specific	Low
Storage of Building Materials	Length of Project	Daily	High
Vehicular Movement	Length of Project	Daily	Medium

12.2.2. Possible impacts Management Requirements / Actions: Construction phase

During the Construction Phase the following Management Requirements / Actions should be attended to by the Proponent, Environmental Officer and Contractor:

Environmental Feature	IMPACT	Management Requirements / Actions	Responsible Entity
Weekly Visual inspection	Visual and Social Impact	• Weekly site inspections to be done to ensure compliance with the EMP	Proponent, Environmental Officer and Contractor
Building rubble	Visual impact and topsoil contamination	• Proper onsite disposal facility (skip). • Regular site cleanup	Contractor
Hazardous waste	Contamination of Topsoil.	• Proper onsite disposal facilities. • Disposal of such waste should be done in accordance to the Municipal bylaws. • Disposal only at Municipal approved sites	Contractor

General waste	Visual impact and soil contamination	• The construction site should be kept tidy and neat at all times. • No waste may be buried or burned on the site • No waste may remain on site after the completion of the project.	Contractor
Road safety	Injury or loss of life	• Clear and Proper demarcation of road to be used by construction vehicles	Contractor
Safety around work sites	Injury or loss of life	• Excavations and trenches should be left open for the shortest time possible. • Clearly Demarcate excavated areas and sand piles with demarcation tape to avoid injury.	Contractor
Ablution facilities	Non-compliance with Health and Safety Regulations / unhygienic site conditions	• Portable toilets (i.e. easily transportable) should be available at every construction site • Separate toilets should be available for men and women and should clearly be indicated as such.	Contractor
General health and safety	Injury or loss of life	• All workers should have access to the relevant personal protective equipment (PPE).	Contractor

		• No workers should be allowed to drink alcohol during work hours.	
Noise	Nuisance impacts	• Work hours should be restricted to between normal working hours being 08h00 to 17h00. • The use of power tools and heavy machinery should be limited and only be used when required in order to limit the noise pollution. • Proper planning in order to minimise time on site.	Contractor
Dust	Nuisance and health impacts	• A watering truck should be used on gravel roads with the heaviest vehicle movement especially during dry and windy conditions. However, due consideration should be given to water restrictions during times of drought. • The use of waterless dust suppression means. • Cover all stockpiles with plastic to minimise windblown dust. • Dust protection masks should be provided to	Contractor

		workers	
Service Infrastructure	Loss of Services	• Contractors to identify all municipal Infrastructure service lines. • Clearly demarcate such services to avoid damage and interruption of services.	Contractor
Storage of Building Materials	Injury, loss of life, visual and soil contamination	• All building materials to be property stored on site in a safe manner. • All material be clearly demarcated with demarcation tape.	Contractor
Vehicular Movement	Social Impact and safety	• Intended disruption of local traffic flow to be well planned and kept to a minimum. • A suitable person/s be appointed to manage traffic flow. • Access and egress point/s be clearly demarcated and defined.	

12.3. Maintenance and Operation Phase of Project

With the maintenance and operation phases, at times, there might be the need for some extensive work or upgrading to be done. These actions also carry the risk of negatively impact on both the natural and urban environment. To follow is the possible impact and their mitigations.

12.3.1. Potential Impacts

During the operation and maintenance phase of the project the always exist the possibility of

disturbance to the surrounding area. The maintenance and operations phase are just as important as the other phases as it ensures the continuation of environmental and social well-being over a long period of time. Visually unattractive buildings have a direct impact on the social aspect of the neighbourhood. The accumulation of general waste on the property can also affect the wellbeing of the neighbourhood.

Construction that emanates from the upgrading and increased service capacity can have the same effect as normal construction activities. In fact, there is little difference and as such all the concerns mentioned under the constructions phase is also applicable in the maintenance and operation phases.

The lack of environmental awareness by employees and contractors can also during this phase case damage to the surrounding vegetation and soil.

Lack of appropriate PPE can lead to injury or even loss of life on site. Wrong equipment used during the maintenance and operation phase can lead to interruptions in services impacting negatively on the quality of living of the neighbourhood.

Mitigations

It is imperative that regular checkups be done on the property to ensure general cleanliness of the site and the area surrounding it, as per the Swakopmund Town Planning Scheme. Proper disposal facilities be made available for the disposal of general wase.

Of great importance to any project is Environmental Awareness Training to the employees and contractors on site or visiting the site. Such training improves the overall effectiveness of the EMP being a vital part in the conservation and protection of Environmental aspects and the social aspects within the urban fabric.

Due to the movement on site during maintenance the possibility of dust being produced is relatively low but can be mitigated by apply water or waterless suppression methods. In order to minimise unwanted disturbance onto the adjacent road reserve, it is proposed that all activities related to the operation and maintenance take place within a clearly demarcated Erf. This demarcation can be in the form of hazard tape defining the boundary or the physical boundary wall of the new erf itself.

The proponent must ensure that the correct PPE is available and provided to employees and contractors performing their duties on the site. Correct equipment to be supplied and used for the maintenance and operation phase to avoid unnecessary service interruption because of equipment failure.

Summary of Impacts for Planning and Design Phase of Project

POTENTIAL IMPACT	DURATION	MONITORING	IMPACT LEVEL
Environmental Awareness training	Ongoing	Constant	Low
Dust	Short term	Constant	Low
General Cleanliness	Ongoing	Constant	Medium

Visual apparency of Structures	Ongoing	Constant	Medium (for this site)
General health and safety	Ongoing	Constant	High

12.3.2. Management Requirements / Actions: Maintenance and Operation phase

During the Maintenance and Operation phase the following Management Requirements / Actions should be attended to by the Proponent, Environmental Officer and Contractor:

Feature	Impact	Management Requirements / Actions	Responsible Entity
Environmental Awareness training	Lack of EMP awareness and the implications thereof	• All contractors appointed for maintenance work on the respective streets must ensure that all personnel are aware of necessary health, safety and environmental considerations applicable to their respective work.	Proponent, Environmental Control Officer and Contractor
Dust	Health Impacts and Nuisance	• Should dust levels become significant dust suppression techniques should be applied. • Waterless dust suppression means should be utilised within areas experiencing water	Contractor

		scarcity.	
General Cleanliness	Visual & Social Impact	• Regular check-ups to see whether the site is and socially acceptable manner.	Environmental Control Officer and Proponent
Visual apparency of Structures	Visual & Social Impact	• Periodic renovation and painting of structures and walls.	Proponent
General Health and Safety	Health Impacts, injury and loss of life	• All employees and contractors •	Proponent, Environmental Control Officer and Contractor

13. ENVIRONMENTAL MANAGEMENT PLAN

The Environmental Management Plan provides for management intervention and mitigating factors to ensure that any activity during the 3 phases is minimised. The EMP is a management tool aimed at curbing or eliminating any possible negative effects on environmental and social that might arise from activities on or around the site.

The main objectives of the Environmental Management Plan are:

- To guide the various role-players involved in the project,
- To prescribe the best possible mitigation factors for any of the identified potential negative impacts on both the natural and urban environments.
- To monitor and assess the potential impacts and the performance of the employees in terms of the requirements of the EMP.
- To ensure that the appropriate Environmental Awareness training is provided to all sectors of the work force and various role-players.
- To ensure that the correct mitigating measures are available for any future work that might emanate from the project.

The EMP is attached to this document as **(Annexure C).**

14. CONCLUSION

It is our opinion that the possible negative impacts for the intended actions have been clearly identified and mitigated within this document. The EMP, attached as Annexure B, clearly outlines the responsibilities and actions to be taken by the various role-players.

In order to minimize the identified environmental and social impacts a sound management system be implemented, along with effective preventative measures. Regular environmental performance checks to be performed to ensure compliance to EMP and apply corrective measures were identified if and when necessary.

Due to the nature of the circumstances and nature of use there is very little environmental risk associated with the project. Nonetheless, the EMP should as a matter of priority be used during the operation process as an onsite tool to guide the role-players and work forces.

Any party that does not comply with the EMP should held accountable for the rehabilitation of the area due their noncompliance and be dealt with through the correct measures.

Taking the intentions of the proponent into consideration, it can be well argued that the proposed intentions will have no significant impact on either the natural or urban environment.

The EIA was initiated and completed in line with the requirements of the Environmental Management Act, 2007 and Regulations.

ANNEXURE A

Local Authority Support Letter

ANNEXURE B

Public Participation (Adverts, Neighbours Letters and Site Notice)

ANNEXURE C

Environmental Management Plan (EMP Document)