

**ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR THE
PROPOSED SUBDIVISION OF THE ERF 7881, KUISEBMOND
EXTENSION 10, AND CREATION OF A STREET (PUBLIC
ROAD), WALVIS BAY, ERONGO REGION**

ENVIRONMENTAL SCOPING REPORT

Prepared For

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DOCUMENT INFORMATION

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LIST OF ACRONYMS

DEAF:	Directorate of Environmental Affairs and Forestry
EAP:	Environmental Assessment Policy
EIA:	Environmental Impact Assessments
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
I&APs:	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water, and land Reform
MEFT:	Ministry of Environment, Forestry and Tourism
MURD:	Ministry of Urban and Rural Development
NORED	Northern Regional Electricity Distributor
NSA:	Namibia Statistic Agency
PPE:	Personal Protective Equipment
RA;	Roads Authority
URPB:	Urban and Regional Planning Board

EXECUTIVE SUMMARY

Eco Engineering Services cc has purchased a property (Erf7881) measuring approximately 3115.82m² from the Walvis Bay Municipality. The proponent intends to Rezone Erf 7881 and Subdivide the Erf into small properties for the development of 8 individual properties (houses). The subdivision will also result in the creation of a right of way servitude (street) to provide access to the resulting properties. A registered town planner was appointed to apply town planning procedures for the Rezoning and Subdivision of Erf 7881.

In terms of the Environmental Management Act (EMA) No. 7 of 2007 (Schedule 5.1) and its regulations (GN No. 30 of 2012), the creation of a public road (street) or a road which caters for more than one lane of traffic in both directions cannot take place without an ECC being obtained. The proposed subdivisions will be carried out in line with the Urban and Regional Planning Act, 05 of 2018 and approval will be obtained from the newly established planning board, Urban and Regional Planning Board (URPB).

Green Gain Consultants cc was appointed to conduct the required Environmental Impacts Assessment (EIA) study and apply for the ECC for the proposed activities. This study was carried out in line with the requirements of the Environment and Management Act (Act No. 07 of 2007) and its Regulations (GN No. 30 of February 2012). Since the proposed project is of a small scale with limited impacts only a scoping process was employed. A multidisciplinary approach was used which includes collection of baseline information both biophysical environment and socio-economic as well as consultation with potential Interested and Affected Parties (I&APs) and relevant stakeholders.

This Scoping Report presents an assessment of potential environmental and socio-economic impacts. Also attached is an Environmental Management Plan (EMP) which details a list of mitigation measures to avoid and minimize potential negative impacts and optimize the potential positive impacts. It also outlines roles and responsibilities of the proponent and other different role players. The EMP, upon approval by the Ministry of Environment and Tourism (MEFT) will be a legally binding document to which the proponent will be needed to adhere to. Thus, a copy should always be given to any contractor or sub-contractor to be involved in the construction or maintenance of the proposed road.

1. INTRODUCTION AND BACKGROUND

1.1 BACKGROUND

Eco Engineering Services cc hereinafter referred to as the proponent has purchased the property (Erf 7881) located in Kuisebmond Extension 10 for the purpose of housing development. The property measures approximately 3115.82m² and is currently zoned “General Residential”. Thus, the proponent intends to subdivide the Erf into individual erf for residential property development and has appointed a resgitered town planner to apply town planning prioceedures as follows.

- Subdivision of the Erf 7881 into 10 Portions and Remainder.
- Rezoning of 9 Portions (PNT 1-9) from General Residentials to “Single Residentials”.
- Rezoning of Portion 10 from General Residential to Street to provide access to Portion 9, 10 & 3.

The subdivisions of the Erf will result in the creation of a street (public road) to provide access to the newly created ervens. In terms of the Environmental Management Act, No. 07 of 2007, and its Regulations (No. 03 of February 2012) the creation of a street (public road) cannot be undertaken without an Environmental Impact Assessment study being carried out.

1.2 SCOPE OF THE STUDY

The environmental scoping study was conducted in line with the Namibia’s Environmental Impact Assessment Regulations (GN No. 30 of 2012). It indicates a description of the affected environment and the way the proposed activities may affect the environment.

A multidisciplinary approach was used to collect baseline information. Information pertaining to the receiving environment and its social surroundings has been sourced through site investigations, Council documents and the use of Geographic Information Systems (GIS) mapping. The study also benefited a great deal from Interested and Affected Parties contributions.

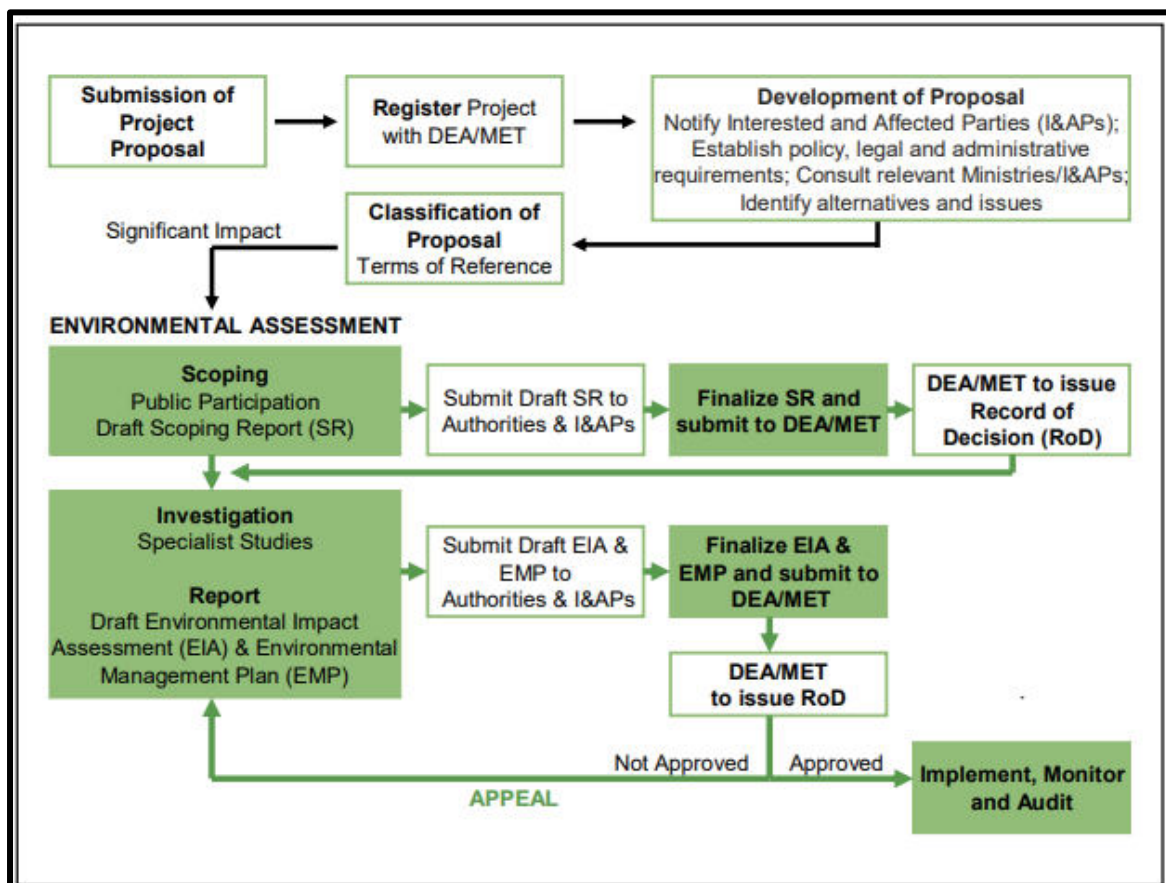


Figure 1: EIA process in Namibia

1.3 PURPOSE OF THE STUDY

The aims of this Scoping process are.

- Evaluate the suitability of the proposed activities against the biophysical and socio-economic of the area.
- Propose the appropriate mitigation measures to avoid, mitigate or lessen the negative impacts.
- Consult all I&AP's and relevant stakeholders.
- Above all, comply with the EMA, No. 07 of 2007.

1.4 Environmental Assessment Practitioner (EAP)

Green Gain Consultants cc is a Namibian based professional environmental and natural resources consulting firm established and driven through belief, passion, and dedication to sustainable development. Established in 2012, Green Gain has grown into a substantial team of environmental practitioner in Namibia providing innovative and cost-effective solutions to environmental challenges and help our clients meet regulatory and stakeholder expectations for environmental performances. The table below presents detailed information about Green Gain Consultants cc.

Table 1: Details of the EAP

Environmental Assessment Practitioner (EAP): Green Gain Consultants cc	
Physical address	Cnr. Joe Davis and Paul van Harte, Narraville, Walvis Bay
Postal address	P.O. Box 5303, Walvis Bay
Contact numbers	0813380114 or 0811422927
Email address	info@greengain.com.na mailto:greengaincc@yahoo.com
Expertise	<p>Name: Mr. J.K. Amushila</p> <p>Qualifications: M. Sc. Environmental Management, B. Honors Agriculture, B. Degree Agriculture, National Diploma in Agriculture.</p> <p>Experience: He is a registered EAPAN member (No.165) He has worked on several EIA and SEA projects. Through his consulting work he gained experience of not only EIA project management, but also environmental specialist experience as well as public consultations.</p>

2. APPROACH TO THE STUDY

Given the nature of the proposed activities a scoping assessment was deemed sufficient. The following methods were used as part of the study.

- **Site visits to collect primary data.**
- **Legal and policy review**
- **Gleaning over existing information pertaining to similar developments and issues**
- **Discussions, meetings, and site visits with the Authority and in this case the proponent**
- **Incorporate opinions and concerns raised by interested and affected parties.**
- **Make professional judgments and recommendations.**

2.1 Baseline study

a). Site Visits:

Sites visit was conducted to collect biophysical data such as.

- Flora and Fauna of the area
- Roads and traffic information
- Land use and adjacent areas
- Hydrological features
- Soil and Geology
- Topographic features, etc.

b). Review of Policy and Relevant Documents/Literatures

The following Literatures were reviewed.

- **Walvis Bay Town Planning Scheme**
- **Local Authorities Act, (Act 23 of 1992)**

2.2 Public participation process

The Environmental Assessment Regulations specifies that a Public Participation Process must be conducted as an integral part of the EIA study. This was adhered to, as potential I& AP and relevant stakeholders were invited to register and forward concerns / comments to the EAP to ensure an equitable and effective participation.

2.2.1 Notification of IAPs and Stakeholders

Potential interested and affected parties (I&APs) were notified through newspaper advertisements and public notices which provided brief information about the proposed project and the EIA process. Public notices were advertised twice in two local newspapers, Namib Times and the Confidante for 26 January and 02 February 2024. Public notices were also displayed at the Council offices and at the project site.

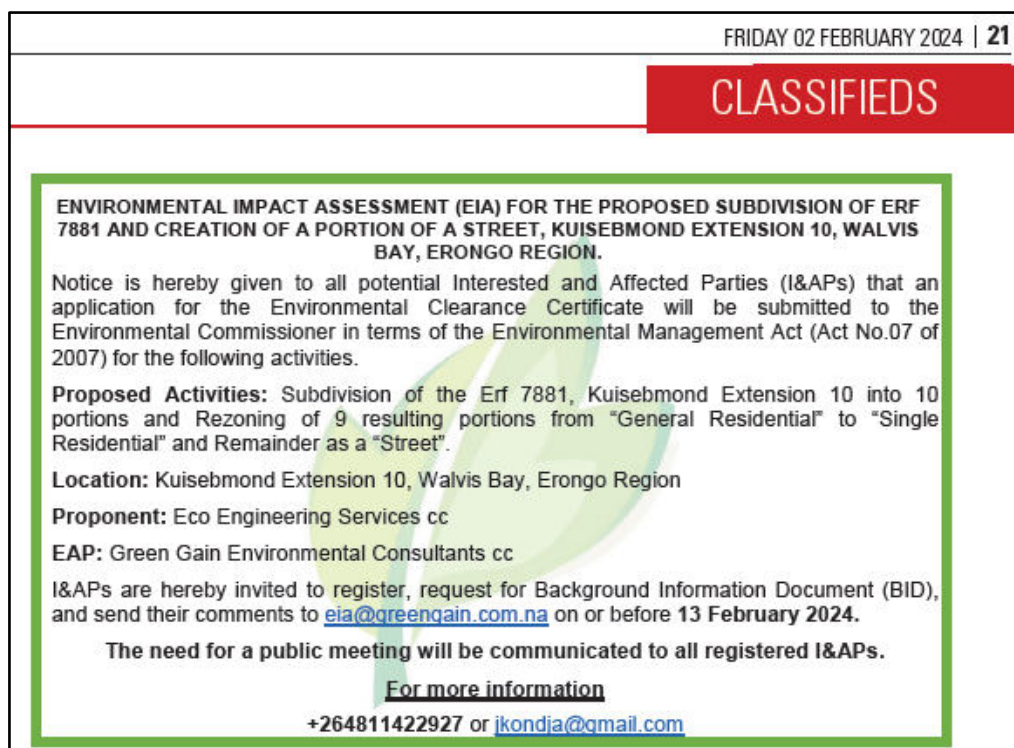


Figure 2: Copy of a Public notice

3. DESCRIPTION OF THE PROPOSED ACTIVITIES

3.1 Locality

The proposed development site is located in Kuisebmond Extension 10, on the corner of Volstruis and Omugulumbashe Streets



Figure 3: Locality map of Erf 7881 (Blue)

3.2 Site overview

The site is currently vacant and is located in the built environment adjacent to residential properties and a Public Open Space (Erf 7911). The site is connected to municipal services (water, sewerage, electricity) as it was meant for residential development (General Residential). Access to the site is through Volstruis Street. There are no servitudes crossing over the property.



Figure 4: Site overview.

3.3 Proposed subdivision

The proponent intends to carry out the following.

- Subdivision of the Erf 7881 into 10 Portions (PNT 1 to 8 & R/7881) and Remainder as Right of Way Servitude.
- Rezoning of the 9 Portions (PNT 1-8, R/7881) from General Residential to “Single Residential”.
- Creation of a Public Road, approximately 50m long and 6m wide, to provide access to Properties on Portion 9, 10 & 3.



Figure 5: Proposed subdivision layout

3.4 Proposed Housing development

The proposed housing development will consist of single residential properties as per house plan/designs depicted in Figure 3 below. The houses are suitable for accommodating families of 3-4 people. As such the proposed development will create shelter for 27-36 people in Walvis Bay.



Figure 6: Proposed housing development.

3.4 Project alternatives

The EIA Regulations stipulate that the Scoping process should investigate alternative development options to any proposed developments/activities. The following alternatives were considered.

a). Do Nothing

The “Do-Nothing” option will imply that the action of Rezoning and Subdivision of the Erf will be taken, and the property will remain as it is (General Residential). This option will not be ideal as there is currently a pressing need for houses in Walvi Bay, especially for low to middle income earners.

b). Design and layout options.

The proposed layout as presented in Section 3.3 above was considered ideal and in accordance with the Townships and Division of Land Ordinance 11 of 1963, the new Urban and Regional planning Act, 05 of 2018. Moreover, the layout has already been approved by the Walvis Bay Municipality

3.3 Need and desirability

The “**need**” and “**desirability**” for the intended activities is based on the following aspects.

- The proposed subdivision is necessary to enable the construction of more houses to address housing shortages in Walvis Bay
- The creation of a right of way servitudes is necessary to provide accessibility to the resulting properties.
- The proposed activities (subdivision and creation of a street) would not compromise the integrity of the town spatial development framework.
- The approval of this application would not compromise the integrity of the existing environmental management priorities for the area and that of the town.

4. THE AFFECTED ENVIRONMENT

This section provides a brief description of the existing biophysical and built/social environments. It draws on information from site visits, the study team and member's experiences, background literature as well as maps and photographs. It also presents a background against which the positive and negative impacts of the proposed options can be assessed.

4.1 Socio-economic

a) About the town

Walvis Bay is the second-most populous city and the largest coastal city in Namibia. Walvis Bay's population is about 63,000 people. Walvis Bay is the principal port of Namibia and is an import/export facility for processed fish, mining products and beef. The area is linked to Namibia's air, rail, and road network, making its port well situated to service Zambia, Zimbabwe, Botswana, Southern Angola and South Africa.



Figure 7: Overview of Walvis Bay

The country is becoming an increasingly attractive investment option for South African manufacturers, mining companies seeking to beneficiate resources and logistics enterprises seeking a more cost-effective location.

b) Socio-Economic development

The economic activities of Walvis Bay rest on four pillars, namely fishing, tourism, manufacturing, and the harbour. For the purpose of this report, only the fishing industry will be discussed, since the proposed activities under investigation take place in the marine environment some distance from Walvis Bay.

The Housing need in Walvis Bay is visible as the informal settlements are overcrowded and keeps on growing. It is estimate that at least over 100 000 live in backyard shacks and often at risk of shack fire. The demand for housing has increased at the town and people struggle to find adequate shelter, contributing to an increase of backyard squatters. The increase in squatters has also resulted in the illegal occupation of private and public land at the town to such an extent that squatters often clash with the police when they attempt to evict illegal squatters, resulting in some squatters being arrested and others injured in the process.



Figure 8: Overview of Walvis Bay informal settlement

4.2 Biophysical

According to Mendelsohn, et al., (2002), the climate of the Erongo Region and Walvis Bay in particular can be described as semi-arid. Annual temperatures range between less than 16-20 °C with the maximum temperatures ranging between less than 20- 28 °C and the minimum temperatures between 8-12 °C. The coastal belt temperatures are usually above 10 °C due to the coastal winds.

Rainfall is recorded to fall mostly in the summer months of January, February and March with the average annual rainfall recorded to be between 100 mm to 150 mm for the subject area (Mendelsohn, et al., 2002).

The geology underlying the Namib Desert consists of a Precambrian basement with granite, gneiss and shale. The oldest Tertiary rocks are part of the Tsondab-Sandstone-Formation, which underlies most of the central Namib south of the Kuiseb. North of the Kuiseb a flat gravel plain on a crystalline basement is found. The underlying rocks consist of calcareous and gypsum metamorphic bedrock or granite.

In the Erongo Region the land rises steadily from sea level to about 1000 meters across the breadth of the Namib. Namibia's highest mountain, Brandberg (2,579 m), lies in the far northern part of the Erongo Region. The Namib plain is incised by a few main ephemeral rivers that run seawards from wetter parts of their catchments further inland. The four main rivers in the Erongo Region include the Swakop, Omaruru, Kuiseb and Ugab rivers (Geological Survey of Namibia, 2012).

5. LEGAL REQUIREMENTS

The following is a brief overview of all pertinent Acts, bills, laws, policies, and standards regarding the environment which were considered while conducting the Scoping study for the intended activity.

Table 2: Applicable National Laws

LEGISLATION	PROVISION	PROJECT IMPLICATION
Constitution of the Republic of Namibia (1990)	The articles 91(c) and 95 (i) commits the state to actively promote and sustain environmental welfare of the nation by formulating and institutionalizing policies to accomplish the sustainable objectives which include: <ul style="list-style-type: none"> - Guarding against overutilization of biological natural resources, - Limiting over-exploitation of non-renewable resources, - Ensuring ecosystem functionality, - Maintain biological diversity. 	The proposed development must be of sound environmental management objectives.
Environmental Management Act No. 07 of 2007	The purpose of this Act is 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 provide for a process of assessment and control of projects which may have significant effects on the environment; and to provide for incidental matters. The Act gives legislative effect to the Environmental Impact Assessment Policy. Moreover, the act also provides procedure for adequate public participation during the environmental assessment process for the interested and affected parties to voice and register their opinions and concern about the proposed project.	This has been complied with; thus, an EIA has been carried out and an ECC will be applied for prior to the creation of the proposed roads.
Water Resources Management Act 2004	The Water Resources Management Act (No 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should also be controls on the disposal of sewage, the purification of effluent, measures should be taken to ensure the prevention of surface and groundwater pollution and water resources should be used in a sustainable manner.	The protection of ground and surface water resources should be a priority. Obligation not to pollute surface water bodies.

Pollution Control and Waste Management Bill	This Bill serves to regulate and prevent the discharge of pollutants to air and water as well as providing for general waste management. This Bill will license discharge into watercourses and emissions into the air.	All activities shall be conducted in an environmental sustainably manner.
Labour Act (No 11 of 2007)	135 (f): “the steps to be taken by the owners of premises used or intended for use as factories or places where machinery is used, or by occupiers of such premises or by users of machinery in connection with the structure of such buildings of otherwise in order to prevent or extinguish fires, and to ensure the safety in the event of fire, of persons in such building;” (Ministry of Labour and Employment Creation)	Contractors, Sub-contractor shall be guided by this Act when recruiting or handling employment related issues.
Noise Control Regulations (Labour Act)	It is essential to ensure that before any development project is approved and undertaken, an assessment or evaluation of expected noise level is done.	Noise generation during construction/development should be minimized to the satisfactory of neighboring residents and the town Council.
Town and Regional Planners Act, 1996 (Act No. 9 of 1996)	This Act establishes the Namibian Council for Town and Regional Planners, defines functions, and powers of the Council and provides for the registration of town and regional planners and the supervision over their conduct. The Minister may, on the recommendation of the Council, prescribe the kinds of work of a town and regional planning nature which shall be reserved for town and regional planners. The Act also defines improper conduct and defines disciplinary powers of the Council. Furthermore, the Act provides for the establishment of national, regional, and urban structure plans, and the development of zoning schemes. It also deals with a variety of related land use control issues such as the subdivision and consolidation of land and the establishment and extension or urban areas.	A registered Town Planner has been appointed for this project.
Town Planning Ordinance (No. 18 of 1954)	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	Town Planning Procedures will be registered through the URPB

Townships and Division of Land Ordinance 11 of 1963, as amended	The objective of this Ordinance is to consolidate and amend the laws relating to the establishment of townships and to provide for the regulation and control of the development and subdivision of land and for matters incidental thereto.	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).
Urban and Regional Planning Act, 05 of 2018.	The Act and Regulations combine the Townships Board and Namibia Planning Advisory Board (NAMPAB) into one to be known as the Urban and Regional Planning Board and delegate the decisions on town planning applications to Local Authorities. However, an LA can only make decisions after the MURD has declared a Local Authority as an Authorized Planning Authority (APA).	Town Planning Procedures will be applied for the proposed subdivision and rezoning. Since Municipality of Swakopmund is not yet an approved APA, approval should be obtained from the Urban and Regional Planning Board (URPB)
Land Survey Act 33 of 1993	To regulate the survey of land; and to provide for matters incidental thereto.	Surveying procedures must be applied accordingly
Local Authorities Act (No. 23 of 1992)	The purpose of the Local Authorities Act is to provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties, and functions of local authority councils; and to provide for incidental matters.	The proponent is a Local Authority. The need and desirability for the proposed subdivision has been approved.
Soil Conservation Act 76 of 1969	The Soil Conservation Act stipulates that the combating and preventing of soil erosion should take place; the soil should also be conserved, protected, and improved, vegetation and water sources and resources should also be preserved and maintained. When proper mitigation measures are followed along the construction and implementation phase of the project, the natural characteristic of the property is expected to have a moderate to low impact on the environment.	This should be complied with during the construction phase as outlined in the EMP for this project.

6. ASSESSMENT OF PROJECT IMPACTS

The scoping process has identified potential project impacts during its planning and operation phase and examined each of these issues. In assessing the impact of the proposed development, four rating scales were considered. Each issue identified was evaluated in terms of the most important parameter applicable to environmental management. These include the *extent, intensity, probability, and significance* of the possible impact on the environment. The rating scales used are as follows.

Table 3: Significance assessment

CRITERIA	DESCRIPTION			
EXTENT	National (4) The whole country	Regional (3) Erongo region region and neighbouring regions	Local (2) Within a radius of 2 km of the proposed site	Site (1) Within the proposed site
DURATION	Permanent (4) Mitigation either by man or natural process will not occur in such a way or in such a time span that the impact can be considered transient	Long-term (3) The impact will continue/last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter.	Medium-term (2) The impact will last for the period of the construction phase, where after it will be entirely negated	Short-term (1) The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
INTENSITY	Very High (4) Natural, cultural, and social functions and processes are altered to extent that they permanently cease	High (3) Natural, cultural, and social functions and processes are altered to extent that they temporarily cease	Moderate (2) Affected environment is altered, but natural, cultural, and social functions and processes continue albeit in a modified way	Low (1) Impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected
PROBABILITY	Definite (4) Impact will certainly occur	Highly Probable (3) Most likely that the impact will occur	Possible (2) The impact may occur	Improbable (1) Likelihood of the impact materialising is very low
SIGNIFICANCE	Is determined through a synthesis of impact characteristics. Significance is also an indication of the importance of the impact in terms of both physical extent and time scale, and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.			

Table 4: Color coding meaning

Low impact	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction, or operating procedure.
Medium impact	Mitigation is possible with additional design and construction inputs.
High impact	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.
Very high impact	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a “very high impact” is likely to be a fatal flaw.
Status	Denotes the perceived effect of the impact on the affected area.
Positive (+)	Beneficial impact
Negative (-)	Deleterious or adverse impact.
Neutral (/)	Impact is neither beneficial nor adverse
It is important to note that the status of an impact is assigned based on the status quo – i.e., should the project not proceed. Therefore, not all negative impacts are equally significant.	

7. ANTICIPATED PROJECT IMPACTS AND MITIGATION MEASURES

7.1 Potential impacts during planning and design phase

The first step in avoiding and preventing any possible negative impacts during the construction, operation, maintenance, and decommissioning phase, should start with the planning and designing phase. The following issues should be considered during the planning and design phase.

a) Sizes of the road and of the properties

The proposed properties sizes as depicted in Figure 6 are in accordance with the Urban and Regional Planning Act, 05 of 2018 and in line with the HN Town Planning Scheme. The proposed road size (10 m) also complies to the minimum allowable road size required by the Urban and Regional Planning Act, 05 of 2018 and also considered sufficient to cater for traffic in two directions. The proposed layout is subjected to the approval of the Urban and Regional Planning Board (URPB).

b) Impact on ground water and drainage

Provision must be made for drainage of stormwater from and around the site. This can be achieved by making provision of storm water drainage system i.e., slope road surface or culverts to allow free flow of storm water during rainy season.

c) Provision of service lines

The newly created erven will need to be connected to the municipal services such as sewage, water, electricity, internet, telecommunication etc. Hence, it is recommended that provision for routes along or cross over the proposed road for these services lines. This is to ensure that the associated infrastructure i.e., pipes, manholes, lines etc, will be safely placed and will not interfere with the traffic and road users. Moreover, proper planning will save cost during the installation of these service line both to the Council and to the developer or property owners.

7.2 Potential impacts during Construction phase

Table 5: Potential negative impacts associated with the proposed activities: Construction Phase.

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
1. BIOPHYSICAL							
Impact on flora and fauna	<ul style="list-style-type: none"> No impact 	1	1	1	1	Low	<ul style="list-style-type: none"> Site already serviced and earmarked for housing development
Soil contamination	<ul style="list-style-type: none"> Contamination of soil with chemicals (sodium chloride, Calcium magnesium acetate, etc.) which found in deicer agents 	1	1	1	1	Low	<ul style="list-style-type: none"> The proposed road will be similar to the existing Municipal roads Environmentally friendly and recommended products must be used for road marking.
Impact on drainage Impact on the	<ul style="list-style-type: none"> Construction works may divert the natural stormwater drainage of the site. 	1	1	1	1	Low	<ul style="list-style-type: none"> There are no major drainage lines affected. However, provision for

							culverts must be made to enable surface runoff.
Visual impacts	<ul style="list-style-type: none"> Uncompleted construction works may decrease the visual attraction of the area 	1	1	1	1	Low	<ul style="list-style-type: none"> All temporary structures must be removed after construction and all trenches must be covered. Construction waste should be collected and disposed of weekly.
Air quality	<ul style="list-style-type: none"> Dust generation from construction work may decrease air quality. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Control dust generation during construction period.
	<ul style="list-style-type: none"> Fumes from traffic (road users) and emission of leads from moving vehicles may pollute the air. 	1	1	1	1	Low	<ul style="list-style-type: none"> Limited impact

Water usage	<ul style="list-style-type: none"> The construction of the proposed road will make use of water in its construction phase. 	1	1	1	1	Low	<ul style="list-style-type: none"> Given the size of the proposed road area, the impact on water resource availability is limited and can be accommodated within the available water resources.
2. SOCIO-ECONOMIC							
Dislocation of people	<ul style="list-style-type: none"> Since the proposed development sites are partially occupied, the intended development might result in dislocation of the affected people. 	1	1	1	1		<ul style="list-style-type: none"> Affected people will be accommodated into newly created erven.
Traffic impacts	<ul style="list-style-type: none"> Construction works will increase traffic congestion in the nearby street. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Erect construction signals at the construction site. There must be at least two flag bearers at the construction site to direct traffic flow.

Nuisance in the form of noise and vibration	<ul style="list-style-type: none"> • Generation of excessive noise during construction and operation may be nuisance to the residents. 	1	1	1	1	Low	<ul style="list-style-type: none"> • Construction should be limited to daytime. • Provide maintenance to construction plant and machineries
Waste generation	<ul style="list-style-type: none"> • The construction, operation may result in a myriad of waste products in the environment. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> • All waste generated during construction should be contained and disposed properly.
Temporary camps	<ul style="list-style-type: none"> • Construction camps onsite can result in secondary environmental impacts i.e., pollution, noise etc. 	1	1	1	2	Moderate	<ul style="list-style-type: none"> • Construction camps should be established at the site approved by the Local Authority. • Provide ablution facilities at the construction site.
Health, Safety and Security	<ul style="list-style-type: none"> • The safety, security, and health of the labour force, employees and general, public may be compromised during construction. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> • All employees should be provided with personal protective

							equipment (PPE). • The construction site must be barricaded, and all trenches must be covered to prevent/sealed.
Local employment (positive)	• The construction phase will generate temporary local	1	1	2	2	Moderate	• Preferences should be given
ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
Business opportunities (positive)	• Construction works will also present business opportunity for the local businesses i.e., supplies, construction etc.	1	1	2	2	Low	• Construction materials should be sourced locally as far as possible.

7.3 Potential impacts during operation phase

Table 6 Potential impacts during Operation phase

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
1.BIOPHYSICAL							
Impact biodiversity (positive)	<ul style="list-style-type: none"> Roadside plants will enhance biodiversity. 	1	1	1	1	Low	<ul style="list-style-type: none"> Provide more plants along the road to make up for vegetation lost.
Impact on small animals (positive)	<ul style="list-style-type: none"> New road may provide habitant for small animals 	1	1	1	1	Low	<ul style="list-style-type: none"> Culverts and other under road structures may serves as habitant
Visual impacts (positive)	<ul style="list-style-type: none"> The road will improve aesthetic view. 	1	1	1	1	Low	<ul style="list-style-type: none"> The road should be taxed to improve view.
Impact on the soil	<ul style="list-style-type: none"> Contamination of soil with chemicals (sodium chloride, Calcium magnesium acetate, etc.) which found in deicer agents. 	1	1	1	1	Low	<ul style="list-style-type: none"> Use environmentally friendly materials and chemicals for road markings etc.
Water usage and contamination	<ul style="list-style-type: none"> Stormwater and surface contamination during road maintenance. 	1	1	2	2	Moderate	<ul style="list-style-type: none"> Only use environmentally

							friendly materials and detergents.
Erosion and surface runoff	<ul style="list-style-type: none"> Due to increase hard surface, the surface will become impermeable, thus increasing the surface runoff. 	1	1	1	2	Moderate	<ul style="list-style-type: none"> Make provision for stormwater drainage.

ASPECT	POTENTIAL IMPACTS	RATING (If it does occur)				SIGNIFICANCE OF IMPACT	MITIGATION/ENHANCEMENT MEASURES
		Extent	Duration	Intensity	Probability		
2. SOCIO-ECONOMICS continue.							
Traffic impacts (positive)	<ul style="list-style-type: none"> New road will allow traffic free flow and accessibility. 	1	2	1	2	Moderate	<ul style="list-style-type: none"> Install Traffic signs to regulate traffic flow.
Development (positive)	<ul style="list-style-type: none"> The proposed road structure will improve the quality of life for the residents. 	1	2	2	1	Moderate	<ul style="list-style-type: none"> Road must be of required engineering standard.

8. CONCLUSION AND RECOMMENDATIONS

The objective of the Scoping Phase was to define the range of the impact assessment and determine the need to conduct any specialist study. It is believed that these objectives have been achieved and adequately documented in the Scoping Report. All possible environment aspects have been adequately assessed and necessary control measures have been formulated to meet statutory requirements thus implementing this project will not have any appreciable negative impacts.

8.1 Assumptions and Conclusions:

Although the proposed activities of subdivision and creation of a right of way is not expected to result in any appreciable environmental impacts, the EIA study is being conducted as a compliance with the Schedule 10.2 (a) of the EMA to obtain an ECC for submission to the Urban and Regional Planning Board for the approval of the subdivision layout. Hence, the following conclusions are made.

- The proposed right of way servitude will not compromise the environmental integrity of the surrounding environment.
- There are no objections or critical issues to the proposed activities.
- The findings of the Scoping Assessment are considered sufficient, and no additional specialist study is required.

8.2 Recommendations

To the proponent

- Inform the local authority (Walvis Bay Municipality) for any changes made on the proposed layout.
- Obtain approval from the Ministry of Urban and Rural Development

To the Environmental Commissioner

- Consider the findings and recommendations of this Scoping process with mitigation measures as outlined herein and in the Environmental Management Plan and subsequently,
- Issue the Environmental Clearance Certificate to authorize for the **Proposed subdivision of Erf 7881, Kuisebmond Ext 10, and Creation of a Street (Public Road), Walvis Bay Erongo region.**

9. REFERENCES

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10. APPENDICES

APPENDIX A: Proof of Consultations

APPENDIX B: Approval from Walvis Bay Municipality

APPENDIX C: EMP