

***“Balancing Growth with Resilience”***

## **ENVIRONMENTAL & SOCIAL IMPACT ASSESSMENT REPORT**

### **Closure & Rezoning of Erven 379, 402, 403, 404 and 410 from Public Open Spaces to Private Open Spaces, Swakopmund Proper, Namibia**

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**APP-002040**

“Our observation of nature must be diligent, our reflection profound, and our experiments exact. We rarely see these three means combined; and for this reason, creative geniuses are not common.”  
– Denis Diderot

*"Balancing Growth with Resilience"*

## Document Status

<b>PROPONENT</b>	Municipality of Swakopmund
<b>PROJECT TITLE</b>	Closure & Rezoning of Erven 379, , 402, 403, 404 and 410 from Public Open Spaces to Private Open Spaces, Swakopmund Proper, Namibia
<b>PROJECT TYPE</b>	Environmental & Social Impact Assessment Study
<b>PROJECT LOCATION</b>	Erven 379, , 402, 403, 404 and 410 Swakopmund Proper, Erongo Region, NAMIBIA
<b>LOCAL AUTHORITY</b>	Municipality of Swakopmund, Erongo Region
<b>COMPETENT AUTHORITY</b>	<b>Environmental Commissioner:</b> <b>Ministry of Environment, Forestry and Tourism</b> Directorate of Environmental Affairs (DEA) Private Bag 13306, Windhoek, Namibia Tel: (+264-61) 2842111, Fax: (+264-61) 229936
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*“Earth and sky, woods and fields, lakes and rivers, the mountain and the sea, are excellent schoolmasters, and teach some of us more than we can ever learn from books.”*

**– John Lubbock**

*“We are living on this planet as if we had another one to go to.”*

**– Terry Swearingen**

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<b>DEFINITION OF COMMON TERMS USED<sup>1</sup></b>	
<b>Rezoning</b>	Rezoning refers to the change in land use of a specific erf/ land within a town having a promulgated Town Planning Schemes. This change in land use/ zoning provides an owner of an erf a different development potential.
<b>Consolidation of land / erven</b>	Consolidation is the merging or joining of two or more properties into one larger property on which development can take place and thereby enhancing the development potential of the property.
<b>Public Consultations and Project Facilitation</b>	Public Consultation forms the back-bone of town planning. We offer services such as consultations between the public and relevant authorities and stakeholders on town planning related issues.
<b>Public Open Space and Street Closures</b>	When necessary and when not utilised public open spaces and streets can be closed in terms of the Local Authorities Act. The closed street or public open space can then either be consolidated with another property or be utilised for a different purpose
<b>Town Planning Schemes</b>	A Town Planning Scheme is a legal document compiled for Municipalities, Towns and Villages in terms of the Town Planning Ordinance 18 of 1954 in order to coordinate development. A town planning scheme will contain such provisions such as zoning, height of buildings, building lines, primary uses on each property within the town. Town Planning Schemes are done in consultation with the relevant Local Authority and presented to the community for comments within a consultative process and such a scheme is a public legal document.
<b>Consent Applications</b>	Due to the flexibility of Town Planning Schemes owners of properties located within a town planning scheme area can apply for certain consent approvals as allowed in the Town Planning Scheme. This for example will mean that an owner of a Single Residential property can apply to the Town Council for consent to operate a Bed and Breakfast on their property if it is allowable in terms of Town Planning Scheme
<b>Urban and Regional Structure Plans</b>	A Structure Plan or Integrated Land Use Plan is a tool for guiding development within a town or a region for a period of time being 15, 20 or 30 years. Structure Plans are not a statutory document and can be adapted if and when required. The plan is to be transparently prepared in close consultation with Local Authority and the community. The aim of the plan is to guide urban development over a long term while also informing the public and investors of the vision for the town.
<b>Urban Design</b>	Urban design involves the arrangement and design of buildings, public spaces, transport systems, services, and amenities so as to provide for a unique development. Urban design services ranges from detailed urban design plans, urban design codes as well as specific tailored urban design advice based on the client's requirements. Urban Design advice can be particularly useful as a complementary service to visionary documents such as Structure Plans and also to enhance specific development opportunities within both the public and private sectors.
<b>Erf</b>	Means any and every piece of land situated in an approved township. Land situated outside approved townships is called a farm or a portion of a farm.
<b>Local Authority Council</b>	Means any municipal council, town council or village council elected to govern the affairs of a municipality, town or village.
<b>Local Authority Area</b>	Means the area under the jurisdiction and control of a local authority.
<b>Public Place</b>	Means any street, square, recreation ground, garden, park or enclosed space situated within and/or owned by the local authority for the use and benefit of the public, or which the public has the right to use.
<b>Town Planning Scheme</b>	Means a document containing a comprehensive policy statement serving as a framework and foundation for future development and land use patterns for the area to which it applies. It is a statutory document enforceable by law and assigns real rights to land.
<b>Townlands</b>	Means land within a local authority area but outside the approved township area. Such land is called farms or portions of farms.
<b>General Plan</b>	means a plan which, representing the relative position and dimensions of two or more erven, has been surveyed and signed by a registered land surveyor and which has been approved or certified as such by the Surveyor General or his delegate.

<sup>1</sup> Manual on Town & Regional Planning Practice in Namibia,

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## 0. EXECUTIVE SUMMARY

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### I. Introduction

The Namibian Government resolved to develop the Swakopmund Townlands area into a well-planned and administered urban development node as the capital of the Erongo Region. Visionary urban planning supported by infrastructure development is needed to achieve the vision of the Namibian Government<sup>2</sup>.

The proposed Swakopmund Structure Plan 2020 – 2040 was developed as the first policy document that sets out a number of goals and strategies that will guide urban development for the next 20 years. The vision of the proposed Structure Plan is to *“Create a sustainable, liveable and inclusive city”*.

The proposed project is aimed at closing off the Erven as Public Open Spaces and rezoning them to Private Open Spaces, fits well into the Town Planning Scheme. The erven are located in Swakopmund Proper and measure the following: 379 (1000m<sup>2</sup>), 402 (982.82m<sup>2</sup>), 403 (296.87m<sup>2</sup>), 404 (1376.43m<sup>2</sup>) and 410 (3991m<sup>2</sup>). They are in Windhuker Street.

Some of the Erven didn't have access to, which is why the Municipality of Swakopmund needs to redesign them. The Erven have been lying dormant for decades and Council wish to sell them off to individuals, hence the rezoning and closure. They are being rezoned to Private Open Space in order to keep their recreational function.

The proposed activity constitutes a number of listed activities under the EIA Regulations, as promulgated under Section 27(1) and (2) of the EMA. The EIA Regulations describes the process for the submission of applications for authorization subject to the Scoping and Assessment phases. The tasks as documented in accordance with the Regulations of the EIA.

Under section 56 of the Environmental Management Act, 2007 (Act No.7 of 2007), the Minister has made the regulations for Environmental Impact Assessment (EIA) as set out in the Schedule of Government Notice No. 30 (2012). These regulations require that all projects, plans, programmes and policies that have a detrimental effect on the environment be accompanied by an EIA.

Under Section 27 of the Environmental Management Act, 2007 (Act No. 7 of 2007), and after following the consultative process referred to in section 44 of that Act, the Minister lists in the Annexure to the above mentioned Schedule, activities that may not be undertaken without an Environmental Clearance Certificate (Government Notice No. 29 of 2012).

### ii. Project Description, the Need & Motivation

Some of the Erven didn't have access to which is why we needed to redesign them. The Erven have been lying dormant for decades and Council wish to sell them off to individuals, hence the rezoning

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<sup>2</sup> [https://swakopmun.com/wp-content/uploads/2020/06/200619-DRAFT\\_SWK-Structure-Plan-2020-2040-1.pdf](https://swakopmun.com/wp-content/uploads/2020/06/200619-DRAFT_SWK-Structure-Plan-2020-2040-1.pdf).



and closure. They are being rezoned to Private Open Space in order to keep their recreational function.

The closure and rezoning is to be done in accordance with the Swakopmund town planning.

### iii. Planning Principle

The erven to be closed and rezoned are located in Swakopmund Proper and measure the following: 379 (1000m<sup>2</sup>), 402 (982.82m<sup>2</sup>), 403 (296.87m<sup>2</sup>), 404 (1376.43m<sup>2</sup>) and 410 (3991m<sup>2</sup>).

The proposed development will help define the edge of Extension Swakopmund along Windhuker Street.

### iv. Need for Closure and Rezoning

Swakopmund is one of the fastest growing economic towns of Namibia. The proposed development from Public Open Space (POS) to Private Open space will directly help change Swakopmund for the better.

- **Redefining infrastructure with place-led development:** Cities do not exist without people and it is important to shape the city according to their needs. The design of public places should allow all residents to take ownership of them, so they can become a shared asset that the entire community can enjoy. Actions should be taken to create vibrant and healthy cities for all people regardless of age or social, economic, or ethnic background.
- **Integrating Urbanscapes into developmental projects.** Private Open Spaces are instrumental in improving overall quality of life, while also enhancing livability, improving prosperity, and supporting city transformation.;
- **Transforming public spaces and streetscapes.** The walking environment in cities and pedestrian priority on the streets are very important for mobility, which in turn provides accessibility to public spaces for all.
- **Fostering economic development through urban places:** Not only can urban public spaces make people feel better, safe, and included, but they can also foster economic development. The quality of a place leads to attachment, and the attachment leads to higher growth. How could this happen? Because in addition to being sociable, accessible and comfortable, a good place should also be full of uses and activities, which in turn boost the economic activity over there. The development will likely bring about economic development to the neighborhoods around them
- **Creating safer and more inclusive public spaces.** There are several examples of cities in different parts of the world that successfully transformed from violent, criminal and unsafe environments, into inclusive, safer and more livable places.

## V. Alternatives

The proposed activity is in line with the objectives of the Swakopmund Strategic Plan 2020/2040, The Town Planning Scheme as well as NDP 4. There is no suitable alternative to the proposed development.

## vi. Legal Requirements

The proposed activities constitute a number of listed activities under the EIA Regulations, as promulgated under Section 27(1) and (2) of the EMA. The EIA Regulations describes the process for the submission of applications for authorization subject to the Scoping and Assessment phases. The tasks as documented in accordance with the Regulations of the EIA.

Under section 56 of the Environmental Management Act, 2007 (Act No.7 of 2007), the Minister has made the regulations for Environmental Impact Assessment (EIA) as set out in the Schedule of Government Notice No. 30 (2012). These regulations require that all projects, plans, programmes and policies that have a detrimental effect on the environment be accompanied by an EIA. Under Section 27 of the Environmental Management Act, 2007 (Act No. 7 of 2007), and after following the consultative process referred to in section 44 of that Act, the Minister lists in the Annexure to the above mentioned Schedule, activities that may not be undertaken without an Environmental Clearance Certificate (Government Notice No. 29 of 2012).

## VII. Public Consultation / Participation

the Public Participation / Consultation exercise was carried out by the Consultant in accordance with the Environmental Management Act 7 of 2007 and its Regulations. Various I&APs at local level were identified and their input solicited. Particular effort was exerted to involve I&APs at a local level. The period for Public Consultation stretched between 15 September to 15 October 2020.

## VIII. Impact assessment

The issues identified by the EAP and along with those identified during the Commenting period / public consultation process are assessed using a range of assessment criteria. The application of these criteria involves a balanced consideration of duration, extent, and intensity/magnitude, modified by probability, cumulative effects, and confidence in order to determine significance. Mitigation measures are outlined for each impact.

## IX. Conclusions and recommendations

It is therefore recommended that the proposed development (as described in this report) and the following associated activities receive **Environmental Clearance Certificate** provided the recommendations included in this report and the EMP are religiously implemented.





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## 1. INTRODUCTION

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### 1.1 Background

Swakopmund is one of the fast-growing centres of Erongo Region and the proposed project is aimed at closing off the Erven as Public Open Spaces and rezoning them to Private Open Spaces. They are located in Swakopmund Proper and measure the following: 379 (1000m<sup>2</sup>), 402 (982.82m<sup>2</sup>), 403 (296.87m<sup>2</sup>), 404 (1376.43m<sup>2</sup>) and 410 (3991m<sup>2</sup>). They are in Windhuker Street.

The development is a clear indication of various developments planned for the coastal town of Swakopmund. Such a development is one of a suite of the town planning instruments used for future spatial planning.

As per the Environmental Management Act (7 of 2007)<sup>3</sup>, such a development cannot take place without Environmental Scoping having been completed and Environmental Clearance Certificate issued.

Some of the Erven didn't have access to which is why we needed to redesign them. The Erven have been lying dormant for decades and Council wish to sell them off to individuals, hence the rezoning and closure. They are being rezoned to “Private Open Space” in order to keep their recreational function.

The purpose of this document is to prepare Environmental Clearance for the above-mentioned activity.

### 1.2 Terms of Reference (ToRs)

The Terms of Reference for the proposed project is based on the requirements set out by the Environmental Management Act (2007) and it's EIA Regulations (2012)<sup>4</sup>. The process covered the following steps, which are reported on in this document as follows:

- Provide a detailed description of the proposed activity;
- Identify all legislation, policies and guidelines that have reference to the proposed project
- Identify existing environmental (both ecological and socio-economic) conditions of the receiving environment in order to determine environmental sensitivities;
- Inform Interested and Affected Parties (I&APs) and relevant authorities of the details of the proposed development and provide them with a reasonable opportunity to participate during the process ;
- Consider the potential environmental impacts of the development, and assess the significance of the identified impacts.

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<sup>3</sup>

[http://www.met.gov.na/files/downloads/a7e\\_Guide%20to%20the%20Environmental%20Management%20Act%20no%207%20of%202007%20\(GE\).pdf](http://www.met.gov.na/files/downloads/a7e_Guide%20to%20the%20Environmental%20Management%20Act%20no%207%20of%202007%20(GE).pdf).

<sup>4</sup> Ibid.

- Outline management and mitigation measures in an EMP to minimise and/or mitigate potentially negative impacts, which cannot be avoided.

### 1.3 Legal Framework Consulted

Namibia has a number of legislations dealing with environmental related issues, which determine the objectives guiding, and the strategies to be used in order to strengthen the respect for environmental values, taking into account the existing social, cultural and economic situation. The foundation for the Namibian environmental policy framework is Article 95 (I) of the Constitution<sup>5</sup>.

According to the Environmental Management Act No.7 of 2007 and its Regulations, Closure & Rezoning of Erven from Public Open Spaces to Private Open Space requires an Environmental Clearance Certificate (ECC) that will enable the Environmental Commissioner to examine whether or not the proposed land use will negatively affect the surrounding area.

However, the following table identifies the laws and policies that have been considered in the preparation of this Scoping Report:

**Table 2:1:** Laws and Policies applicable to the proposed activity and considered in the EIA Report

LEGISLATION/ GUIDELINE	RELEVANT PROVISIONS	IMPLICATIONS FOR THIS PROJECT
<b>Namibian Constitution First Amendment Act 34 of 1998<sup>6</sup></b>	“The State shall actively promote... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of all Namibians, both present and future” (Article 95(I)).	Ecological sustainability should inform and guide this EA and the proposed development.
<b>Environmental Management Act EMA (No 7 of 2007)<sup>7</sup></b>	<ul style="list-style-type: none"> <li>▪ Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27).</li> <li>▪ Details principles which are to guide all EAs.</li> </ul>	The EMA and its regulations should inform and guide this EA process.
<b>Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 4878)<sup>8</sup></b>	<ul style="list-style-type: none"> <li>▪ Details requirements for public consultation within a given environmental assessment process (GN 30 S21).</li> <li>▪ Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).</li> </ul>	
<b>Forestry Act 12 of 2001 Nature Conservation Ordinance 4 of 1975<sup>9</sup></b>	<ul style="list-style-type: none"> <li>▪ Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22 (1)).</li> <li>▪ Prohibits the removal of and transport of various protected plant species.</li> </ul>	Even though the Directorate of Forestry has no jurisdiction within townlands, these provisions will be used as a guideline for conservation of vegetation.

<sup>5</sup> <https://laws.parliament.na/namibian-constitution/>

<sup>6</sup> <https://www.lac.org.na/laws/annoSTAT/Namibian%20Constitution%20First%20Amendment%20Act%2034%20of%201998.pdf>.

<sup>7</sup> <http://www.lac.org.na/laws/annoSTAT/Environmental%20Management%20Act%207%20of%202007.pdf>

<sup>8</sup> <https://www.thinknamibia.org.na/environmental-law/chapter13>

<sup>9</sup> <http://www.lac.org.na/laws/2012/4878.pdf>

LEGISLATION/ GUIDELINE	RELEVANT PROVISIONS	IMPLICATIONS FOR THIS PROJECT
<b>Labour Act 11 of 2007<sup>10</sup></b>	Details requirements regarding minimum wage and working conditions (S39-47).	The Municipality of Swakopmund should ensure that all parties involved comply with the provisions of these legal instruments.
<b>Health and Safety Regulations GN 156/1997 (GG 1617)<sup>11</sup></b>	Details various requirements regarding health and safety of labourers.	
<b>Public Health Act 36 of 1919<sup>12</sup></b>	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	
<b>National Heritage Act 27 of 2004<sup>13</sup></b>	Section 48(1) states that “A person may apply to the [National Heritage] Council [NHC] for a permit to carry out works or activities in relation to a protected place or protected object”.	Any heritage resources (e.g. human remains etc.) discovered during construction requires a permit from the NHC for relocation.
<b>Burial Place Ordinance 27 of 1966<sup>14</sup></b>	Prohibits the desecration or disturbance of graves and regulates how bodies may be unearthed or dug up.	Regulates the exhumation of graves.
<b>Water Act 54 of 1956<sup>15</sup></b>	The Water Resources Management Act 24 of 2004 is presently without regulations; therefore the Water Act No 54 of 1956 is still in force: <ul style="list-style-type: none"> <li>▪ Prohibits the pollution of underground and surface water bodies (S23(1)).</li> <li>▪ Liability of clean-up costs after closure/ abandonment of an activity (S23(2)).</li> </ul>	The protection of ground and surface water resources should be a priority. The main threats will most likely be concrete and hydrocarbon spills during construction and hydrocarbon spills during operation and maintenance.
<b>Town Planning Ordinance 18 of 1954<sup>16</sup></b>	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	The proposed use of the project site must be consistent with the Swakopmund Town Planning Scheme.
<b>Townships and Division of Land Ordinance 11 of 1963<sup>17</sup></b>	Details the functions of the Township Board including what they consider when receiving an application for Township Establishment (S3).	The proposed layout and land uses should be informed by environmental factors such as water supply, soil etc. as laid out in Section 3.
<b>Road Ordinance 1972 (Ordinance 17 Of 1971<sup>18</sup>)</b>	<ul style="list-style-type: none"> <li>▪ Width of proclaimed roads and road reserve boundaries (S3.1)</li> <li>▪ Control of traffic on urban trunk and</li> </ul>	The limitations applicable on RA proclaimed roads should inform the proposed layout and zonings where applicable.

<sup>10</sup> [http://www.ilo.org/dyn/travail/docs/1013/2007\\_Labour\\_Act.pdf](http://www.ilo.org/dyn/travail/docs/1013/2007_Labour_Act.pdf)

<sup>11</sup> <https://www.nsi.com.na/download/health-and-safety-regulations-156-of-1997/>

<sup>12</sup> <http://faolex.fao.org/docs/pdf/nam126788.pdf>

<sup>13</sup> [https://laws.parliament.na/cms\\_documents/national-heritage-0ac18dcd17.pdf](https://laws.parliament.na/cms_documents/national-heritage-0ac18dcd17.pdf)

<sup>14</sup> <https://www.nhc-nam.org/content/national-heritage-act-gaz-3361-act-27-2004>

<sup>15</sup> <https://parliament.na/index.php/archive/category/102-acts-of-2004?download=655:water-resources-management-act-24-of-2004&start=20>

<sup>16</sup> <http://www.lac.org.na/laws/annoSTAT/Town%20Planning%20Ordinance%2018%20of%201954.pdf>

<sup>17</sup> <https://archive.gazettes.laws.africa/archive/na/2017/na-government-gazette-dated-2017-06-01-no-6320.pdf>.

<sup>18</sup> *ibid*

LEGISLATION/ GUIDELINE	RELEVANT PROVISIONS	IMPLICATIONS FOR THIS PROJECT
	<p>main roads (S27.1)</p> <ul style="list-style-type: none"> <li>▪ Rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads (S36.1)</li> <li>▪ Infringements and obstructions on and interference with proclaimed roads. (S37.1)</li> <li>▪ Distance from proclaimed roads at which fences are erected (S38)</li> </ul>	
<b>Swakopmund Town Planning Scheme (TPS)<sup>19</sup></b>	This statutory document provides land use regulations and development.	Land uses and developments should be in accordance with the TPS.
<b>(proposed) Swakopmund Structure Plan 2020 - 2040<sup>20</sup></b>	The proposed structure plan aims to create liveable spaces by supporting town planning, urban design, architecture and engineering driven approaches that promote city development based on the continued philosophy to create human spaces while also creating opportunities for land use diversification.	<ol style="list-style-type: none"> <li>1. Creating liveable spaces by encouraging urban densification within development areas and along mobility corridors while preserving the integrity and homogeneity of existing residential areas.</li> <li>2. Curbing urban sprawl</li> </ol>
<b>Sustainable Urban Energy Planning: A handbook for cities and towns in developing countries (SUEP:2004)</b>	Provides a comprehensive list and case studies to implement energy saving measures.	Implementing energy-efficiency and carbon mitigation measures. Conserve natural resources with city planning.

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<sup>19</sup> ibid

<sup>20</sup> ibid

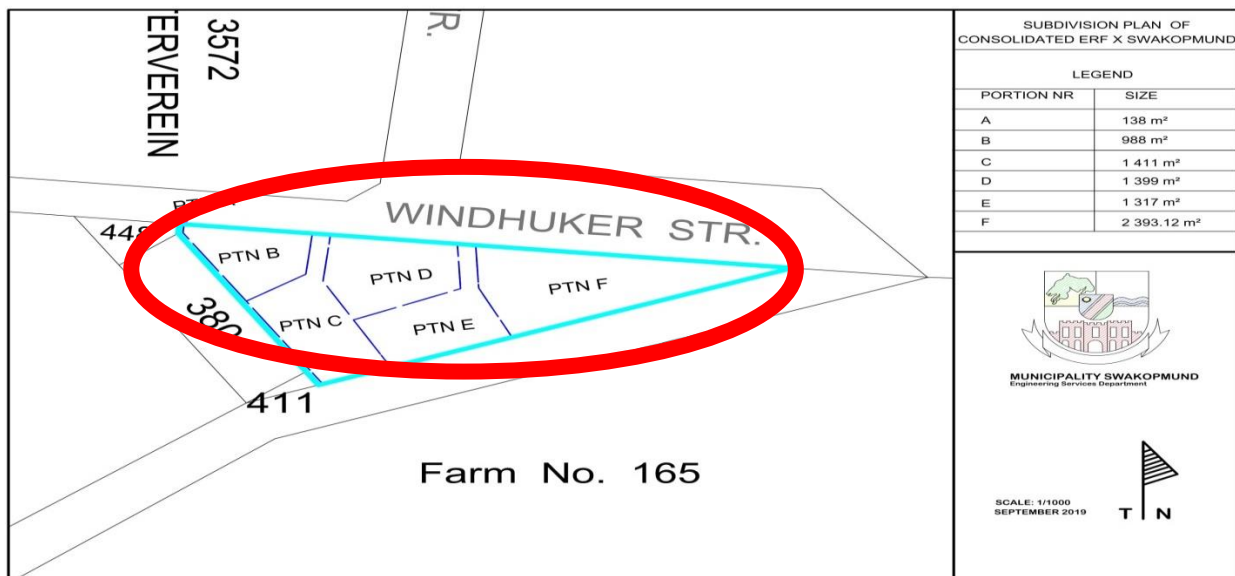
*“One of the first conditions of happiness is that the link between man and nature shall not be broken.”*  
 —Leo Tolstoy

## 2. PROPOSED PROJECT DESCRIPTION

### 2.1 Description of the Proposed Activity

The proposed activity entails Closing off the Erven as Public Open Spaces and rezoning them to Private Open Spaces. They are located in Swakopmund Proper and measure the following: 379 (1000m<sup>2</sup>), 402 (982.82m<sup>2</sup>), 403 (296.87m<sup>2</sup>), 404 (1376.43m<sup>2</sup>) and 410 (3991m<sup>2</sup>). They are in Windhuker Street. Rezoning involves changes in land use, bulk or densities and consent uses involving the variations of the scheme over which the local authority has power to approve and lay down conditions.

The site is an existing one at the edge of the Swakopmund Boundary on the southern part, as illustrated below in the Subdivision Plan below:



**Figure 2.1:** Subdivision Plan Consolidated Erf X Swakopmund (Courtesy: Municipality of Swakopmund)

The subdivision application for erf X results in B, C, D, E and F (Erven 379, 402, 403, 404 and 410); it lies under the Swakopmund Municipal area of jurisdiction. Therefore, it is necessary to subdivide the site into its component parts.

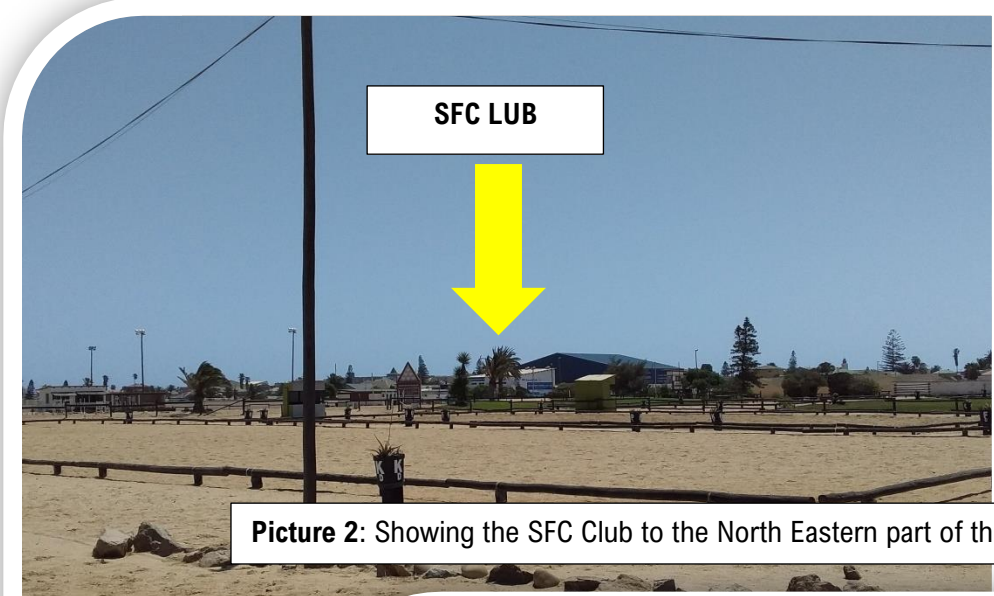
### 2.2 Zoning, Land Use and Site Size

The site is zoned “Public Open Space”<sup>21</sup> in terms of the Swakopmund Town Planning Scheme. Following the closure, the erven will be rezoned to “Private Open Spaces”. It should be noted that some of the Erven didn’t have access, to which is why they have to be redesigned. The Erven have been lying dormant for decades, and the Municipality of Swakopmund intends to sell them off to individuals, hence the rezoning and closure. They are being rezoned to Private Open Space in order to keep their recreational function.

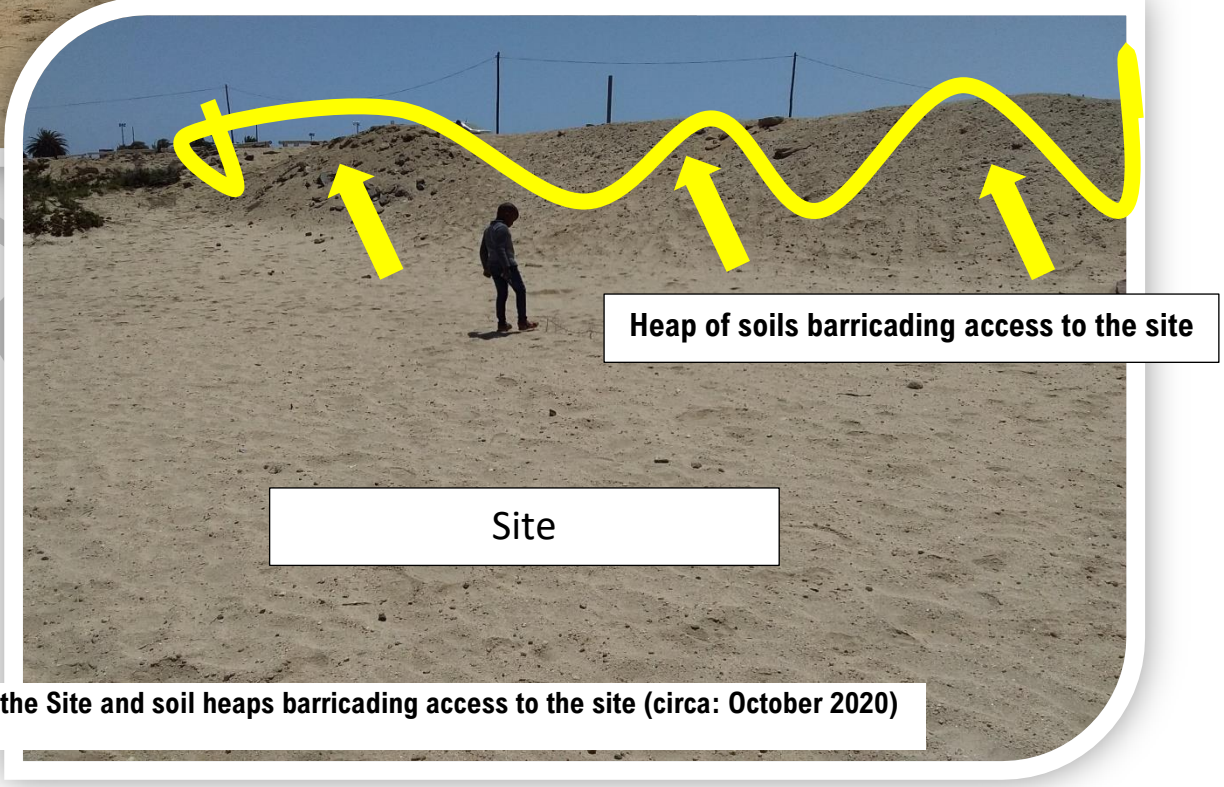
<sup>21</sup> A **Public Open Space (POS)** is defined as an open piece of land both green space and hard space to which there is public access. Public open space is often referred to by urban planners and landscape architects by the acronym 'POS'. Varied interpretations of the term are possible (Koohsari, Javad et al. 2015)



**Site Picture 1:** Depicts 1) Windhuker gravel road, 2) way to the site, 3) horse stables, and 4) way to the SFC Club, Swakopmund (circa October 2020)



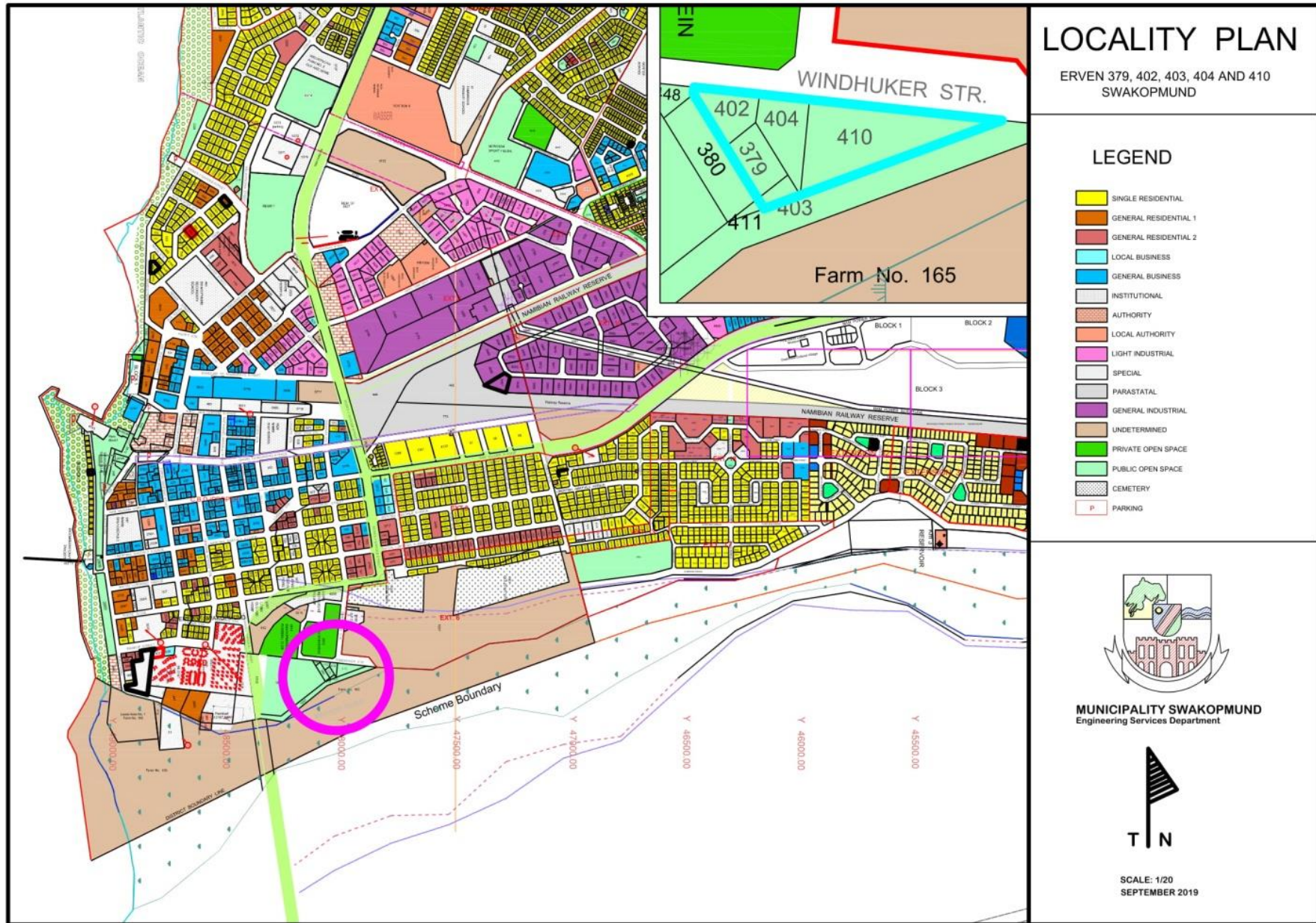
**Picture 2:** Showing the SFC Club to the North Eastern part of the Site to be closed and Rezoned



**Picture 3:** Depiction of the Site and soil heaps barricading access to the site (circa: October 2020)



**Figure 2.2: Zoning and Land Use – Erven 379, 402, 403, 404 and 410 Swakopmund, Namibia (Courtesy: Municipality of Swakopmund 2019)**



The site is notionally vacant and measures  $\pm 7,647.12\text{m}^2$  in extent. It is theoretically possible to close and rezone the site into any number of viable portions.

The site was previously idle for some time now. The Private Open Spaces created by the proposed subdivision will make use of the existing infrastructure in the area.

As the subdivision is less than 11 portions there is no statutory requirement for a Need and Desirability application for approval by NAMPAB. Page | 1

### **2.3 Ownership**

The piece of land directly fall under the jurisdiction of the Swakopmund Local Authority.

APP - 002040

Figure 2.3: Google Earth Map – Street View, Swakopmund, Namibia

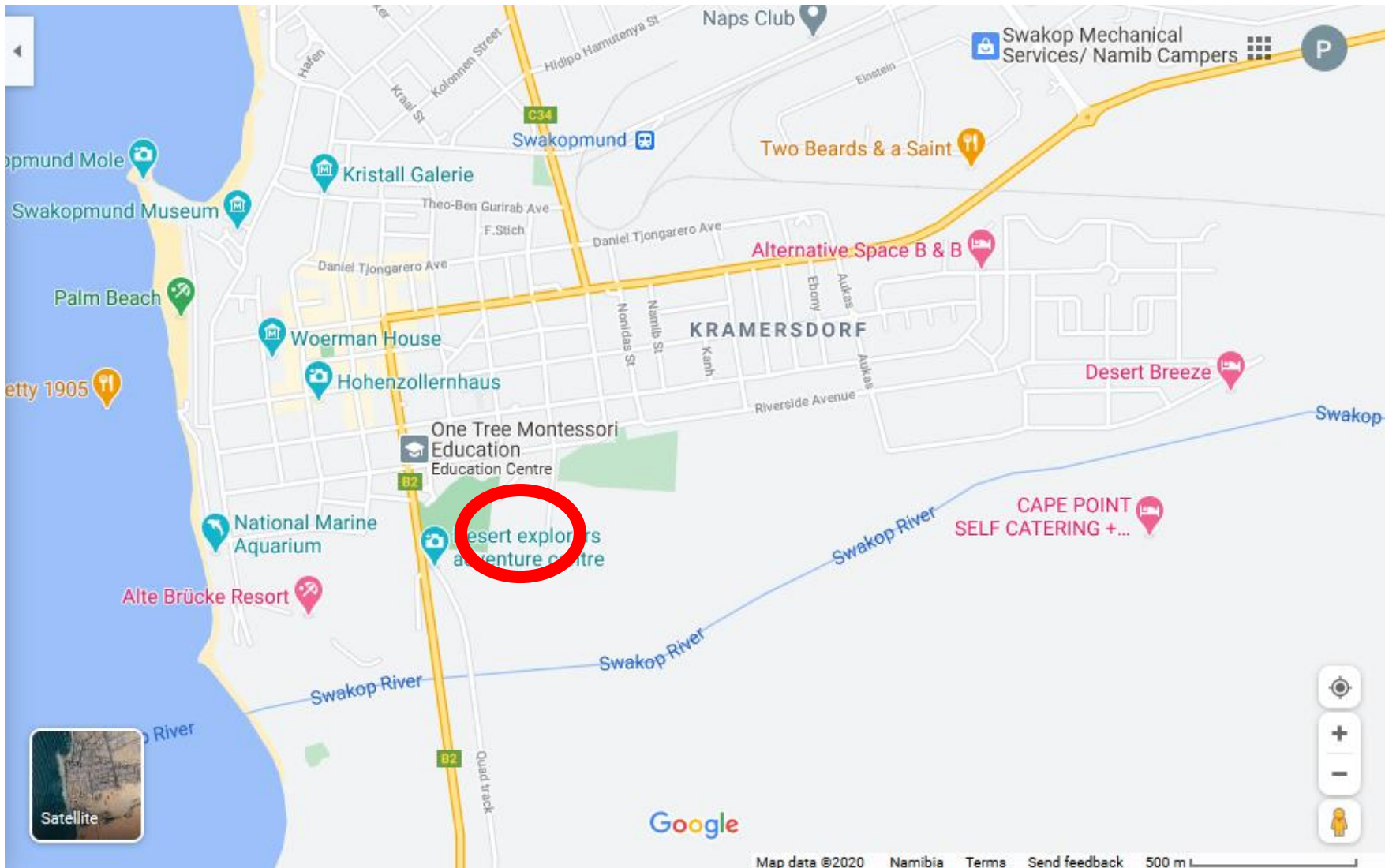
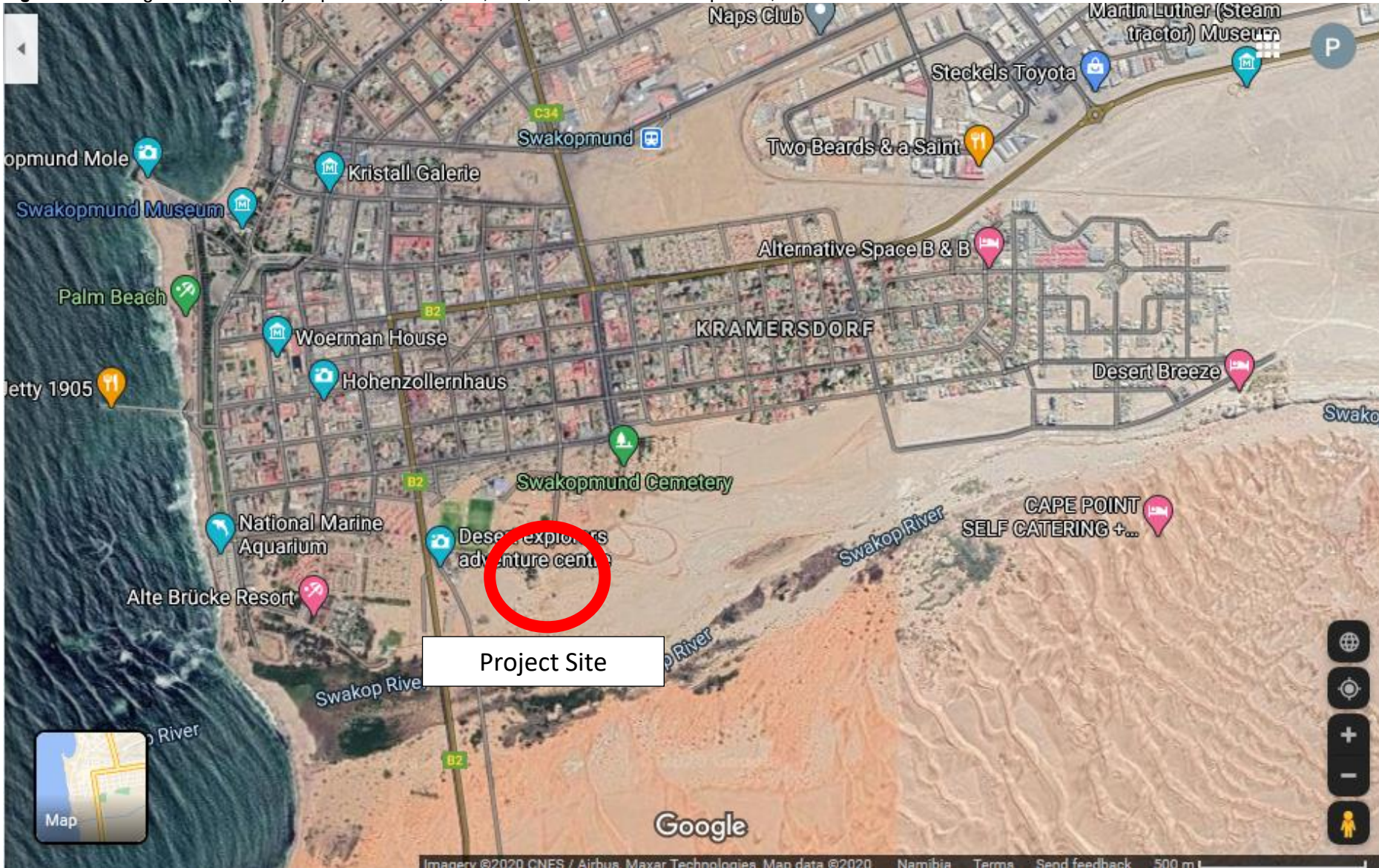




Figure 2.4: Google Earth (Aerial) Map - Erven 379, 402, 403, 404 and 410 Swakopmund, Namibia



## 2.4 Proposed Subdivision<sup>22</sup>

Land subdivision is the first step in the process of community development. Once land has been divided, lots and blocks and publicly recorded, the correction of defects is costly and difficult. Subdivision of land sooner or later becomes a public responsibility, in that streets must be maintained and various public services must be provided. The public health, safety and welfare is thereby affected in many important respects. It is therefore in the interest of the public, the developer and the future owners that subdivisions be conceived, designed and developed in accordance with the regulations governing the subdivision of land within Namibia.

The proposed subdivision into 5 portions (Portions A to E and Remainder), will be as follows:

### Proposed subdivision of Erven 379, 402, 403, 404 and 410 into Portions A to E and Remainder

ERF NO	LAND-USE ZONING	AREA (m <sup>2</sup> )
379	Public Open Space	1,000m <sup>2</sup>
402	Public Open Space	982.82m <sup>2</sup>
403	Public Open Space	296.87m <sup>2</sup>
404	Public Open Space	1376.43m <sup>2</sup>
410	Public Open Space	3991m <sup>2</sup>

A range of erf sizes is provided in the subdivision which gives potential developers a wide choice of development options.

## 2.5 Access and Services

The site is bounded by Windhuker Street and has a prominent and visual position. Primary access to the site will only be from Windhuker Street, an internal street. Windhuker Street is also a one-way “off-ramp” street from Rhode Allee Street.

The site is currently NOT connected to any Municipal services.

## 2.6 Development

Since the 5 erven have been lying idle for decades, for decades, the Municipality of Swakopmund therefore intends to sell them off to interested individuals. They are being rezoned to Private Open Space in order to keep their recreational function. There is a growing demand in Swakopmund for property development (Swakopmund Structure Plan 2020 – 2040; Local Economic Development Strategy 2019 – 2023).

Each separate erf is expected to have freehold title. Therefore, it is necessary to subdivide the site into its component parts. Each erf will be developed for separate business activities which operate separately and independently from each other. Each new portion will be developed in accordance

<sup>22</sup> **Sub-division** means the division of a parcel of land other than buildings held under one ownership into two or more parts whether such division is by conveyance, transfer, assignment, vesting order, plan of survey, plan of sub-division, or any other instrument for the purpose of sale, gift, partition, succession, lease, mortgage or for any other purpose and such sub-division constitutes development whether or not the use for which the sub-divided land is intended constitutes development and “sub-divide” shall be construed accordingly (Koohsari, Javad et al. 2015)



with the Swakopmund Town Planning Scheme requirements such as coverage, height, bulk, building lines and on-site parking.

Land availability is restricted and expensive, particularly for very large industrial erven; that is there is a greater demand for smaller rather than larger light industrial erven.

The current land demand in Swakopmund is for freehold title of smaller more manageable and more affordable properties rather than rental from a landlord. Therefore, developing/redeveloping existing properties with existing available and useable infrastructure is much more affordable and sustainable.

Increasing the intensity of development within the existing urban areas will effectively utilise existing services and improve the urban area of Swakopmund private estate. In addition, it helps reduce urban sprawl and encourages more compact development.

The proposed development is regarded as being ideally suited for this area and would not have a negative impact on the urban and environmental structure of this area. The application is also fully in accordance with the Swakopmund Town Planning Scheme and other Swakopmund Council policy and guidance.

The proposed developments will marginally increase the load on services, but there is sufficient capacity in the area and the impact will be much less significant than extending the town boundaries.

The development/redevelopment will spark interest and make local residents optimistic about their town. It will help revitalise the area and increase property values in the surrounding environs. It will also be complementary to the surrounding recreational facilities and services in the vicinity.

There is sufficient bulk services closer to the site in terms of water, sewerage, electricity and communication cables.

## 2.7 Geophysical Aspects

Due to the nature of the proposed project, the design philosophy and vision of the development and the implementation of industry best practice mitigation measures, the effects on the environment and society are expected to be minimal and localised. It is likely that there may be some short term, temporary localised disruption to ecological features (flora and fauna) on the site during the construction phase. During operations, it is likely that there may be some minor adverse as well as beneficial effects to the local society and economy. The proposed activity may affect the following geophysical aspects:

<b>Negative:</b>	Dust particles will be created during the construction phases.
<b>Positive:</b>	This particles of dust can be blown away by the wind reducing the chances of people inhaling it;
<b>Negative:</b>	The physical size of the site restricts development potential in terms of density;
<b>Positive:</b>	The proposed development will help curtail illegal activities taking place on the site – prostitution, illegal parkings, drug and alcohol abuse, as well as being frequented by stray camels from Desert Explorers.



## 2.8 Biological Aspects<sup>23</sup>

Although all towns are highly artificial, they soon come to function as unique environments and dynamic systems. They import resources from the surrounding hinterland, and export others, with effects that extend well beyond the municipal boundaries. Settlements leach resources - water, energy and raw materials - from the hinterland, while pumping noxious wastes and pollutants back into the countryside, out of sight of urban residents. When the town happens to be one like Swakopmund, constructed in a fragile eco-system with few resources conducive to human habitation, the ecological footprint of the town is proportionately greater.

This environment has transformed from the natural environment to a human habitat now, which has caused a total wipe out of the natural habitat. Street paving, gardening, level ground, and buildings have covered up the natural environment, leaving no endangered species, few plants, and animals. Due to the existing character of the area, the proposed development will not cause any adverse negative biological or environmental impact.

The proposed activity may affect the following biological aspects:

<b>Negative</b>	None observed.
<b>Positive</b>	No impacts will be generated by this subdivision and eventual development because development will take place in an existing urban environment.
<b>Positive</b>	The development is not located to any biologically sensitive areas.
<b>Positive</b>	When new structures go up, inert desert sand has to be transported to sites to replace the salty, waterlogged soil in the town

## 2.9 Social Aspects<sup>24</sup>

The site is zoned "Public Open Space" in terms of the Swakopmund Town Planning Scheme which permits a wide range of activities. Following the closure and subsequent rezoning from Public Open Space to Private Open Space, the erven will be sold off to individuals.

The site is located between the horse stables, Swakopmund Camel Farm / Desert Explorers. During the day, noise levels are high because of the movement levels; and during the night, it is calmer in the neighborhood. The proposed development and activity will add to the existing vibrant nature of the area and corridor which may increase noise levels from the site.

The proposed activity may affect the following social aspects:

<b>Negative (aesthetic)</b>	the neighborhood will be changed as the site had been "vacant" for some decades now.
<b>Negative</b>	camel owners will feel displaced as they use the site for camel patrols, and they will feel their privacy as being invaded
<b>Neutral</b>	the proposed development will set the example for future properties; cumulative impact on the social environment can either be positive or negative.
<b>Positive</b>	the development will increase value of the properties in the area, making people take more pride in their community
<b>Positive</b>	A mixed-use development improves quality of life.

<sup>23</sup> **Biological Aspects** - the external appearance of a plant community, which changes throughout the year in accordance with the succession of the phases of development of plants. As a rule, aspect is repeated year in and year out in almost identical sequence (Merriam Webster Dictionary)

<sup>24</sup> **Social aspects** are the commonalities among people within a specific culture. **Social aspects** may include the following: language, norms, Rules (Ibid.)

## 2.10 Cultural Aspects<sup>25</sup>

There are no historical or heritage sites in the vicinity or within the 10km radius. virtually all buildings have no architectural significance or any importance to the local community.

The proposed activity may affect the following economic aspects:

<b>Negative</b>	The development will have a negative aesthetic view on the whole area.
<b>Positive:</b>	No objections were received from the public; therefore the proposed activity is in accordance with the community's values, norms, and cultural principles.



<sup>25</sup> Cultural means relating to a particular society and its ideas, customs, and art.

"Saving our planet, lifting people out of poverty, advancing economic growth... these are one and the same fight. We must connect the dots between climate change, water scarcity, energy shortages, global health, food security and women's empowerment. Solutions to one problem must be solutions for all".

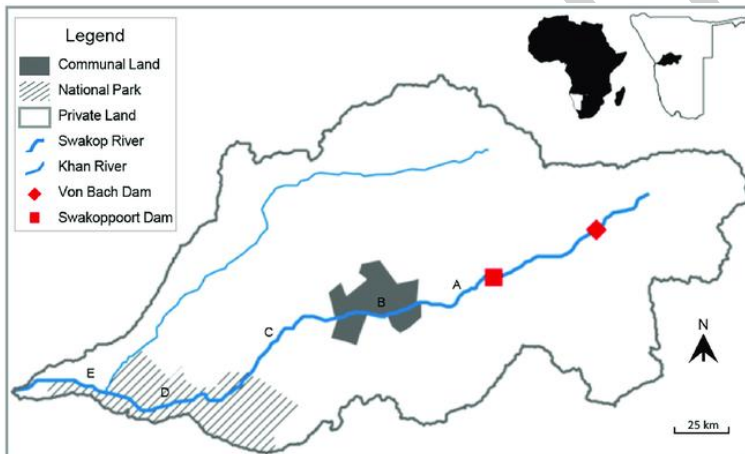
**Ban Ki-moon**

### 3. DESCRIPTION OF THE RECEIVING ENVIRONMENT

This Chapter provides an overview of the baseline studies on the biophysical and social environmental conditions, with which the proposed project will interact. This information has been sourced from observations made during a site visit and existing literature from previous research conducted in the area. This chapter also identifies sensitivities pertaining to key environmental features as well as potential impacts resulting from the proposed project in relation to these sensitivities.

#### 3.1 Swakop Catchment Area

Swakopmund wholly lies under the Lower Swakop Catchment area along the Swakop River. The Swakop River is a major river in western central Namibia. Its river source is in the Khomas Highland. From there it flows westwards through the town of Okahandja, the historic mission station at Gross Barmen, and the settlement of Otjimbingwe. It then crosses the Namib Desert and reaches the Atlantic Ocean at Swakopmund (German: *Mouth of the Swakop*). The Swakop is an ephemeral river; its run-off is roughly 40 million cubic metres per annum<sup>26</sup>.



**Figure 3.1:** Swakop River Catchment (Courtesy: BGR Bunde 2020)

The Swakop River, along with its main tributary Khan, is one of the largest temporary water-bearing rivers in the dry western part of Namibia. It is 460 km (290 mi) long and has a 30,100 km<sup>2</sup> (11,600 sq mi) large catchment area (including its tributaries). The name comes from the Khoekhoe languages of the Nama and Damara *Tsoa-xaub*. *Tsoa* means 'excrement opening' or 'anus' while *xaub* stands for the 'contents of excrement.' This name derives from the observation that the flow of large amounts of brownish sludge in the rain with it and discharges into the Atlantic Ocean.

The area around the river mouth and the surrounding dunes are also known for rich bird life and some unusual plant species (like the Welwitschia) that use the regular fog drifting in from the sea to sustain themselves in the absence of other moisture.

The area around the river mouth and the surrounding dunes are also known for rich bird life and some unusual plant species (like the Welwitschia) that use the regular fog drifting in from the sea to sustain themselves in the absence of other moisture.

<sup>26</sup> <https://www.bgr.bund.de>

Groundwater levels in the area have also dropped about 0.3 m further due to the presence of two big dams built on the Swakop River.

Notwithstanding the river's irregular flow, some agriculture is undertaken in the Swakop River valley, thus the region is well known for its fresh produce, especially tomatoes, asparagus and olives. There are some fears of salt and uranium (possibly natural, possibly from the Rössing uranium mine) endangering this farming industry. Page | 6

### 3.2 Swakop Catchment Hydrology

The Swakop drains a catchment area of 30,100 km<sup>2</sup> extending from the mouth into the Atlantic Ocean at Swakopmund over Otjimbingwe and in the east to about 50 km from Okahandja, and in the south to Khomas Highlands outside Windhoek. The highest point of the watershed is located at 2480 m. Annual rainfall varies from 0 mm in the lower reaches up to 475 mm in the eastern Khomas Highlands. 39% of the catchment area experiences rainfall that exceeds 300 mm per year, and up to 80% of the catchment experiences annual rainfall above 100 mm<sup>27</sup>.

The Von Bach Dam near Okahandja and Swakoppoort Dam west of Gross Barmen in the upper reaches of the Swakop are of great importance for the water supply of Central Namibia. Like all rivers, the Swakop also has a number of major sources and major wetlands in the lower reaches. Existing groundwater, however, is often salty due to soil salinity<sup>28</sup>.

On the lower reaches of the river, flooding has become ever more increasing, due to increased land use of the Swakop gallery forests. This contributes to a stronger and more rapid runoff and increased erosion of the Swakop Marshlands.

### 3.3 Swakop Catchment Vegetation and fauna

Because of its size and scope, the Swakop has a very diverse catchment area. 29% of the area is in highveld savanna, 28% in thornveld savanna, 34% in semidesert and savanna transition zone, and 9% in the central Namib Desert. In the Highlands a more or less dense bush vegetation prevails. In the arid lower reaches there is a more limited flora on the Swakop River valley itself, with the typical gallery vegetation from ana trees (*Faidherbia albida*), tamarisk (*Tamarix*), camel thorn (*Acaciaerioloba*), *Salvadora*, various fig species, *Euclea* and also tobacco (*Nicotiana* spp.), Jimsonweed (*Datura*) and mesquite (*Prosopis* spp.) as invasive species<sup>29</sup>.

Wildlife in the Swakop is found practically only in sparsely populated lower reaches and is limited to antelope, smaller predators and birds. Big game such as elephants, rhinos, lions and other big cats are no longer to be found. In the rest of the catchment area, there are, however, a number of tourist and game farms, and the big cats are kept there.

<sup>27</sup> <https://iwa-network.org/the-upper-swakop-river-basin-2/>

<sup>28</sup> <https://iwa-network.org/programs/basins-of-the-future>

<sup>29</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0277379114003412>

### 3.4 Swakopmund Biophysical Environment

#### 3.4.1 Climate

Swakopmund is centrally located on the Namibian coastline in the arid Namib Desert. The arid conditions are as a result of dry descending air and upwelling of the cold Benguela Current. Thick fog or low stratus clouds are a regular occurrence in Swakopmund. This is due to the influence of the Benguela Current and forms the major source of water for the succulent and lichen flora in the Namib Desert.

Winds generated from the high-pressure cell over the Atlantic Ocean blow from a southerly direction when they reach the Namibian coastline. As the Namibian interior is warm (particularly in summer), localised low-pressure systems are created which draws the cold southerly winds towards the inland desert areas. These winds manifest themselves in the form of strong prevailing south-westerly winds, which range from an average of 20 knots (37 km/h) during winter months to as high as 60 knots (110 km/h) during the summer. Winds near Swakopmund display two main trends; high velocity and frequency south to south-westerly winds in summer and high velocity, low frequency east to north-easterly winds during winter. During winter, the east winds generated over the hot Namib Desert have a strong effect on temperature, resulting in temperature in the upper 30 degrees Celsius and tend to transport plenty of sand.

**Table 3.1** presents a summary of climate conditions / data in Swakopmund area.

ELEMENT OF CLIMATE	DESCRIPTION
• <b>Average annual rainfall (mm/a)</b>	0-50
• <b>Variation in annual rainfall (%)</b>	< 100
• <b>Average annual evaporation (mm/a)</b>	2400 – 2600
• <b>Water deficit (mm/a)</b>	1701 - 1900
• <b>Temperature</b>	Average maximum: Between 24 °C in March/April and 19.3 °C in September Average minimum: Between 16.5 °C in February and 9.1°C in August Average annual >16 °C
• <b>Fog</b>	Approximately 900 hours of fog per year
• <b>Wind</b>	Prevailing wind is average to strong south westerly

#### 3.4.2 Climate Change and Sea Level Rise

- Since 1960 the global average sea level rise is 1.8 mm per year while the average sea level rise for Swakopmund is approximately 2 mm per year (Climate Data 2020)<sup>30</sup>. Since most of Swakopmund is at 2 m above sea-level or less, this may have significant impacts on the town and port. Although future predictions on climate change and sea level increases are based on many variables, it is clear that in future the frequency of climate extremes will increase. The present day worst case scenario is that an extreme sea level of +1.5 m above Land Levelling Datum (LLD) (LLD is approximately equal to mean sea level) will occur every 100 years. By 2030, this is predicted to occur once every year mostly due to an increased frequency of storm events associated with climate change. The

<sup>30</sup> <https://en.climate-data.org/africa/namibia/erongo-region/swakopmund-836/>



major impacts associated with this will be increased erosion of the shore line as well as inundation of low lying areas<sup>31</sup>.

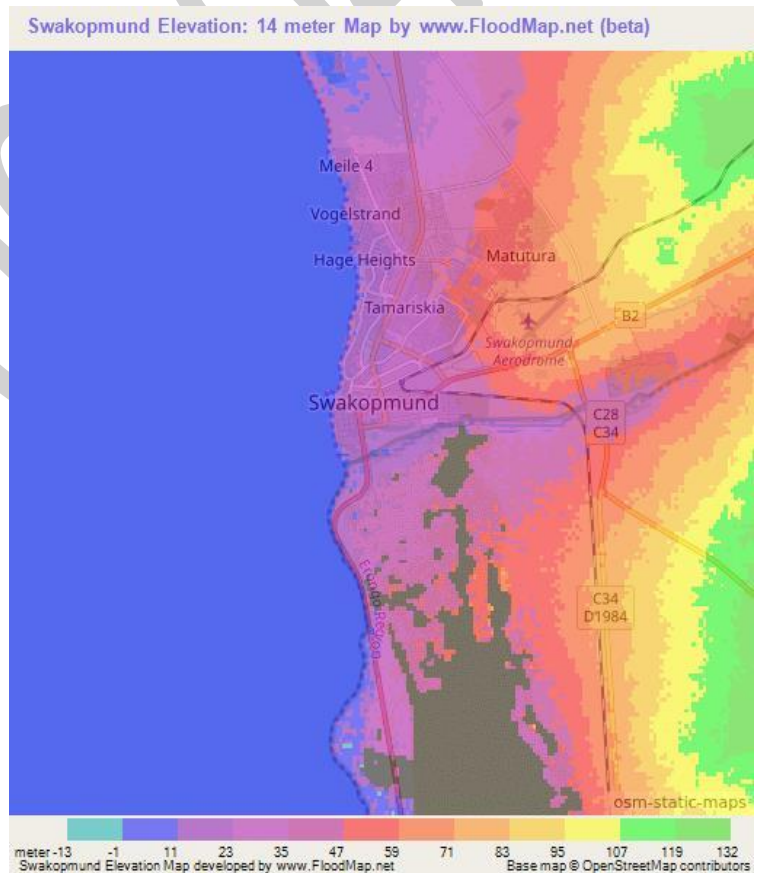
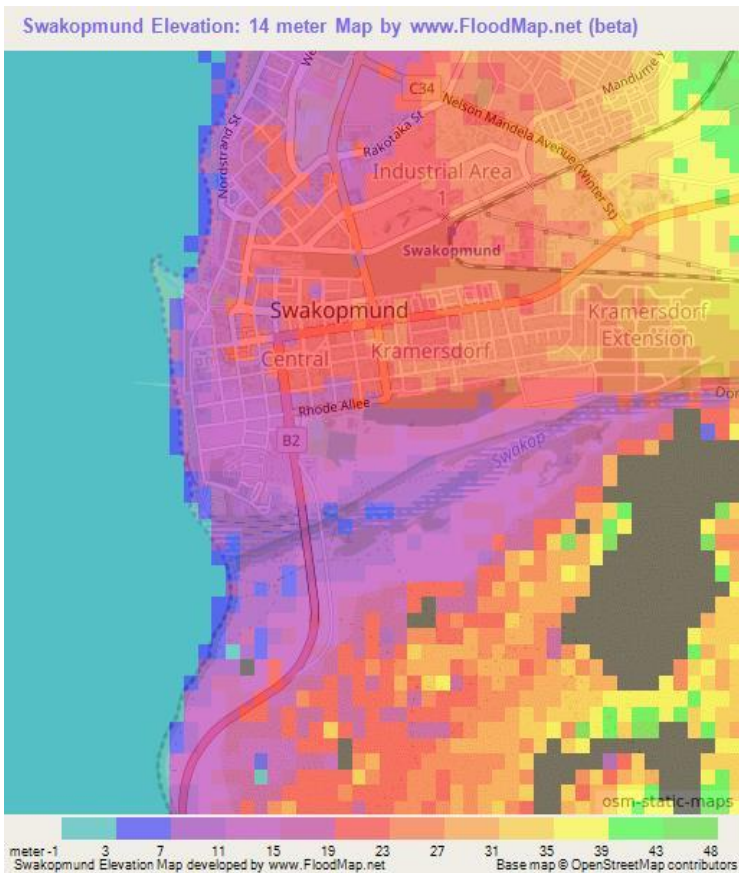
### 3.4.2 Topography and Vegetation

Swakopmund's topographical figures are listed below:

• <b>Coordinates:</b>	-22.83678 14.37140 -22.51678 14.69140
• <b>Minimum elevation</b>	0 ft.
• <b>Maximum elevation</b>	771 ft.
• <b>Average elevation</b>	174 ft.

Constituted by the ephemeral Swakop River; the Namib sand sea south of the river and the gravel plains to the east; beaches and Atlantic coastline, these rich environments exist in dynamic relationships to one another.

**Figures 3.2 & 3.3:** Elevation maps of Swakopmund, Namibia, which display range of elevation with different colours.<sup>32</sup>



The base has its own characteristic fauna and flora, distinct from that living higher up on the same dune. Above the dune base is an area of more steeply sloping sand - up to about 14% from the

<sup>31</sup> <https://www.cambridge.org/core/login?ref=/core/books/towns-ecology-and-the-land/soil-chemicals-air/3B9A99B47932F830FE28B6F625096882>

<sup>32</sup> The elevation map of Swakopmund, Namibia is generated using elevation data from NASA's 90m resolution SRTM data. The maps also provide idea of topography and contour of Swakopmund, and is displayed at different zoom levels.



horizontal- called the dune slope, which also supports its own characteristic life forms - endemic fauna which is found only in the Namib Desert.<sup>33</sup>

Here sand rests at about 32 -34% above the horizontal. This is where life on the dune is concentrated. Animals and plants of the desert have devised unique adaptive strategies, surviving with little rain - less than 15mm per annum - and deriving maximum benefit from the high humidity generated by fog sweeping off the coast. Seeds can lie dormant for years, animals can aestivate by seeking shelter in the summer months. Smaller animals like lizards and beetles can retreat on a daily basis below the sand. Larger animals can migrate or seek shade. Most rely on fog and wind-blown detritus as a source of food. *Trianthema hereroensis* is the common succulent found on the sand between Swakopmund and Walvis Bay. The plant absorbs fog water through its leaves. These plants grow on the dune sea south of the Swakop River only as far inland as the fog regularly penetrates. It is an important source of food and shelter for many dune animals. Its seeds are eaten by beetles, and when green, oryx and gerbils forage on the leaves.

The ability of the desert to sustain this rich bio-diversity should not distract from the fundamental fragility of this environment. The desert is easily disturbed. Ecologically it is a low energy system because of the lack of water. Perennial plants grow slowly while annual ones can only grow in the years with adequate rain. As a result it requires a longer period of time for the vegetation of the area to recover from disturbance than if the rainfall was higher<sup>34</sup>.

### **3.5 Swakopmund Social Environment**

This section aims to identify trends that are related to the importance of the assessment and determine potential impacts and/or implications of each that are relative to the project. It is important that the key-socio-economic trends in Swakopmund are understood as a basis for the assessment as they are of major importance.

#### **3.5.1 Key Population statistics**

The Erongo Region and Swakopmund specifically, is one of the fastest growing regions in terms of population size in Namibia, with almost 45,000 inhabitants as of 2011<sup>35</sup>. The population growth rate of Swakopmund for the period 2001 to 2011 is 4.7% while that of the Erongo Region is 3.4% and that of Namibia 1.4%. In Swakopmund, this growth can firstly be attributed to in-migration of job-seekers (42.63%) and secondly to in-migration by people who obtained jobs in Swakopmund prior to moving. This goes hand in hand with a decline in rural populations of the Erongo Region.

During the last census of 2011, unemployment in Swakopmund was 27% which is significantly lower than the Namibian level of 37%. The average annual household income in the Erongo Region during the 2009/2010 Namibian Household Income and Expenditure Survey was N\$ 84,989 which is second to only the Khomas Region with N\$ 132,209 (Namibia Statistics Agency, 2012; Erongo Regional Council 2020). The main source of income in the Erongo Region is from salaries and wages with about 80% of households relying on this type of income (Namibia Statistics Agency, 2012).

<sup>33</sup> <https://www.sciencedirect.com/science/article/abs/pii/S1068797111001817>

<sup>34</sup> <https://www.sciencedirect.com/science/article/abs/pii/S1068797111001854>

<sup>35</sup> <http://www.erc.com.na/erongo-region/demographics/>

### 3.6 Swakopmund Geophysical Aspects

The desert climate is warm and dry, but this is influenced by the cold water upwelling of the Benguela Current of the Atlantic Ocean, which, in contact with the warm desert air, produces water vapor (fog) that moderates the air temperature.

The area experiences south-westerly winds throughout the year and strong north-easterly winds during winter months (June – August). The north-easterly winds sweeps over the Namib Desert which brings sandstorms and dust to the coastal region<sup>36</sup>.

Soil conditions consist of compressed barren holomorphic soils, rich in salt content which are common in Swakopmund and other coastal towns like Walvis Bay and Henties Bay. Various anthropogenic material and particulates such as ceramics, plastics, and heavy metals can be found on site<sup>37</sup>.

Due to urbanization and development, the site has been transformed into a human habitat and urban environment. The site and surrounding area contain man-made buildings, sporting / recreational facilities, and gravel street that have changed the geography of the natural environment.

The site is away from the ocean and 5m above sea level. Therefore, no major earthworks are required for site development. The high water table is not fit for human consumption due to the ocean salinification. Instead, limited freshwater is pumped from the aquifers for human consumption and use.

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<sup>36</sup>

[https://www.researchgate.net/publication/223716289\\_Survey\\_of\\_soil\\_chemical\\_properties\\_across\\_a\\_landscape\\_in\\_the\\_Namib\\_Desert](https://www.researchgate.net/publication/223716289_Survey_of_soil_chemical_properties_across_a_landscape_in_the_Namib_Desert)

<sup>37</sup> <https://www.tandfonline.com/doi/full/10.1080/23311932.2019.1645258>

*“You cannot get through a single day without having an impact on the world around you. What you do makes a difference and you have to decide what kind of a difference you want to make.”*

—Jane Goodall

## 4 PUBLIC CONSULTATION / PARTICIPATION

Public consultation is an important component of an Environmental Assessment (EA) as it provides potential Interested and Affected Parties (I&APs) with a platform whereby they can raise any issues or concerns relevant to the proposed project. This assists the environmental consultant in considering the full spectrum of potential impacts and to what extent further investigations are required.

In addition, the public consultation process also grants I&APs an opportunity to review and comment on all the documents produced throughout the EA process. This is done in accordance with both the Environmental Management Act’s EIA Regulations, as well as international best practice principles. This section details:

- The identified I&APs for the proposed project;
- The means of communicating with them; and
- A summary of the issues raised during the public consultation process.

A list of all issues and concerns that have been raised during the public consultation process is provided in the Issues and Responses Trail. Public consultation is an important component of an Environmental Assessment (EA) as it provides potential Interested and Affected Parties (I&APs) with a platform whereby they can raise any issues or concerns relevant to the proposed project. This assists the consultant in considering the full spectrum of potential impacts and to what extent further investigations are required.

### 4.1 Interested and Affected Parties

To ensure all I&APs were notified about the project, notices regarding the project were placed in widely circulated national newspapers and local municipal notice board inviting members of the public to register as I&APs. See Annexure for Newspaper Adverts.

**Table 4.1:** Registered Interested & Affected Parties

Name	Organisation	Contact	Email
<b>Chief Reg. Officer</b>	Erongo Regional Council	+264 64 410 5700	cro@erc.org.na
<b>Anet Kotting</b>	Hospitality Association of Namibia	+264 64 417 100	gm@hotelzumkaiser.com
	Desert Explorers Adventure Centre	+264 64 406 096	info@namibiadesertexplorers.com
	Okakambe Trails	+264 64 402 799	okakambe@gmail.com
<b>Tobias Newaya</b>	NAMPAB	+264-61 297 5186	
<b>Johanna Angolo</b>	Municipality Swakopmund	+264 64 410 4418	jangolo@swkmun.com.na
<b>Hilaria Kevanhu</b>	Municipality Swakopmund	+264 64 410 4404	hkevanhu@swkmun.com.na
<b>Ndapandula Shipena</b>	Municipality Swakopmund	+264 64 410 4409	nshipena@swkmun.com.na
<b>Paulina Engelbrecht</b>	Municipality Swakopmund	+264 64 410 4438	pengelbrecht@swkmun.com.na
	SFC Sports Club	+264 64 405 406	secretary@sfc.com.na
<b>Johannes Hamunyela</b>	Ruskin Tours	+264 81 717 6642	ruskin@iway.na
<b>Gerald Hofmeyer</b>	IAP / Swakopmund	+264 81 283 931	BID sent via whatsapp

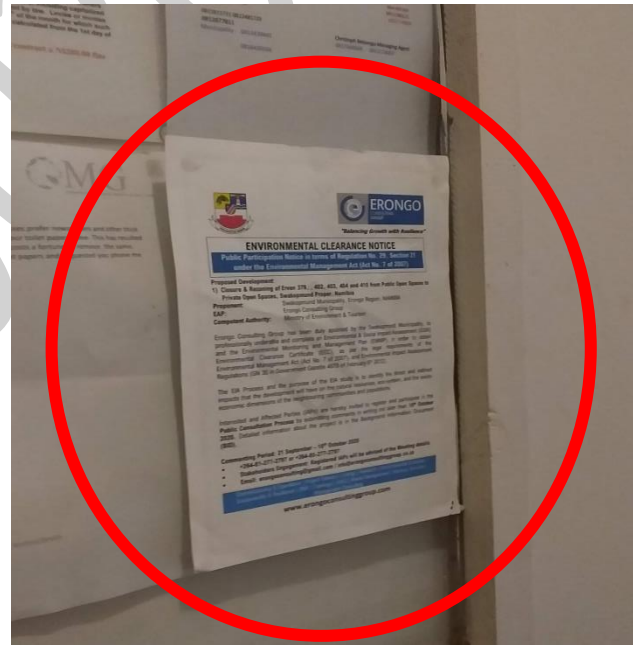
**4.1.1 Issues raised**

No issues/comments/objections to the application were raised by any Interested and Affected Parties. No issues were recorded during this period.

**4.1.2 Communication with IAPs**

Section 21 of the EIA Regulations (RN: MET, 2012) details steps to be taken during a given public consultation process and these have been used in guiding this process. Communication with I&APs about this proposed development was facilitated through the following means:

- A Background Information Document (BID) was compiled that contained essential information about the proposed developments. The BID was sent to all registered I&APs;
- Notices were placed in the press, briefly explaining the development and its locality, inviting the public to register as I&APs; and
- All I&APs living within and adjacent to the proposed development areas were invited via mail to express their views (see attached List).
- An Environmental Site Notice of the proposed activity was up on the site from September 15 – 15 October 2020



**Site Pictures 1 & 2:** Environmental Clearance Notices on the site & Notice Board

The main issues arising from the comments received during the Commenting Period have been summarized below. These comments, as well as those received during the course of the public consultation process have been recorded in an Issues and Responses Trail.

Theme	Issues Identified
1. Economic	• Creation of jobs and local people being employed
2. Infrastructure	• Waste Management in the area; Type of infrastructure to be built in the area
3. Environmental	• Winds, Dust
4. Traffic	• Control and flow of traffic to the site; access to the site

**Table 4.2:** Likely Identified Issues

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## **5 ALTERNATIVES**

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The strategic consultation planning process of the proposed project involved the Municipality of Swakopmund, who is the Client / Proponent.

### **5.1 No-Go Alternative (Do Nothing Alternative)**

Should the proposed development not take place, serious consequences can be expected, as the land has been idle for some decades now, and it is the intention of the Municipality of Swakopmund to close and rezone the erven and sell them to private property developers, thereby boosting the revenue efforts by the Municipality of Swakopmund. The development will also help define the edge of Swakopmund. Therefore, it is necessary to close and rezone the 5 erven.

### **5.2 Site Alternative**

Due to land availability and service connections, the proposed sites, Alternative 1, are the only sites that have been identified. Therefore, no alternative sites have been identified or considered during this study.

### **5.3 Technology Alternative 1:**

Due to the type of project, no alternative technology can be considered.

### **5.4 Selection Process**

The identified piece of land has been vacant for decades; hence it has been selected for future development and expansion of the town of Swakopmund.

## 6. IMPACT ASSESSMENT

### 6.1 Methodology

The EIA Regulations require “a description of the significance of any significant effects, including cumulative effects, which may occur as a result of the undertaking of the activity”. In order to determine significance each of the potential impacts identified, the following steps formed the methodology for assessing the significance of the effects or impacts identified through this EA process:

- The first step is to screen out (set aside) all impacts which do not fall within the scope of this project and responsibility of the developer;
- The next step is to determine whether sufficient information exists to assess the potential impacts of those that remain. If insufficient information is available to assess (with a high degree of confidence) and recommend mitigation measures to address a given impact further investigation will be required. However, if sufficient information is available to assess (with a high degree of confidence) and recommend mitigation measures to address a given impact no further investigation will be required and the impact will be addressed in the EMP;
- To fully understand the significance of each of the potential impacts, it is necessary to subject each to a range of assessment criteria. The application of these criteria, in determining the significance of potential impacts, uses a balanced combination of duration, extent, and intensity/magnitude, modified by probability, cumulative effects, and confidence. The definitions of each of the criteria are contained below; and

Finally based on the answers obtained after applying steps 1-3 a decision can be made regarding the significance of the impact based on three categories – low, medium or high.

**Table 6.1:** Screening and Assessment of Impacts<sup>3839</sup>

IMPACT ASSESSMENT CRITERIA	
<b>NATURE</b>	Reviews the type of effect that the proposed activity will have on the relevant component of the environment and includes “what will be affected and how?”
<b>EXTENT</b>	Geographic area. Indicates whether the impact will be within a limited area: <ul style="list-style-type: none"> <li>• Immediate area (on site where construction is to take place);</li> <li>• local (limited to within 25km of the area);</li> <li>• regional (limited to ~200km radius);</li> <li>• national (limited to the coastline of Namibia); or</li> <li>• International (extending beyond Namibia’s borders).</li> </ul>
<b>DURATION</b>	Whether the impact will be: <ul style="list-style-type: none"> <li>• temporary (during construction only),</li> <li>• short term (1-5 years), medium term (5-10 years),</li> <li>• long term (longer than 10 years but will cease after operation) or permanent.</li> </ul>
<b>INTENSITY</b>	Establishes whether the magnitude of the impact is destructive or innocuous and whether or not it exceeds set standards, and is described as: <ul style="list-style-type: none"> <li>• none (no impact);</li> <li>• low (where natural/ social environmental functions and processes are negligibly</li> </ul>

<sup>38</sup> [https://www.researchgate.net/publication/343365336\\_Assessment\\_of\\_Environmental\\_Impact](https://www.researchgate.net/publication/343365336_Assessment_of_Environmental_Impact)

<sup>39</sup> Lawrence, David & P, David. (2007). Impact significance determination—Designing an approach. Environmental Impact Assessment Review - ENVIRON IMPACT ASSESS REV. 27. 730-754. 10.1016/j.eiar.2007.02.012



	<p>affected);</p> <ul style="list-style-type: none"> <li>• medium (where the environment continues to function but in a noticeably modified manner); or</li> <li>• high (where environmental functions and processes are altered such that they temporarily or permanently cease and/or exceed legal standards/requirements).</li> </ul>
<b>PROBABILITY</b>	<p>Considers the likelihood of the impact occurring and is described as:</p> <ul style="list-style-type: none"> <li>• uncertain,</li> <li>• improbable (low likelihood),</li> <li>• probable (distinct possibility),</li> <li>• highly probable (most likely) or</li> <li>• Definite (impact will occur regardless of prevention measures).</li> </ul>
<b>SIGNIFICANCE</b>	<p>Significance is given before and after mitigation.</p> <ul style="list-style-type: none"> <li>• <i>Low</i> if the impact will not have an influence on the decision or require to be significantly accommodated in the project design,</li> <li>• <i>Medium</i> if the impact could have an influence on the environment which will require modification of the project design or alternative mitigation (the project components can be used, but with deviations or mitigation).</li> <li>• <i>High</i> where it could have a “no-go” implication regardless of any possible mitigation (an alternative should be used).</li> </ul>
<b>STATUS OF THE IMPACT</b>	<p>A statement of whether the impact is:</p> <ul style="list-style-type: none"> <li>• positive (a benefit),</li> <li>• negative (a cost), or</li> <li>• Neutral.</li> </ul> <p>Indicate in each case who is likely to benefit and who is likely to bear the costs of each impact.</p>
<b>DEGREE OF CONFIDENCE IN PREDICTIONS</b>	<p>Is based on the availability of specialist knowledge and other information.</p>

**Table 6.2:** Definitions of the various significance ratings<sup>40</sup>

<b>SIGNIFICANCE RATING</b>	<b>CRITERIA</b>
<b>LOW</b>	Where the impact will have a negligible influence on the environment and no modifications or mitigations are necessary for the given development description. This would be allocated to impacts of any intensity/ magnitude, if at a local scale/ extent and of temporary duration/time.
<b>MEDIUM</b>	Where the impact could have an influence on the environment, which will require modification of the development design and/or alternative mitigation. This would be allocated to impacts of medium intensity/magnitude, locally to regionally, and in the short term.
<b>HIGH :</b>	Where the impact could have a significant influence on the environment and, in the event of a negative impact the activity(ies) causing it, should not be permitted (i.e. there could be a ‘no-go’ implication for the development, regardless of any possible mitigation). This would be allocated to impacts of high intensity, locally for longer than a month, and/or of high intensity regionally and beyond.

All impacts included in the table below fall within the scope of this project and responsibility of the proponent. Each of the potential impacts is screened and subjected to the criteria stipulated above. The significance of each potential impact is determined based on the criteria.

Detailed descriptions of mitigation measures for impacts that require mitigation are contained in the EMP

<sup>40</sup> [https://www.researchgate.net/publication/248537095\\_Impact\\_significance\\_determination-Designing\\_an\\_approach](https://www.researchgate.net/publication/248537095_Impact_significance_determination-Designing_an_approach)

**Table 6.3:** Detailed Screening and Assessment of Impacts

POTENTIAL IMPACT	DESCRIPTION	EXTENT	DURATION	INTENSITY	PROBABILITY	CONFIDENCE/ SUFFICIENT INFORMATION AVAILABLE?	SIGNIFICANCE	SIGNIFICANT MITIGATION DEEMED POSSIBLE?	NEXT STEP
<b>Aesthetic issues</b>	The change in the existing landscape may be an eye sore to existing residents due to blockage of open views.	Immediate area	Temporary	Low	Improbable	Yes	Low	Yes	EMP
<b>Employment creation</b>	The construction activities associated with the project is due to create local employment opportunities.	Local	Temporary	Medium	Definite	Yes	Low	Yes	EMP
<b>Noise (construction phase)</b>	Construction activities can create noise for local nearby residents / businesses.	Local	Temporary	Low	Highly probable	Yes	Low	Yes	EMP
<b>Dust (construction phase)</b>	The ingress and egress of construction vehicles can create dust.	Local	Temporary	Low	Highly probable	Yes	Low	Yes	EMP
<b>Traffic (Operational phase)</b>	Increase in traffic in the area is expected due to construction	Local	Permanent	Medium	Definite	Yes	Low	Yes	EMP

	activities								
<b>Effluent generation</b>	Effluent Will Be Generated	Local	Long-term	Medium	Definite	Yes	Medium	Yes	EMP
<b>Generation of waste</b>	Likely Construction activities will generate waste.	Local	Long-term	Medium	Definite	Yes	Medium	Yes	EMP
<b>Impact on existing properties</b>	The proposed development is believed to impact on existing property values in the area.	Local	Long-term	Low	Probable	Yes	Low	Yes	EMP

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The proposed mitigation will reduce the significance level to **LOW**.

Potential impacts associated with the proposed project have been identified and their significance determined. None of the potential impacts identified had a “high” impact significance. All identified impacts can be mitigated so as to reduce the significance of these impacts to an acceptable level. Mitigation measures are described in greater detail in the EMP. Hence, the project, as proposed in this report, can be implemented with no significant impacts if executed according to the EMP.

**It is therefore recommended that Environmental Clearance be granted for the proposed development.**

It can thus be concluded that the proposed Closure and Rezoning of Erven 379, 402, 403, 404 and 410 from “Public Open Spaces” to “Private Open Spaces” will not cause any social, economic and environmental damage to the local communities. Since this is a mere process, respective developments that will take place on site will require separate EIA processes. Most of the potential impacts identified during the study are generic construction impacts that will be eliminated as soon as the development starts operating. There are some positive impacts the development will bring such as bringing aesthetic quality to the neighbourhood, which will ultimately increase nearby property values, also the development will create jobs, improve quality of life.





*The only way forward, if we are going to improve the quality of the environment, is to get everybody involved.*

**Richard Rogers**

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## **7. ASSUMPTIONS, UNCERTAINTIES OR GAPS IN KNOWLEDGE**

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### **7.1 Assumptions:**

- The scope is limited to assessing the potential impacts associated with the proposed Closure and Rezoning activities; therefore, the effect on the surrounding environment is based on the current land use.
- All information provided by Erongo Consulting Group is deemed valid and correct at the time it was provided.
- Since during the Commenting Period, no Indigenous Local Knowledge (IKS) came forth, therefore, it is assumed that there are no sensitive cultural sites like shrines, on the proposed site.
- Based on the layout, the biophysical, Geo-physical and social environments won't be affected by closure and rezoning process

### **7.2 Assumptions from Specialists:**

- The Outline Scheme Report is based on the bulk services information received from the Municipality of Swakopmund.

### **7.3 Limitations/Gaps in Knowledge: None**

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## **8. EIA PROFESSIONAL RECOMMENDATIONS**

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The EIA / Scoping is of the opinion that the development should be authorized because the negative impacts can be mitigated to a satisfactory level.

The EAP findings and recommendations are as follows:

- The character of the Neighborhood is one of mixed uses. The Neighborhood is influenced by the location of the SPCA, SFC Sports Club, Horse Stables, Desert Explorers, and the Cemetery
- The Swakopmund Town Planning Scheme and related design guidelines are adopted and proposed as a Method to protect and enhance the neighborhood character.
- This closure and rezoning is unlikely to have a negative impact on the character of the neighborhood.
- The realignment of Erven 379, 402, 403, 404 and 410 from Public Open Spaces to Private Open Spaces will impact the area both by way of traffic flow and visually.
- The realignment provides an opportunity to enhance the entry to Horse Stables, SFC Club and provide a safer, more defined transition.
- The realignment provides an opportunity for Municipality of Swakopmund to implement its Town Planning Scheme with this development of an enhanced entry.
- Municipality of Swakopmund will benefit from the ability to develop the area which has been dormant and idles for decades that will allow them to sell of the rezoned erven to private developers, thereby fully activating the mixed use development
- Detrimental impact is not anticipated to occur to any adjacent property. That is not to say that a significant change will not be made to the area with the realignment of Windhuker Street. This change will have the impact of modifying the appearance and access to Erven 379, 402, 403, 404 and 410.
- Erongo Consulting Group recommends approval of the proposed rezoning.
- By considering the proposed zoning change with a Planned Development Overlay specific uses and design considerations may be tailored explicitly to the development.
- It should be recognized that the improvements to the whole area directly benefit the local communities and the Local Authority at large

*“We have forgotten how to be good guests, how to walk lightly on the earth as its other creatures do.”*

—Barbara Ward

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## 9. ENVIRONMENTAL MANAGEMENT PLAN STATEMENT

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It should be recognized that no development could be completed without impacting in some way on the environment; therefore, it is imperative that negative impacts are minimized to a greater extent.

During the scoping phase of the EIA process, the environmental issues that were identified were for both the construction and operation phase.

The identified impacts are summarized below:

1. Loss of topsoil;
2. Potential habitat of the infrastructure on the socio-economic structure of the area.
3. Job creation looking at employment of local community;
4. Excessive noise generation during construction;
5. Potential damage or destruction to undiscovered heritage sites of the area;
6. Traffic congestion during construction;
7. Potential impact of sensitive habitat destruction; and
8. Potential impact of destruction on red data plants.

From the evaluation identified impacts using the assessment methodology, the significance ratings of negative impacts were reduced to low with outlined mitigation measures and the positive impacts were accentuated. The extent with mitigation ranged between site specific and local. Adherence to the draft EMP will also ensure that impacts occurring due to the development will be reduced to a greater extent.

In terms of the findings, the municipality has the ability to accommodate the proposed site. Other studies that were undertaken as part of the EIA process included a Heritage Impact Assessment to inspect the site for any possible archaeological and historical material and Paleontological Investigation to determine the likelihood of fossil preservation in the area. The site has no **paleontological** and **archaeological** grounds to suspend the proposed development, therefore no mitigation measures are required but mitigation is provided in the EMP in case there is unearthing of fossils, grave sites, etc. during earthmoving activities.

The proposed site is suitable for private development because it is compatible with the surrounding area, easily accessible and availability of connection points to services, e.g. water, electricity (though as of now there are no municipal services on the 5 erven).

During the Commenting Period, no objections were received. A no-go option for this project is not feasible because the site, being dormant for decades, has to be developed and help define the edge of Swakopmund.

**It is therefore recommended that Environmental Clearance be granted for the proposed Closure & Rezoning of Erven 379, 402, 403, 404 and 410 from Public Open Spaces to Private Open Spaces in Swakopmund**

The Environmental Management Plan (EMP) identifies possible impacts of the project on the environment and the mitigation thereof. It gives guidelines to the responsible person(s) to follow appropriate contingency plans in the case of various possible impacts, thus the copy of the EMP should be given to the contractor to ensure adherence. The Draft EMP is attached hereto and should it be approved, it will serve as the final EMP.

*“Unprecedented technological capabilities combined with unlimited human creativity have given us tremendous power to take on intractable problems like poverty, unemployment, disease, and environmental degradation. Our challenge is to translate this extraordinary potential into meaningful change.”*

**– Muhammad Yunus**

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## **10. CONCLUSION**

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The proposed Closure & Rezoning of Erven 379, 402, 403, 404 and 410 from Public Open Spaces to Private Open Space will take place within an area covered by a Town Planning Scheme. The scheme regulates the impact of the development together with the regulations of the Environmental Management Act (7 of 2007).

Each separate activity wishes to own their site via freehold title. Therefore, it is necessary to subdivide the site into its component parts.

The proposed Closure & Rezoning of Erven 379, 402, 403, 404 and 410 from Public Open Spaces to Private Open space will not have high significance on the natural environment because similar rezoning have already taken place. The proposed development will have a minimal ecological footprint.

Potential impacts associated with the proposed project have been identified and their significance determined. None of the potential impacts identified had a “**high**” impact significance. All identified impacts can be mitigated so as to reduce the significance of these impacts to an acceptable level. Mitigation measures are described in greater detail in the EMP. Hence, the project, as proposed in this report, can be implemented with no significant impacts if executed according to the EMP.

**It is therefore recommended that Environmental Clearance be granted for the proposed development as it's of national benefit.**



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## ONLINE RESOURCES

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- [https://swakopmun.com/wp-content/uploads/2020/06/200619-DRAFT\\_SWK-Structure-Plan-2020-2040-1.pdf](https://swakopmun.com/wp-content/uploads/2020/06/200619-DRAFT_SWK-Structure-Plan-2020-2040-1.pdf).
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