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**ENVIRONMENTAL
COMPLIANCE CONSULTANCY**



ECC-111-307-REP-07-D

ENVIRONMENTAL AND SOCIAL IMPACT ASSESSEMENT REPORT

Erf 4747 SWAKOPMUND, ERONGO REGION, NAMIBIA

PREPARED FOR

 LIGHTHOUSE PROPERTY
INVESTMENT TRUST

JANUARY 2021

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EXECUTIVE SUMMARY

INTRODUCTION

This Environmental and Social Impact Assessment (ESIA) report presents the findings of an ESIA undertaken for the proposed development on Erf 4747 in Swakopmund, Erongo region by Lighthouse Property Investment Trust. The ESIA and this report has been undertaken in accordance with the requirements of the Environmental Management Act, 2007 (Act No.7 of 2007) and the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2011) gazetted under the Environmental Management Act, (EMA), 2007 (Act No. 7 of 2007).

PROPOSED PROJECT OVERVIEW

Lighthouse Property Investment Trust proposes to establish a residential and commercial development, with tourism activities on Erf 4747 located within the heritage area of Swakopmund. The property is owned by the proponent (Lighthouse Property Investment Trust). The development will be established on a site where the old swimming used to be, in the vicinity of the mole beachfront, Swakopmund Namibia. The area has significant tourism potential which will expose tourists to additional amenities within this node of the town. The proposed development will generate income for the local community and open-up broader economic opportunities.

The proposed project has been subject to a process of design evolution, informed by both consultation and an iterative environmental assessment. During design development, alternatives considered included architectural amendments to the building's design, height alterations and the possible inclusion of another lighthouse on the proposed building.

The proposed development will take approximately three years to construct. The development will entirely consist of land-based construction. Approximately 2500-3000 jobs will be created to construct the development all will be sourced from the local and regional communities. The scale of the development will necessitate upgrades and expansion to domestic services for example, electricity, water, sewage and emergency services. The proponent has entered into a development agreement with the local Swakopmund Municipality to upgrade all services that may be required to ensure compliance to local civil engineering specifications. This agreement is still in effect and legally binding.

As part of this environmental clearance certificate application, an Environmental Impact Assessment (ESIA) has been undertaken to satisfy the requirements of the Environmental Management Act, No. 7 of 2007. This environmental assessment report and Environmental Management Plan (EMP) shall be submitted to the relevant competent authority as part of the application for the environmental clearance certificate.

The assessment has been carried out for the establishment of a mixed-use development consisting of residential and commercial activities on Erf 4747. The proposed development intends to have the following elements:

- A retail footprint of 140 m²;
- Restaurants of 1519 m²;
- A residential footprint of 16 400m²;
- Outside public amenities, including jungle gyms & splash pad and play park area as well as beach showers within the play park;
- Inside public amenities, including a 140 m² (male and female) public ablution space, incorporating changing rooms with showers, toilets and lockers;
- Multi-level tenant parking for 233 vehicles as per the town planning scheme requirements;
- A new Erongo Red substation;
- Upgrading to the existing municipal walkways or boardwalk where applicable; and

- Landscaping where applicable.

The proposed development will be located on an open Erf on the corner of Theo Ben Gurirab Avenue and Strand Street and within the historic central business district of Swakopmund. The area is defined as a 'special urban design area', bordered to its west by the riverine nature zone and public access and recreation zone as per the Swakopmund Structure Map, 2019.

The assessment was undertaken using a methodology developed by Environmental Compliance Consultancy (ECC), which is based on the International Finance Corporation (IFC) standard for impact assessments. Through the assessment process, a review of the site and surrounding environment was completed by undertaking desktop reviews and verification of site data. The assessment conducted is only for tourism activities as a described listed activity in the regulations of 2012.

Regardless of the nature and scale of the project, limited biophysical impacts were identified in this assessment, as the site is disturbed to a large extent. A few patches of mature palm trees are still present on site and will be incorporated into the layout of the development.

Social impacts were assessed to be of greater value pertaining to this project. The key receiving environmental and social features in the study area are the soil, air quality, local businesses, local residents and community and the tourism industry.

Local businesses in the surrounding area (500m from the site boundary) for the proposed development include the Strand hotel, the museum, and the craft market. Local service-rendering buildings in the surrounding area include the Altes Amtgericht (used as municipal offices), the magistrate's court, the lighthouse, and the statehouse. Local residents and community within 500m of the site boundary include the upmarket condominium north of the site, the two residential complexes north east and east of the site.

Residents surrounding the project site currently have views of the sea with low-level buildings surrounding it. The landscape character is mixed between residential, commercial and institutional due to the magistrate's court, statehouse and the Altes Amtgericht in close proximity to the project site. The Seascape character is dominated by the Strand hotel, the museum, the mole beachfront and the boardwalk/promenade, and the condominiums north of the project site.

The lighthouse is a dominating feature of Swakopmund and contributes to the sense of identity of the town. This feature is displayed on the municipality's coat of arms. The mole beachfront is the only safe swimming spot and remain a popular attraction for recreational activities for local residents, the community as well as tourists.

A Cumulative Impact Assessment (CIA) was undertaken to identify intra and inter-project related impacts:

- **Intra-project cumulative impacts:** Cumulative impacts that occur within the proposed project;
- **Inter-project cumulative impacts:** Cumulative impacts that occur as a result of the proposed project in combination with other projects, which is split into two:
 - o Cumulative impacts with existing projects; and
 - o Cumulative impacts with future projects.

The CIA considered past, present and realistically defined future projects, which were identified through a desk-based investigation.

There is potential for some Intra-project cumulative Impact Interactions to occur during the construction works. The majority of the interactions would likely arise from activities such as noise and vibration from construction plant and vehicles, dust from plant and vehicles, and the visual impact of the works. In terms of inter-project cumulative impacts, consideration was given to defined current and future projects within the bounds of the local authority which predicts that mainly socio-economic benefits will be produced from the extension of demand for local labour,

supplies, material, machinery and plant equipment. There could be construction of ablution blocks at the same time as this development. If so, it will be the responsibility of both developers to collectively manage all impacts emanating from the proposed development on Erf 4747 and the planned construction of the municipal ablution blocks north of Erf 4747 to reduce the level of significance on receptors.

A precautionary assessment approach has been applied; therefore, with the application of best practice and additional mitigation measures, the predicted impacts may be less severe. Key mitigation will be the sequencing and scheduling of construction activities; applying soft starts to machinery and equipment; applying dust suppression techniques; and implementing traffic management and calming measures. In addition, a range of monitoring will be undertaken including but not limited to, noise monitoring. Through the application of the EIA methodology presented in Section 2 the conclusion of the assessment is that with additional mitigation measures during the operational phase, the significance of effect is expected to be minor. No additional studies are considered necessary to further assess this impact.

This study has assessed potential, likely and identified impacts. It was determined that the likely effects did not fall outside the parameters of acceptable change and are unlikely to be significant in the decision-making process. This is based on the predicted magnitude of change from the baseline environment.

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DEFINITIONS AND ABBREVIATIONS

ALARP	As Low as Reasonably Practicable
CBD	Central Business District
DEA	Directorate of Environmental Affairs
ECC	Environmental Compliance Consultancy
EMP	Environmental Management Plan
ESIA	Environmental Impact Assessment
ESIA	Environmental Social Impact Assessment
GDP	Gross Domestic Product
GRN	Government of the Republic of Namibia
HIV/AIDS	Human Immunodeficiency Virus / Acquired Immunodeficiency Syndrome
I&APs	Interested and affected parties
IFC	International Finance Cooperation
KVA	Kilo Volt Ampere
m ²	Square Meter
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism
MME	Ministry of Mines and Energy
MoHSS	Ministry of Health and Social Services
NDP5	Fifth National Development Plan
NSA	Namibian Statistics Agency
NTS	Non-Technical Summary
PPE	Personal Protective Equipment
SEA	Strategic Environmental Assessment
TB	Tuberculosis
WHO	World Health Organization

1 INTRODUCTION

1.1 PURPOSE OF THIS REPORT

The purpose of this report is to present the findings of the Environmental and Social Impact Assessment (ESIA) that was undertaken for the proposed project. The proposed project entails development activities on Erf 4747 for the purpose of operating a residential and commercial development, with tourism activities, which are described in detail throughout the report.

The assessment has been undertaken in terms of the requirements of the Environmental Impact Assessment Regulations, No. 30 of 2012, gazetted under the Environmental Management Act, No.7 of 2007 (referred to herein as the ESIA Regulations).

ECC's terms of reference for this assessment was to strictly address potential environmental and social impacts, whether positive or negative, and their relative significance, and explore alternatives for technical recommendations and identify appropriate mitigation measures for the Swakopmund Erf 4747 development.

This ESIA report and associated appendices will be submitted to the relevant competent authorities, MEFT and Interested and Affected Parties (I&APs) for public review and stakeholder comment. Comments have been considered and incorporated into this ESIA report where they have been deemed to be material to the decision-making process or enhanced the ESIA and EIA report. An Addendum report and associated appendices will accompany this ESIA report. The Addendum report collates all comments received during the I&AP public review period and provides responses from the proponent and ECC for all comments.

1.2 BACKGROUND OF THE PROPOSED PROJECT

Swakopmund is a coastal town located in the central part of the Namibian coastline. The town is a key tourist destination due to its diverse attractions offering a unique German inspired building architecture. The tourism industry is expected to regain momentum with the resumption of international travel between countries, with travel bans lifted in a phased manner. The tourism industry has been challenged adversely by the Covid-19 pandemic's effect on the freedom of movement, both domestically and internationally thereby creating a negative growth effect.

Lighthouse Investment Property Trust proposes to develop the area for a residential and commercial development, with tourism activities either in the form of a hotel and or residential units (refer to Figure 1).

The proposed development comprises the following:

- A retail footprint (multiple outlets) of 140 m²;
- Restaurants (maximum 3 varieties) of 1519 m²;
- A residential footprint of 16 400m²;
- Outside public amenities, including jungle gyms, splash pad and play park area as well as beach showers within the play park;
- Inside public amenities, including a 140 m² (male and female) public ablution space, incorporating changing rooms with showers, toilets and lockers;
- Multi-level tenant parking for 233 vehicles;
- Upgrade the existing Erongo Red Substation on site;
- Upgrading of the existing municipal walkways/ boardwalk where applicable, and
- Landscaping (including examining the grown palm trees and possibly transplanting them onto a different area within the site).

The Erf is directly surrounded by open municipal land and comprises a public play park to the south, the mole promenade on the west and public parking to the north and Strand Street to the east.

1.3 PHILOSOPHY AND BENEFITS OF THE PROPOSED PROJECT

The aim for the development of the project is to support and facilitate the growth of the local community and economy, and provide facilities which strengthen community relationships, hence the reason why the current location was chosen. The Mole is an area where the Swakopmund community from all walks of life converge upon to enjoy its amenities.

The proposed development aims to:

- Uplift the currently underutilised Erf and surrounding municipal area;
- Generate revenue and economic stimulus to the business and expand the tourism industry of Swakopmund; and
- Provide a multipurpose, recreational and lifestyle facility for all community members of Swakopmund, the broader Namibian community, international and domestic tourists.

The project will offer a range of social and commercial benefits, which include but are not limited to the following:

- Providing tourism facilities (under one roof in a popular recreational spot with supporting ablution facilities for beachgoers) which will attract and retain tourists in Swakopmund thereby supporting economic growth increased bed occupancy and spending;
- Improving local bulk services including water supply, sewerage handling and treatment and electricity;
- generate job opportunities for the local community. The proponent has estimated that approximately 3000 direct and indirect employment opportunities could be created during the construction phase.
- Encouraging and supporting local investment;
- Increasing demand for secondary services such as catering and cleaning, thereby providing additional employment opportunities; and
- Increasing property values

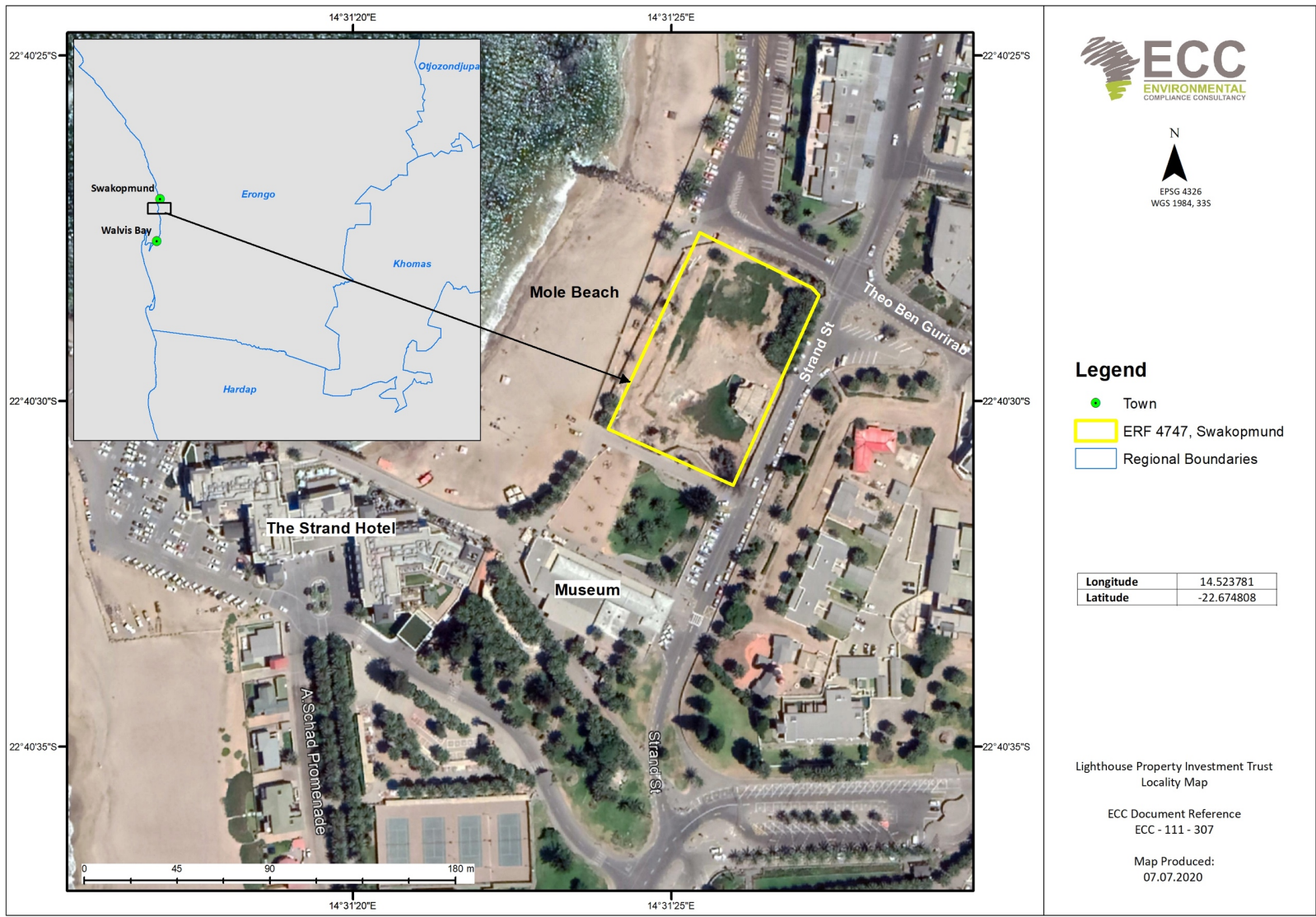


FIGURE 1 - LOCALITY OF THE PROJECT SITE

1.4 SCOPE OF WORK

The assessment report has been prepared by ECC. ECC's terms of reference for the assessment is strictly to address potential effects, whether positive or negative and their relative significance, explore alternatives for technical recommendations and identify appropriate mitigation measures.

This report provides information to the public and stakeholders to aid in the decision-making process for the proposed project. The objectives are to:

- Provide a description of the proposed activity and the site on which the activity is to be undertaken;
- Provide a description of the environment that may be affected by the activity;
- Identify the laws and guidelines that have been considered in the assessment and preparation of this report;
- Provide details of the public consultation process;
- Describe the need and desirability of the activity;
- Provide a high level of environmental and social impact assessment on feasible alternatives that were considered; and
- Report the assessment findings, identifying the significance of effects, including cumulative effects.

In addition to the environmental assessment, an EMP is also required in terms of the Environmental Management Act, No. 7 of 2007. An EMP has been developed to provide a management framework for the planning and implementation of the development. The EMP provides development standards and arrangements to ensure that the potential environmental and social impacts are mitigated, prevented, minimised and/or enhanced as far as reasonably practicable, and that statutory requirements and other legal obligations are fulfilled.

The report, plus impact assessment, supported by specialist studies and appendices, will be submitted to the relevant competent authorities and the Directorate of Environmental Affairs (DEA) at the Ministry of Environment, Forestry and Tourism (MEFT) for review as part of the application for environmental clearance certificate.

1.5 ENVIRONMENTAL CONSULTANCY

ECC, a Namibian consultancy (registration number Close Corporation 2013/11401), has prepared this scoping report and impact assessment on behalf of the proponent. ECC operates exclusively in the environmental, social, health and safety fields for clients across Southern Africa, in both the public and private sectors.

ECC is independent of the proponent and has no vested or financial interest in the proposed project, except for fair remuneration for professional services rendered. The CVs of the authors of this report are contained in Appendix D.

All compliance and regulatory requirements regarding this ESIA report should be forwarded by email or posted to the following address:

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1.6 ENVIRONMENTAL REQUIREMENTS

The Environmental Management Act, No. 7 of 2007 stipulates that an environmental clearance certificate is required to undertake listed activities in terms of the Act and its regulations. Listed activities triggered by the proposed project in terms of the Environmental Management Act, No. 7 of 2007 and its regulations are as follows:

TABLE 1 - LISTED ACTIVITIES AND RELEVANCE TO THE PROPOSED DEVELOPMENT

LISTED ACTIVITY	ESIA SCREENING FINDING
<p>WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES</p> <p>(2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste.</p> <p>(2.3) The import, processing, use and recycling, temporary storage, transit, or export of waste</p>	<p>Construction and domestic waste shall be generated during construction and operations of the project, which shall be collected and removed from the site for re-use, recycling, or final disposal at an appropriate landfill site.</p>
<p>TOURISM DEVELOPMENT ACTIVITIES</p> <p>(6) The construction of resorts, lodges, hotels or other tourism and hospitality facilities</p>	<p>The proposed project development is for the establishment of a mixed-use building structure focusing on tourism and hospitality activities which may include a hotel and all other associated infrastructure and supporting amenities.</p>

2 APPROACH TO THE IMPACT ASSESSMENT

2.1 PURPOSE OF THE ENVIRONMENTAL IMPACT ASSESSMENT

The ESIA process in Namibia is governed and controlled by the Environmental Management Act, No. 7 of 2007 and its regulations, No. 30 of 2012, which is administered by the Office of the Environmental Commissioner within the MEFT.

The aim of this preliminary assessment is to identify, predict, evaluate and mitigate the potential impacts of the proposed project on the natural and human receiving environments, scope the available data and identify the gaps that need to be filled. The assessment process helps to determine the spatial and temporal scope and identify the assessment methodology which is most applicable for use. In addition, the assessment process and subsequent reports are to apply the principles of environmental management to the proposed activities; reduce the negative and increase the positive impacts arising from the project; provide an opportunity for the public to consider the environmental impacts of the proposed project through meaningful consultation; and to provide a vehicle to present the findings of the assessment process to competent authorities for decision making.

2.2 THE ASSESSMENT PROCESS

The ESIA methodology applied to this assessment has been developed using the IFC standards and models, in particular, Performance Standard 1: 'Assessment and management of environmental and social risks and impacts' which establishes the importance of (IFC, 2012; 2017):

- Integrated assessment to identify the environmental and social impacts, risks, and opportunities of projects;
- Effective community engagement through disclosure of project-related information and consultation with local communities on matters that directly affect them; and
- The client's management of environmental and social performance throughout the life of the project.

Furthermore, the Namibian Draft Procedures and Guidance for ESIA and EMP (GRN, 2008) as well as the international and national best practice documents to our disposal and over 25 years of combined ESIA experience, were also drawn upon in the assessment process.

An impact assessment is a formal process in which the effects of certain types of development on the biophysical, social and economic environments are identified, assessed and reported so that the effects can be taken into account when considering whether to grant development consent or to provide financial support. Final mitigation measures and recommendations are based on the cumulative experience of the consulting team and the client, taking into consideration the potential environmental and social impacts. The process followed through the basic assessment is illustrated in figure 2 and detailed further in the following sections.

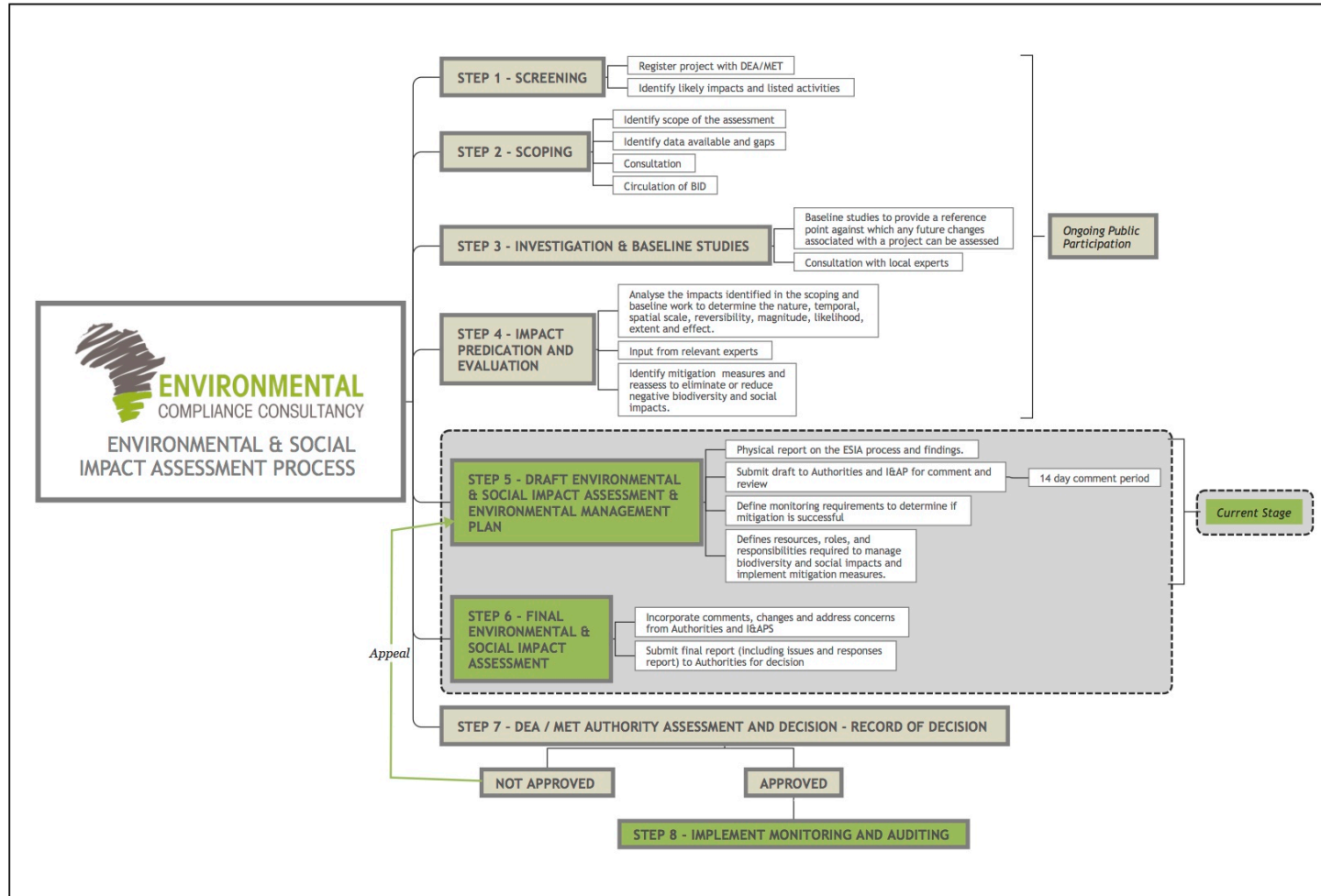


FIGURE 2 - ECC SCOPING PROCESS

2.3 METHODOLOGY FOR THE IMPACT ASSESSMENT

Desktop studies on the national database are undertaken as part of the scoping stage to get information on the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured. This is verified through site data collection.

The environmental and social topics that may be affected by the proposed project are described in this section. The baseline focuses on receptors, which could be affected by the proposed project.

2.4 SCREENING OF THE PROPOSED PROJECT

The first stages of the ESIA process are to register the project with the competent authority and undertake a screening exercise. The project has been registered on the Ministry of Environment, Forestry and Tourism's online portal. The registration number is APP – 001690.

The screening exercise determines whether the proposed project is considered as a Listed Activity in terms of the Environmental Management Act, No. 7 of 2007 and associated regulations, and if significant impacts may arise. The location, scale and duration of project activities will be considered against the receiving environment.

It was concluded that an ESIA (e.g. assessment report and EMP) is required, as the proposed inclusion of tourism activities within the scope of the project is considered as a listed activity and there may be potential for impacts to occur.

2.5 SCOPING OF THE ENVIRONMENTAL ASSESSMENT

The purpose of the scoping stage in the ESIA process is to identify the scope of assessment, undertake a high-level assessment to identify potential impacts (with the assistance of community inputs), and confirm if further investigation is required to assign the severity of potential significant effects and allocate appropriate mitigation.

2.6 BASELINE STUDIES

Baseline studies are undertaken as part of the scoping stage, which involves collecting all pertinent information from the current status of the receiving environment. This provides a baseline against which changes that occur as a result of the proposed project can be measured.

For the proposed project, baseline information was obtained through a desktop study, focussing on receptors that could be affected by the proposed project, and a heritage assessment. The baseline information is covered in Section 5.

A robust baseline is required in order to provide a reference point against which any future changes associated with a project can be assessed, and it allows for suitable mitigation and monitoring actions to be identified.

The existing environment and social baseline for the proposed project were collected through various methods:

- Desk-top studies
- Consultation with stakeholders, and
- Engagement with Interested and Affected Parties (I&APs).

2.7 ESIA CONSULTATION

Public participation and consultation are a requirement in terms of Section 21 of the Environmental Management Act, No. 7 of 2007 and its regulations for a project that requires an environmental clearance certificate. Consultation is a compulsory and critical component in the ESIA process, aimed at achieving transparent decision-making, and can provide many benefits.

The objectives of the stakeholder engagement process are to:

- Provide information on the project to I&APs: introduce the overall concept and plan
- Clarify responsibility and regulating authorities;
- Listen to and understand community issues, concerns and questions;
- Explain the process of the ESIA and timeframes involved; and
- Establish a platform for ongoing consultation.

2.7.1 INTERESTED AND AFFECTED PARTIES

All relevant authoritative bodies were identified and listed as I&APs, as well as organisations and individuals with an implied interest. Other I&APs were identified through invitations such as the newspaper advertisements and site notices. To all of these stakeholders a formal letter was sent via e-mail. The letter and the list of registered I&APs are provided in Appendix C.1. Consultation with I&APs is on-going and the review of this report is part of the consultation process.

2.7.2 NON-TECHNICAL SUMMARY

The Non-Technical Summary (NTS) presents a high-level description of the proposed project; sets out the ESIA process and when and how consultation is undertaken. The contact details for further enquiries are made available to all registered I&APs and the NTS can be found in Appendix B.

2.7.3 NEWSPAPER ADVERTISEMENTS

Notices regarding the proposed project and associated activities were circulated in two newspapers namely the 'Namibian' and on the 06th and the 13th of August 2020 and in the 'Informante' on the 06th and the 13th of August 2020. The purpose of this was to commence the consultation process and enable I&APs to register an interest with the project. The adverts can be found in Appendix C.2. Further to this ECC advertised in the Namib Times on the 9th October informing I&APs about the upcoming review period, an email informing of the review period was also sent to all registered I&APs.

2.7.4 SITE NOTICES

A site notice ensures neighbouring properties and stakeholders are made aware of the proposed project and provide contact details of the assessment practitioner whom I&APs can engage with on the project. The notice was set up on the property as illustrated below. Notices were placed on site on the 10th of August 2020.



FIGURE 3 - SITE NOTICES PLACED ON SITE BOUNDARY

The walkway was selected in order to ensure the highest exposure to I&APs, given this is a very popular walkway this site was selected for the site notice.

An additional notice was placed on the municipal offices notice board during the week of the 10th of August. See below.



FIGURE 4 - SITE NOTICES PLACED AT THE MUNICIPALITY

2.7.5 CONSULTATION FEEDBACK

The I&APs were encouraged to provide constructive input during the consultation process, which is ongoing at present.

The public review of the preliminary assessment report was conducted during the period of the 13th October 2020 – 28th of October 2020. This review period was initiated by another advert published in the Namib Times newspaper on the 9th of October 2020. The comments received from this public review period is listed in an addendum report and presented to Government as part of the final documents submitted for a record of decision about the project. The final reports will also be made available to I&APs.

AESTHETIC APPROVAL APPLICATION TO THE LOCAL COUNCIL BY THE PROPONENT

The following is not related to this impact assessment, however, is mentioned in order to give the reader clarity about the aesthetic approval.

Aesthetic approval submissions were submitted to the Swakopmund aesthetic committee on three separate occasions in tandem with prior public consultations. The relevant dates on which this was conducted are as follows: 22 November 2017, 20 February 2019 and 30 August 2019. These submissions were for purposes of seeking council approval for the design of the building. The proponent received approval from the aesthetic committee in June 2020.

These submissions with their public engagement regime, do not constitute an ESIA process in any way.

The current ESIA, although referring to these processes undertaken independently in the past, do not in any way transfer the comments made by the public on those occasions into this assessment for the sake of deriving a conclusion. The current ESIA is only concerned with tourism related activities stemming from the erection and operation of the proposed building on Erf 4747 and only references these activities by way of a historical overview of the perceived sensitivity of Erf 4747.

These submissions were undertaken by the Lighthouse Property Investment Trust and Chamberlain and Associates. Aesthetic approval is dictated by the Swakopmund Municipal guidelines for proposed projects within the historic CBD area. Feedback from those consultations highlighted design aspects of the proposed building that needed to be re-considered as well as queries related to the legality of the process followed to amend the town planning scheme.

The most prominent aspects identified are listed below.

1. Primary issue was the height and overall design of the building;
 - a. The perceived miss alignment with the social culture of the area;
 - b. The dominant German architecture of buildings; and
 - c. Unobstructed beachfront views from Strand Street (even across the disturbed site).
2. The perceived shadow effect cast onto the surrounding buildings south and east of the proposed building.

FEEDBACK FROM PUBLIC REVIEW ON THIS PRELIMINARY ASSESSMENT REPORT

All comments received from this review process are captured in an addendum report and attached as an appendix to the final assessment report. The review period was provided to registered I&APs to review the preliminary report and appendices and provide written comments to ECC pertaining to the assessment. The regulations (2012) of the Environmental Management Act (2007) make provision for a minimum 7-day review period; however, ECC extended the review period for this project to give I&APs more time for their review, therefore the period ended on the 28th October 2020.

The assessment report was made available electronically on ECCs website and in hard copy by the Swakopmund Scientific Society at the Sam Cohen Library for review by its members and the public from the 22nd of October 2020. The extended review period was necessitated by the past Covid-19 restrictions on travel and public face to face gatherings as well as the uncertainty surrounding the relaxation of free movement nationally. The comments received from the extended public review period on the draft assessment report and specialist study and the responses to the comments made are presented in an addendum report.

2.7.6 BREAKDOWN OF PARTICIPATION AND ISSUES RAISED

A visual representation summarising the main issues raised throughout the public consultation phase is presented in figure 5.

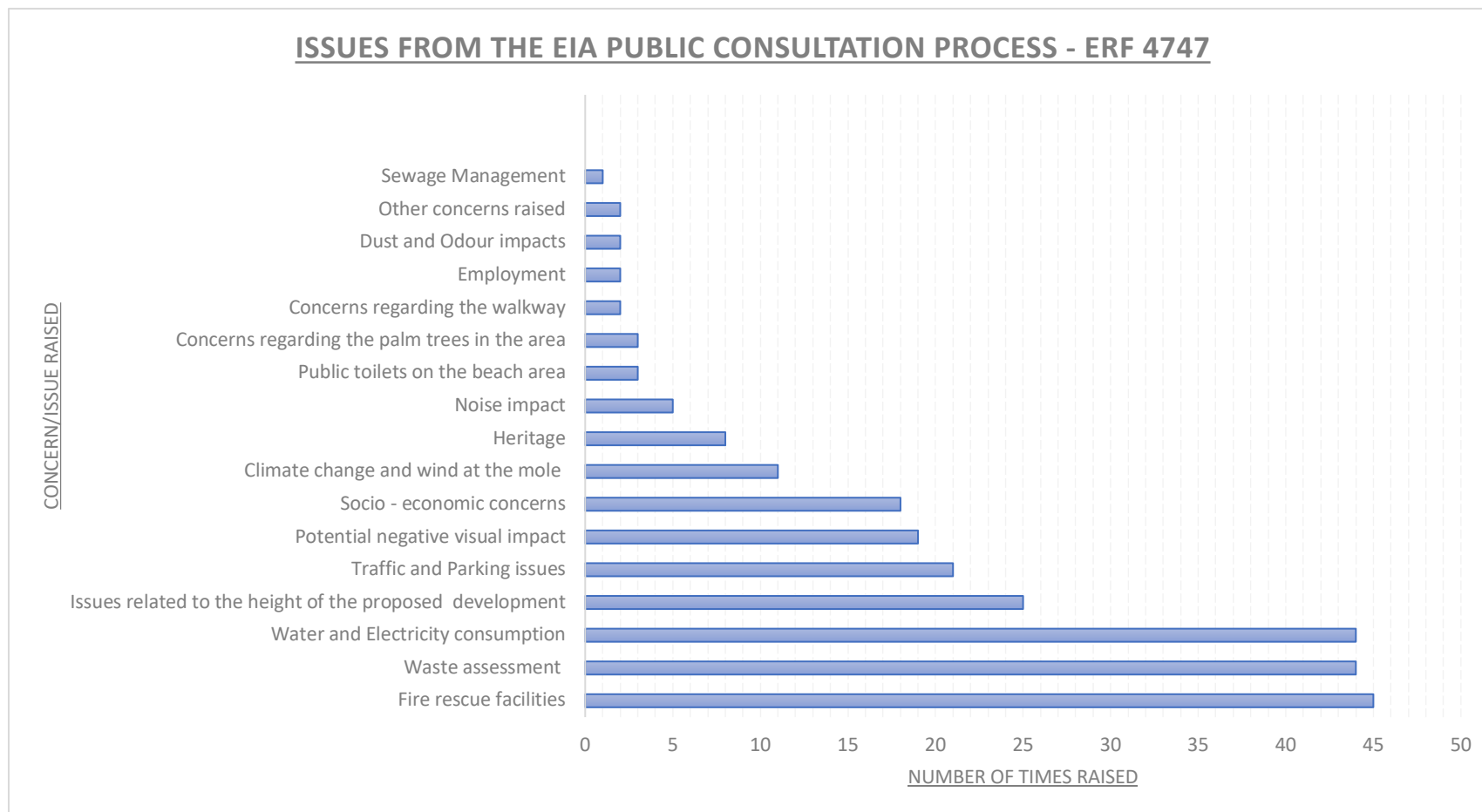


FIGURE 5 - SUMMARY OF CONCERNS OR ISSUES RAISED

2.8 DRAFT ESIA AND EMP

The ESIA report documents the findings of the assessment process, provides stakeholders with an opportunity to comment and continued consultation and forms part of the environmental clearance application. The EMP provides measures to manage the environmental and social impacts of the proposed project and outlines specific roles and responsibilities to fulfil the plan.

The draft ESIA report was issued to stakeholders and I&APs for a further consultation for a period of 7 days, meeting the mandatory requirement of 7 days as set out in the Environmental Management Act of 2007, including the Environmental Impact Assessment Regulations, No. 30 of 2012. The aim of this stage is to ensure all stakeholders and I&APs have the opportunity to provide final comments on the assessment process, the findings and register their comments and or concerns.

2.9 FINAL ESIA AND EMP

All comments received during the I&AP review period was collated in an addendum report as an annexure to the ESIA report. All comments were responded to either through providing an explanation or further information in the response table, or sign posting where information exists, or new information has been included in the ESIA report or appendices. Comments were considered and where they were deemed to be material to the decision making or enhance the ESIA has been incorporated into the ESIA report.

The final ESIA report and associated appendices are available to all stakeholders on the ECC website www.eccenvironmental.com. All I&APs will be informed via email.

The ESIA report and appendices was formally submitted to the Office of the Environmental Commissioner, DEA as part of the application to for an environmental clearance certificate.

2.10 AUTHORITY ASSESSMENT AND DECISION MAKING

The Environmental Commissioner in consultation with other relevant competent authorities will assess the findings of the ESIA. Upon review, the Environmental Commissioner will revert to the proponent with a record of decision.

3 REGULATORY FRAMEWORK

This chapter outlines the regulatory framework applicable to the proposed project.

3.1 NATIONAL LEGISLATION

TABLE 2 - LEGAL COMPLIANCE

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
<p>Constitution of the Republic of Namibia of 1990</p>	<p>The constitution clearly defines the country’s overarching position in relation to the well-being of Namibians, sustainable development and environmental management. The constitution refers that the state shall actively promote and maintain the welfare of the people by adopting policies aimed at the following:</p> <p>“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; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory.”</p>	<p>The proponent is committed to engage with the local community for the proposed project. The proposed project will create local jobs as well as exploring ways of finding beneficial opportunities that could contribute to the Namibian economy.</p>
<p>Environmental Management Act, No. 7 of 2007 and its regulations, including the Environmental Impact Assessment Regulations, No. 30 of 2012</p>	<p>The Act aims to promote sustainable management of the environment and the use of natural resources by establishing principles for decision-making on matters affecting the environment.</p> <p>It sets the principles of environmental management as well as the functions and powers of the Minister. The Act requires certain activities to obtain an environmental clearance certificate prior to project development. The Act states an ESIA may be undertaken and submitted as part of the environmental clearance certificate application.</p> <p>The MEFT is responsible for the</p>	<p>This preliminary assessment report documents the findings of the environmental assessment undertaken for the proposed project, which will form part of the environmental clearance application. The assessment and report have been undertaken in line with the requirements under the Act and associated regulations.</p>

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	protection and management of Namibia's natural environment. The Department of Environmental Affairs under the MEFT is responsible for the administration of the ESIA process.	
Soil Conservation Act, No. 76 of 1969 and the Soil Conservation Amendment Act, No. 38 of 1971	Makes provision for the prevention and control of soil erosion and the protection, improvement and the conservation, improvement and manner of use of the soil and vegetation.	Minimum vegetation disturbance/ relocation will occur on site, there is potential to remove and disturb soil. The construction methods and final design have been considered in the design of the proposed project. Measures in the EMP set out methods to avoid soil erosion from the site onto the beach landscape adjacent and Strand Street to its east.
National Heritage Act, No. 27 of 2004	The Act provides provision of the protection and conservation of places and objects with heritage significance. Section 55 compels companies to report any archaeological findings to the National Heritage Council after which a heritage permit needs to be issued	There is no known potential for heritage objects to be found on site. The Heritage Assessment Report for the site is included in this report and can be found in Appendix E.
Labour Act, No. 11 of 2007	The Labour Act, No. 11 of 2007 (Regulations relating to the Occupational Health and Safety provisions of Employees at Work promulgated in terms of Section 101 of the Labour Act, No. 6 of 1992 - GN156, GG 1617 of 1 August 1997)	The proposed project will comply with stringent health and safety policies, including the compulsory use of specific PPE in designated areas to ensure adequate protection against health and safety risks. Proper storage and labelling of hazardous substances are required, if used. The project will ensure employees in charge of and working with hazardous substances are aware of the specific hazardous substances in order not to compromise worker and environment safety.
Draft Pollution Control; and Waste Management Bill (1999)	The Bill amalgamates a variety of legislative frameworks in Namibia, regulating pollution in different sectors of the economy. The Bill promotes sustainable	Although not enacted, the Bill has been applied to the ESIA to ensure any activities potentially giving rise to pollution are minimized as far as reasonably practicable and obligations are adhered to.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	development, to provide for the prevention and regulation of the discharges of pollution.	
Town Planning Ordinance 18 of 1954 (definition has been amended by Ord.13 of 1970) and the amendment scheme NO.61.	A Town Planning Scheme is a statutory document that for its general purpose coordinated and developed for a local authority area. The Town Planning Scheme contains provisions for regulating, restricting or prohibiting the development of the area to which the scheme applies and generally for carrying out any of the objects for which the scheme allows. The scheme allocates real rights to properties and provides a set of rules under which the right of use can be carried out.	<p>The scheme allows for an ESIA to be undertaken for new mixed-use developments in general and developments in the CBD. The project operates under the ambit of the amended town planning scheme No 61, as advertised in government gazette 15 May 2017, approved by the then Minister of Urban and rural Development on the 06th October 2017 and formally Gazetted in November 2017. The maximum building height of 16 metres was extended to 40 metres.</p> <p>The town planning scheme does not make any mention of the Lighthouse nor any mention of specific height restrictions regarding erf's in the vicinity of the Lighthouse and its focal plane.</p>

The following laws are applicable to the project and will be complied with;

- The Labour Act, 2007 (Act No. 11 of 2007); and
- The Labour Act, 1992: Regulations relating to the health and safety of employees at work.

The proponent will develop a specific Safety Management and Emergency Response Plan for the construction and operation of the proposed development independently to the ESIA that will be in place prior to construction. This plan will contain firefighting standard operating procedures.

3.2 OTHER REGULATORY FRAMEWORKS

TABLE3 - OTHER REGULATORY FRAMEWORKS AND THEIR APPLICABILITY TO THE PROJECT

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Vision 2030	Vision 2030 sets out the nation's development programs and strategies to achieve its national objectives. It sets out eight themes to realize the country's long-term vision. Vision 2030 states that the overall goal	The planned project shall meet the objectives of Vision 2030 and shall contribute to the overall development of the country while building capacity in the local communities.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	<p>of the vision is to improve the quality of life of the Namibian people to a level in line with the developed world.</p>	
<p>Fifth National Development Plan (NDP5)</p>	<p>The NDP5 is the fifth in the series of seven five-year national development plans that outline the objectives and aspiration of Namibia's long-term vision as expressed in Vision 2030. The NDP5 is structured on five pillars: economic progression, social transformation, environmental sustainability and good governance. Under the social transformation pillar is the goal of improved education.</p> <p>A desired outcome of NDP5 is to have a diversified and competitive tourism sector with increased number of tourists from 1.4 million in 2015 to 1.8 million in 2021/22. With the current Covid-19 restrictions on tourism travel into the country the figures presented in the NDP 5 would most probably not be achieved.</p>	<p>The planned project supports meeting the objectives of the NDP5 through creating opportunities for tourism domestically.</p>
<p>National Policy on Tourism for Namibia</p>	<p>Provides a framework for the mobilisation of tourism resources to realise long term national goals defined in Vision 2030 and the more specific targets of the NDP, namely, sustained economic growth, employment creation, reduced inequalities in income, gender as well as between the various regions, reduced poverty and the promotion of economic empowerment.</p>	<p>The proposed project aligns with the policy; in particular, the development provides competitive tourism amenities and services, creating a competitive business environment that is market driven and meets international standards.</p>

3.3 OTHER STRATEGIC DOCUMENTS

Other strategic documents which were used to guide the ESIA are listed in Table 4 below.

TABLE 4: OTHER STRATEGIC DOCUMENTS

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
Strategic Environmental Assessment for the Erongo and Kunene Regions, 2007	This Strategic Environmental Assessment (SEA) was undertaken for the coastal zones of Namibia to support and inform the decision-making processes affecting biodiversity conservation and sustainable coastal development (DHI Water and Environment, 2007). It provides management guidelines on activities to be conducted in the coastal environs of Namibia	The SEA states that tourism facilities are to “minimise their impact on the environment in terms of both resource utilisation and visual impact”. The visual impact is the only aspect applicable to this development. None-the-less, “...with mechanisms such as ESIA’s to assure this”. New tourism developments, in particular, are to be “designed in such a way that they are unobtrusive, environmentally sympathetic and, as far as possible, enhance rather than detract from the visual impression of the environment.” This ESIA report is compliant with the SEA which stipulates ESIA’s for tourist and accommodation developments.
Swakopmund Tourism growth and development strategy	Strategic vision: <i>“Swakopmund is the leading destination for holiday tourists in Namibia offering a range of unique and diverse attractions, facilities and activities”</i> . The strategy’s focus areas are: <ul style="list-style-type: none"> • Enhancing cooperation between stakeholders • Enhancement of the tourism related environment • Development of the tourism industry • Marketing Swakopmund as the preferred tourist destination 	The proposed project aligns with the strategy relating to the enhancement, development and marketing of the town as a preferred tourism destination.
Local Economic Development Strategy for the Municipality of Swakopmund 2019-2023	This strategy aims to develop Swakopmund as the leading location for investors and tourists through the mobilization of medium and larger scale business opportunities as one of the priority categories defined under this strategy. Listed priority activity no 5: Development of beach areas based on existing plans.	The project will assist the municipality of Swakopmund to realize their vision of transforming the town into a preferred and sustainable investment location. The project fulfills priority activity 5 under this strategic document. The project will also contribute significantly to the local economy

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
		during construction and its operations.

3.4 ENVIRONMENTAL MANAGEMENT

Lighthouse Property Investment Trust personnel are committed to environmental management principles and to conduct all construction activities in such a way as to minimize any adverse impact upon the natural and social environments, to ensure compliance with all applicable laws and to aim for continuous improvements. This will be achieved through compliance to the EMP by all personnel, coupled with effective control and mitigation measures.

3.5 PERMITS AND ECO AWARDS

No further permits are required for the operations of the development apart from the various compliance certificates for upgrade works to bulk infrastructure as referred to in the development agreement between the proponent and the local authority, and fitness certificates issued by the local municipality to operate the building once construction is completed.

Above and beyond compliance is the well renowned 'Eco Awards Namibia'. This is an alliance of private sector and government organisations that runs a sustainable tourism certification programme. It is a mark of distinction for accommodation establishments that are planned and managed according to eco-friendly principles. ECC encourages our tourism clients to participate in the Eco Awards programme. The self-assessment is included in **Appendix F**.

4 PROJECT DESCRIPTION

4.1 NEED FOR THE PROPOSED PROJECT

Namibia is among the prime tourist destinations in Africa. The Namibian travel and tourism industry (direct impacts) generated 44,729 jobs or 6.5% of total employment in 2015 and contributed N\$5.2 billion to the Namibian Gross Domestic Production (GDP) (this represented 3.5% of overall GDP), (Namibian Tourism Board, 2016). In pre-Covid19 years, more than one million tourists flocked to the country’s national parks and other tourist destinations each year, including Swakopmund. In response to this pattern, lodges and hotels have increased substantially in the three coastal nodes to cater to the new emerging interests as well as accommodate tourists from all over the world. Tourism also represents the fastest growing sector in Namibia (National Policy on Prospecting and Mining in Protected areas, 2018) and should be supported at local and national levels.

As a renowned tourism destination, the Swakopmund economy is heavily reliant on its extensive tourism offering. This reliance has been challenged in recent times due to the economic slump caused by the current COVID-19 pandemic, and the imposed lockdown applied to the Erongo Region.

According to Pohamba Shifeta, Minister of Environment, Forestry and Tourism (Xinhuanet.com, 2020) there is a need for both government and the private sector to realign efforts to ensure that Namibia regains its position as a tourism destination of choice. The proposed development has the potential to improve the current site and contribute to the Swakopmund community and economy at a local and regional level.

4.1.1 DEVELOPMENT PROCESS FOLLOWED TO DATE

Table 5 below outlines the development stages the proposed development has gone through to date as well as the next step in terms of council approval.

TABLE 5 - THE DEVELOPMENT PROCESS FOLLOWED TO DATE

PROCESS	STATUS
1. Aesthetic approval	Granted 12-Jun-2019 (Municipal letter received 2nd June) – (decision was made at council meeting 26 March 2020) Ratified at May council meeting hence they could only issue in June.
1.1 Approval from State house	Approval was granted from State house. Appendix L
2. Heritage consent	First Submission to NHC done on 11th of June 2020. The proponent received writing from NHC on the 6th November declining the submission.
3. Environmental Clearance	Pending record of decision from MEFT, after submission.
4. Municipal approval (based on engineering drawings)	Date pending.

4.2 ENTRANCE TO BUILDING

Access to the onsite parking will be via the existing parking lot to the north of the site. Pedestrian access to the building is granted from all sides of the building. Most restaurants are located on the western side of the

building, and access can be obtained from all side entrances to these amenities. The promenade walkway will also give access to the building by pedestrians.

4.3 PARKING SPACE CONSIDERATIONS

Traffic growth in the mole area will increase as a result of the establishment of the building. At this stage it is unclear how many vehicles will be present in and around the project site. It is expected that road traffic on Strand Street, Theo Ben Gurirab Avenue and Koch Street will increase. It is anticipated that the operational phase will add additional traffic on these streets both during daylight hours and at night.

A total of 233 parking spaces have been incorporated into the design. The existing on-street parking off of Strand Street in front of the playpark will be kept intact and accessible as street parking space, while additional on-street parking will be developed across the length of the building on Strand Street. See below diagram sketch of the proposed street parking. Within the building two floors including the basement will provide parking for approximately 233 vehicles. See geotechnical study done for the site in Appendix K.

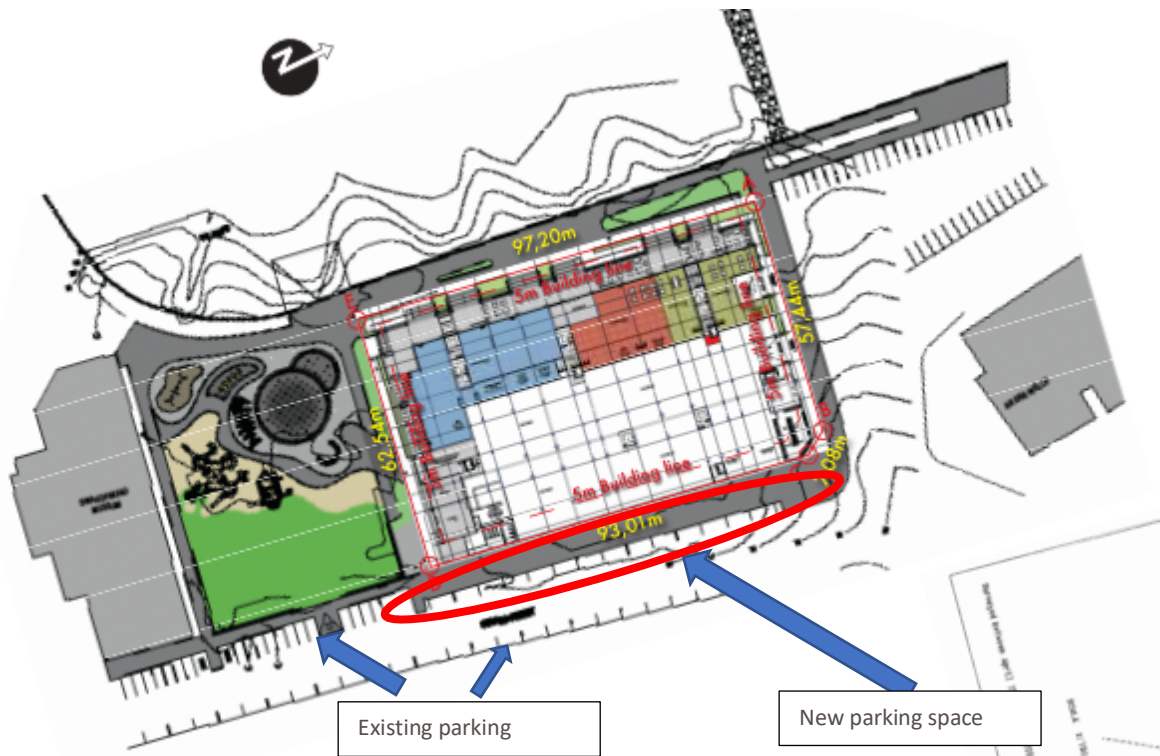


FIGURE 6 - DIAGRAM INDICATING ON-STREET PARKING SPACES OUTSIDE THE BUILDING

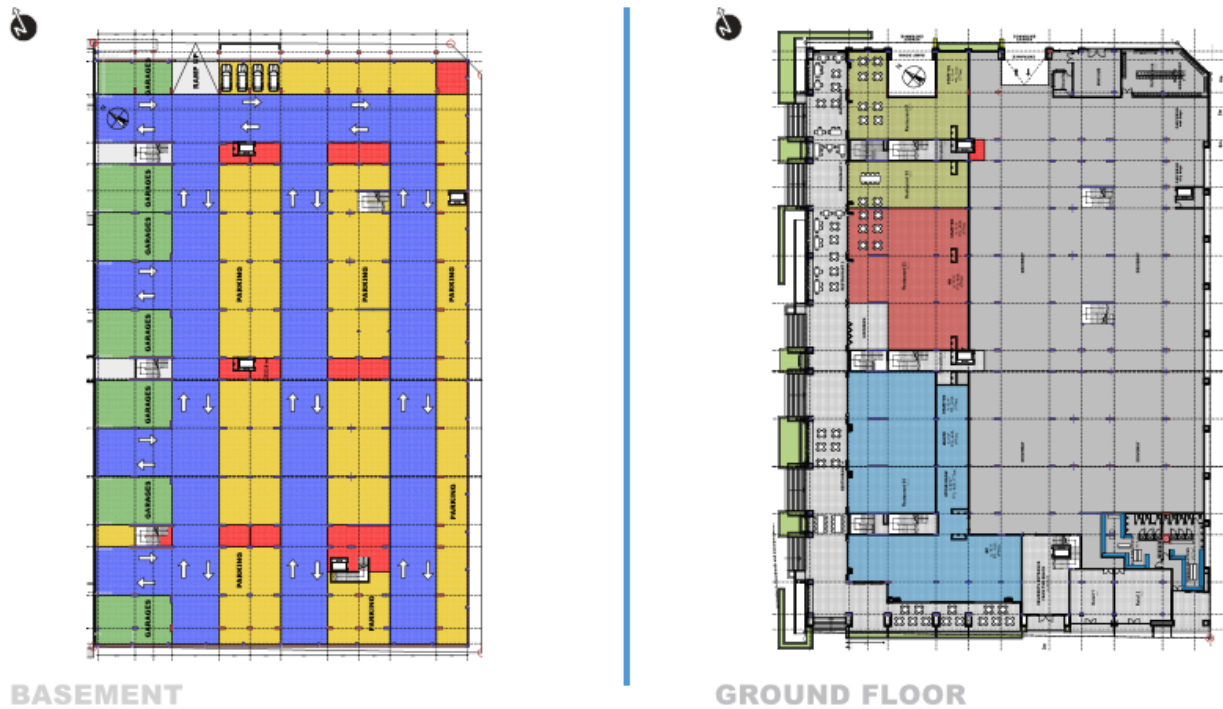


FIGURE 7 - BASEMENT AND GROUND FLOOR PARKING SPACES

4.4 ALTERNATIVES

The proposed project has been subject to a process of design evolution changes (2017-2019), informed by stakeholder consultation with the municipality, and community inputs. In terms of the Environmental Management Act, No. 7 of 2007 and its regulations, alternatives considered should be analysed and presented in the assessment and ESIA report. This requirement ensures that during the design evolution and decision-making process, potential environmental and social impacts, costs, and technical feasibility are considered, which leads to the best option(s) being identified.

4.4.1 ALTERNATIVES CONSIDERED

Three features of the project were put through an alternatives analysis, these are:

1. The colour scheme of the building;
2. Height of the building; and
3. Other design components of the building.

These features are presented in this section.

4.4.2 COLOUR SCHEME OF THE BUILDING (PREFERRED OPTION)

The transitional paint colour scheme is the preferred alternative for this feature. It is similar to the existing colour schemes found on established buildings within the greater heritage area. See figure 8 below of an artist's impression of the building illustrating this option.



FIGURE 8 - COLOUR SCHEME TO BE USED ON BUILDING EXTERIOR APPROVED BY THE LOCAL COUNCIL (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019)

Figure 9 illustrates the colour palette similarities of existing buildings in the greater Historic CBD area within which the proposed building is also located. The roof will have the same colour as that of Strand Hotel.



FIGURE 9 - SIMILAR COLOUR SCHEMES ON EXISTING BUILDINGS IN THE VICINITY (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019) CONTINUATION - COLOUR SCHEME OF THE BUILDING (NOT –PREFERRED OPTION)

The colour scheme proposed in 2017 for the building as presented below is not preferred due to the following reason. The colour palette chosen and submitted for council approval was not a perfect fit for the building considering the baseline colour ranges in the broader heritage area surrounding the project site. See images below of the initial visual renditions submitted in 2017.



FIGURE 10 - INITIAL COLOUR SCHEME CHOSEN (NOT-PREFERRED OPTION) (SOURCE: CHAMBERLAIN AND ASSOCIATES. 2017)

4.4.3 HEIGHT OF THE BUILDING

Erf 4747 is zoned as general business as per the town planning scheme NO. 61, with an allowable height per structure restricted to 40m above natural ground level and unlimited bulk. The proposed building underwent height changes throughout consultations and is described in this section.

INITIAL HEIGHT OF THE BUILDING (NON-PREFERRED OPTION)

The initial height of the proposed building in 2017 was 39.150 m above natural ground level. This height was within the 40m allowable height restriction however it dwarfed other buildings in the area as well as the lighthouse and penetrated the skyline excessively. Public resistance against its height was also a determining factor in the redesign of this feature.

ALTERNATIVE HEIGHT DESIGN FOR THE BUILDING (PREFERRED OPTION)

The proposed building was re-designed and achieved a height above natural ground level of 30m, 10m below the maximum allowable height after the redesign. See figures 11 and 12 that illustrate the height of the building in comparison with other skyline infrastructure, especially the focal lighthouse structure. The total height is lower than the peak of the lighthouse tower positioned to the far left of the diagram below.

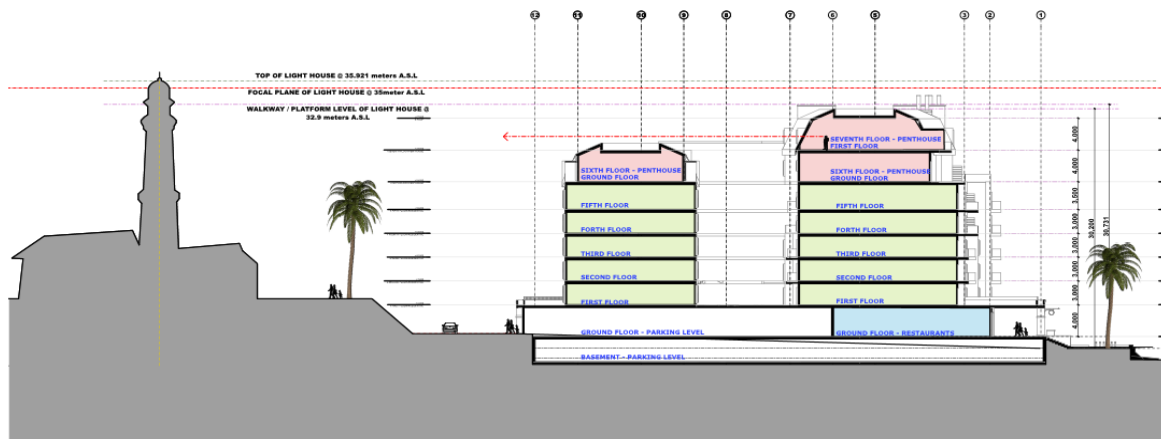


FIGURE 11 - ADJUSTED HEIGHT OF THE PROPOSED BUILDING (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019)

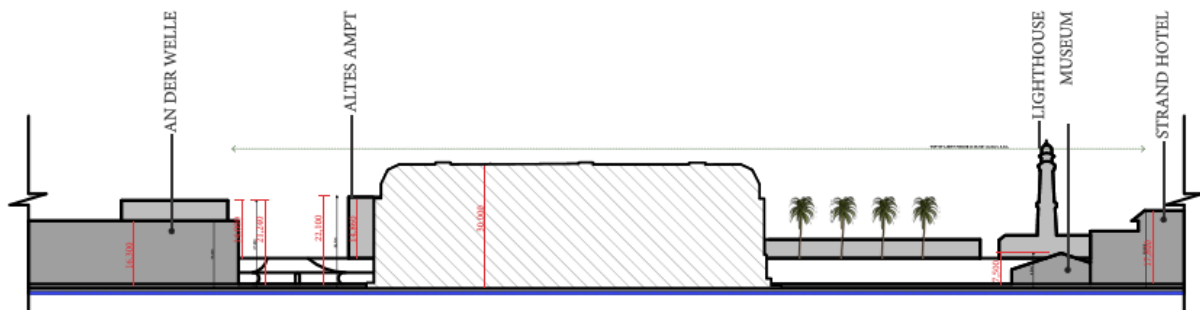


FIGURE 12 - SKYLINE DIAGRAM OF ADJUSTED BUILDING HEIGHT IN RELATION TO OTHER BUILDINGS IN THE GREATER AREA (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019).

4.4.4 OTHER DESIGN COMPONENTS OF THE BUILDING CONSIDERED

The August 2019 design compilation for the building drew from architectural examples available in the immediate vicinity as is illustrated in the figure collage 13 below. The concepts of balcony recesses popped boxes on the façade of the building, the roof caps and balustrades are all reminiscent of the existing architectural landscape and have been incorporated into the redesign.



FIGURE 13 - OTHER DESIGN COMPONENTS OF THE BUILDING

4.4.5 A PROPOSED LIGHTHOUSE

In February 2017 a second design was submitted which incorporated a specific change recommended from consultations between the proponent and Namport regarding the perceived interference of the building with the functional integrity of the existing lighthouse. The proponent agreed to incorporate a lighthouse structure onto the roof of the building as is seen in figure 14. This design lowered its initial height from 39.1m to 30m but altered its façade and colour scheme to match that of the preferred option detailed in section 4.4.2. This design was not accepted by the aesthetic committee.



FIGURE 14 - LIGHTHOUSE INCLUDED IN THIS DESIGN

The final design of the building therefore excludes the proposed lighthouse attached to it. Consultations between Namport, the municipality of Swakopmund and the proponent resolved that this development should not include any aspect of the existing lighthouse and its functioning.

4.4.6 FINAL DESIGN

The August 2019 concept for the development was informed by consultative inputs from the local authority, Namport, as well as the residents of Swakopmund. Aspects that were changed were the height and colour scheme of the building, the lighthouse and individual components i.e., balustrades, roof caps, popped boxes, and balcony recesses, planter boxes on ground level to fit in with the surrounding architecture in the immediate area as guided by the Swakopmund Structure Plan.

The additional lighthouse was removed at the request of the aesthetics committee, which saw the design approved in June 2020. **Appendix H** contains the aesthetic approval granted by the aesthetic committee.



FIGURE 15 - ARTISTS IMPRESSION OF THE PREFERRED OPTION FOR THE BUILDING'S DESIGN CONCEPT

4.4.7 PROPOSED PROJECT SCHEDULE

The construction and development of the proposed project is anticipated to commence once all approvals are in place and will last for a period of 30 months.

4.4.8 WORKERS AND ACCOMMODATION

The project expects to create approximately 2500 – 3000 employment opportunities during the construction phase over a 30-month period. Preference will be given to workers who come from Swakopmund and Walvis Bay. Once the project moves into operation, it is anticipated that up to 300 people will be permanently employed on site. As workers will be sourced locally, there will be no need for workers accommodation, nor it is anticipated that there would be an influx of additional workers requiring accommodation.

4.5 RESOURCE AND WASTE MANAGEMENT

Water will be required for various uses including human consumption and for construction and operation activities. Water will be sourced from local municipal connections.

4.5.1 WATER DEMAND DURING CONSTRUCTION

It is anticipated that the project will consume on average approximately 63 000 liters of water per day based on the number of functional units within the building during the operational phase. Water demand for the construction phase is anticipated to be less than the operational per day average as stated above.

4.5.2 ENERGY DEMAND

The existing 300 kVA power supply to the swimming pool substation on Erf 4747 will be upgraded to a 900-kVA capacity. It is estimated that the proposed development will make use of approximately 48% of the total capacity. The remainder will feed energy requirements of the surrounding area. The upgrade of the existing substation is supported by Erongo Red.

4.5.3 SOLID WASTE MANAGEMENT

During operations, solid waste will be managed in line with the principles of the waste hierarchy for waste prevention, re-use, recycle or compost, energy recovery, and disposal. Waste minimisation and recycling is preferred to waste treatment and disposal (National Solid Waste Management Strategy, MET 2019).

Solid waste will be collected in separate categorized bins, no chemical or hazardous waste will be produced. A collection area will be organised on site, non-organic waste will be collected by a refuse truck and waste will be disposed of at the local landfill site weekly.

The Municipal Council of Swakopmund, under section 94(1)(c) of the Local Authorities Act, 1992 (Act 23 of 1992) make the following regulations in relation to the provision, regulation and control for the removal of domestic refuse.

1. Every occupier of a dwelling, public building or any other premises shall,
 - (a) Apply to the Council in writing for the removal of refuse from such premises.
 - (b) As soon as possible, after receipt of the application referred to in sub-regulation (a), Council shall provide the occupier with such numbers of refuse containers it deems sufficient for the proper storage of refuse.

(For the purpose of regulation (b), a refuse container will be a SABS approved (SABS 1494), 240litre, Polyethylene, two wheeled, mobile refuse containers (MGB 240), internationally known as the "Otto Bin".)

The proponent shall adhere to this application process to service the site's waste disposal requirements.

4.5.4 SEWAGE WASTE MANAGEMENT

The proponent will ensure that portable toilet systems are provided for the contractor during the construction phase. No waste shall be discharged into the environment or into the local municipal sewage reticulation system.

During the operational phase, sewage waste will be relayed into the municipal sewage reticulation system. The project must comply with all municipal regulations regarding disposal volumes and connection specifications. It is anticipated that an average of approximately 58 000 litres of sewage waste per day will be produced from the project. The proponent has confirmed that the engineering design reports which contained these figures where submitted to the local authority and subsequent agreement was reached.

4.5.5 BULK SERVICES

The development agreement signed between the proponent and the local authority provides for the upgrading of all related bulk infrastructure to service the required needs of the project as needed and is the responsibility of the proponent, including costs and labour. Bulk services infrastructure in the immediate vicinity will thus be upgraded by the proponent to enhance service delivery in this zone.

5 ENVIRONMENTAL AND SOCIAL BASELINE

5.1 INTRODUCTION

The environmental and socio-economic baseline is provided in this chapter. This section provides an overview of the existing biophysical and social environment through the analysis of the available information. Desktop studies followed by site verification on the national database are undertaken as part of the scoping process to get information about the current status of the receiving environment. This provides a baseline where changes that occur as a result of the proposed project can be measured.

5.2 BASELINE OF THE BUILT ENVIRONMENT AND LAND-USE

The area has strong tourism potential, because of its unique landscape, proximity to the beach and overall recreational appeal. National tourism activities have declined significantly due the Covid-19 pandemic. This has significantly impacted Namibia and Swakopmund's tourism sector, adversely impacting on the socio-economic conditions of communities reliant on this sector.

The Swakopmund economy has a limited employment diversification portfolio. The town is mainly dependant on tourism, i.e., any drawback in this sector will have serious effects on the local economy at large and on employment (Development Consultants for Southern Africa, 2019).

Within the Erongo region, mining plays a predominate role in the economy. Mining contribution to GDP is recorded at 8.8% and remains the most important taxpayer as well as foreign exchange earner. It is a significant employer and skills developer, and therefore has significant share in the social and economic development of Namibia (National Policy on Prospecting and Mining in Protected Areas, 2018).

5.2.1 THE PROJECT SITE AND LOCATION

Erf 4747 is located on the corner of Theo Ben Gurirab Street within the popular mole beachfront area. The site is also located within the old Historic Central Business District (CBD). There are no direct neighbours to the property as it is bordered by roads. However, the closest neighbours in terms of approximate proximity and direction are:

- 101 m north of the site the upmarket condominiums are situated;
- 123 m south of the site the museum is situated;
- 135 m east of the site the Altes Amtsgericght is situated;
- 144 m south, south east of the site the lighthouse is situated;
- 160 m southeast of the site the magistrates court is situated; and
- Approximately 248 m south of the site the craft market is located.

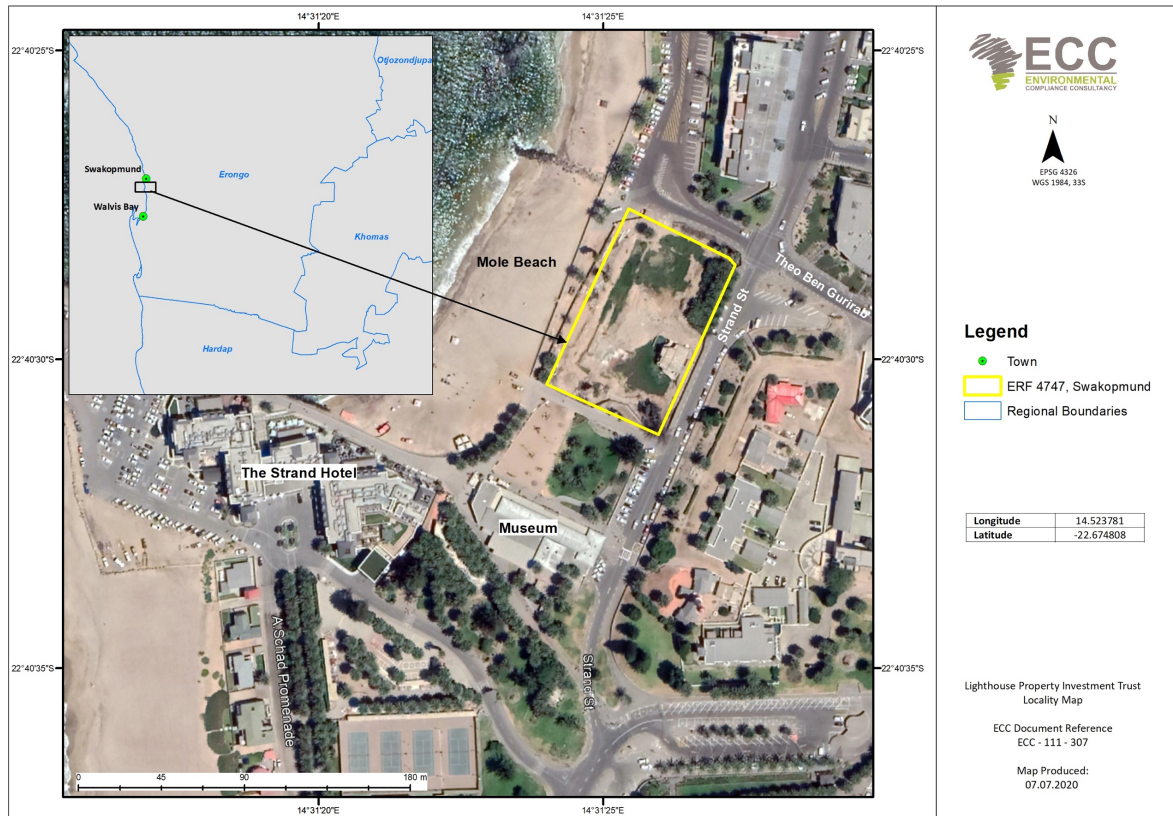


FIGURE 16 - PROJECT LOCATION

5.3 SITE AND SURROUNDING ENVIRONMENT

Erf 4747 is located centrally in the historic CBD area. It is strategically located on the beachfront of the mole, bordered by a park to the south and upmarket condominiums to its north. Directly east of the project site the magistrate’s court is situated and shares that land with Statehouse. Further north east of the Statehouse property, an adjacent property called the Altes Amtsgericght building is located on, which is registered as a heritage building. Directly opposite the Altes Amtsgericght (northward) an apartment building is located that caters for holiday makers and permanent residents. The Strand Hotel is located south west from the project site on the embankment.

Figure 17 below illustrates the location of Erf 4747 in relation to surrounding infrastructure.



FIGURE 17 - AERIAL VIEW NORTH-EAST FROM ERF 4747

5.4 SIMILAR FACILITIES IN SWAKOPMUND

The development will essentially provide amenities aimed at the tourism market and compete with existing amenities in Swakopmund providing near similar consumer products or services. These amenities have a shared receptor base and will continue to affect these shared receptors with a wider choice. The proposed project will introduce amenities that already exist within the immediate environment and beyond i.e., Strand hotel possesses a public spa and wellness centre and seven other spa's and wellness centers can be found within a 10km radius of the proposed project.

The use of these facilities cumulatively will depend on external factors like:

- Distance to the amenity;
- Convenient access to the amenity (road conditions and traffic); and
- Safe and convenient parking at the amenity.

Internal factors are:

- Pricing of products and services offered;
- Safety of facility within which products and services are located; and
- Aesthetic appeal of the facility within which the products and services are located.

5.5 THE LIGHTHOUSE

The Swakopmund lighthouse is a functional Aid to Navigation (AtoN) beacon used by sea farers as a visual orientation tool to navigate the offshore waters past the town and onwards to Walvis Bay by large vessels. The lighthouse stands at 35m tall and casts a beam of 35km out to sea. This means ships and smaller vessels alike can spot the beam around 35km from the shore, while smaller vessels use it to navigate closer to the mole. In addition and supplementary to the light beam, the lighthouse was retrofitted with various analog and digital navigational systems as well, which include the following.

- A radio beacon was added in 1940;
- The light was automated in 1956;
- The lantern and a more powerful light were installed in 1982; and
- The storeroom and the two dwellings that were the lighthouse keepers' accommodation, were expanded. Today they house a restaurant.

Factual aspects to consider (Swanepoel, 2018):

- Erf 4747 falls within the conservation zone;
- Erf 4747 also falls within the lighthouse area of use;
- The town planning scheme does not make any mention of the lighthouse or any mention of specific height restrictions regarding erven in the vicinity of the lighthouse and its focal plane;
- The development was designed to ensure that it falls within the maximum height requirements of the amended town planning scheme;
- The current design of the development was at a height of 40 meters, and subsequently relaxed to a height of 30 meters;
- the Lighthouse falls under the control of Namport; and
- the architects of the development indicated that at a revised design with a maximum building height of 33 metres, the development:

- Might not compromise the night mark in any way and it continue to serve as an AtoN; and
- It partially obstructs the daymark as depicted by the red cone below.

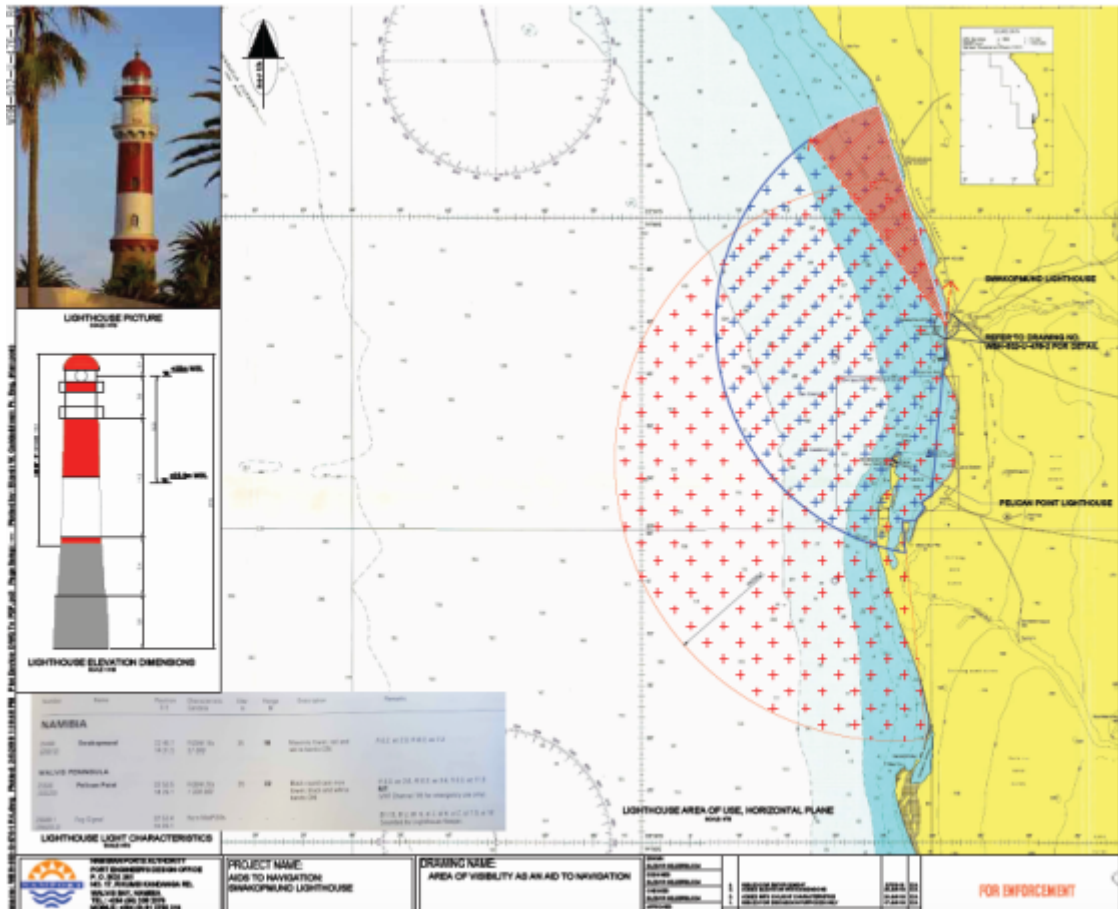


FIGURE 18 - AREA OF INFLUENCE FROM THE DAY MARK (MARKED IN BLUE) WITH THE POSSIBLE OBSTRUCTION INDICATE IN RED TO THE NORTH OF THE LIGHTHOUSE

From the study done, it is clear that only a partial segment of the day mark on the lighthouse will be obstructed by a building with a 30-meter height. The night mark (light beam) will not be obstructed in any way and will continue to function (Swanepoel, 2018). In addition, it must be highlighted that while the International Association of Marine Aids to Navigation and Lighthouse Authorities (IALA) guidelines state that a lighthouse “may” act as a daymark, they do not specify that it “must” act as a daymark.

5.6 TRAFFIC

The proposed development will add additional traffic flow onto the municipal road network surrounding the development with strand street east of the project site potentially experiencing the bulk of traffic flow. It is widely accepted that traffic numbers increase considerably around the museum and Erf 4747 on weekends and during school and public holiday periods. However, upon further enquiry from the Municipality of Swakopmund to ascertain specific traffic count figures for the Mole area, it was found that no such figures exist that could be used as baseline conditions for this assessment.

In the absence of detailed traffic information for the Mole area, the proponent has resolved to commission a traffic impact assessment which will focus on annotating the baseline conditions of traffic flow prior to the implementation of the proposed development, throughout the construction phase and post construction. The

assessment will also provide measures to mitigate any potentially significant impacts that may be predicted to occur as a result of the proposed development.

The complete terms of reference for the traffic impact assessment study can be found in Appendix J.

5.7 CLIMATE

The proposed site is within the Namib Desert climatic zone, with nearly no rainfall throughout the year. Swakopmund climate is characterised by mild summers and cool winters with the mean temperatures ranging between 10°C and 24°C. Fog is the most common precipitation within the project site, with over 100 days of fog events per year (Goudie A., et al 2015).

Wind can occur any time of the day, with the predominant winds from the W – SSW, NW – NNE and NE – E with some seasonal variations in wind speed and direction (Mendelsohn et al., 2002). Most fog is prevalent during mornings and evenings and dissipates as the day heats up. This is an important determining factor for outdoor activities during daytime hours within the town.

Mild temperatures are predominant at the coast, averaging less than 20°C; the hottest month is February, and the coldest month is August (Namibia’s Coast, 2012).

The prevailing wind recorded in Swakopmund is from the southwest and onshore with an average speed of 7.4 km/h (Figure 15). The occurrence of this wind pattern is caused by the South Atlantic anticyclone high pressure cell that descends to the surface of the Atlantic Ocean with a high degree of wind strength released in an anti-clockwise motion in a northerly direction and powers the Benguela Current up the Namibian coastline.

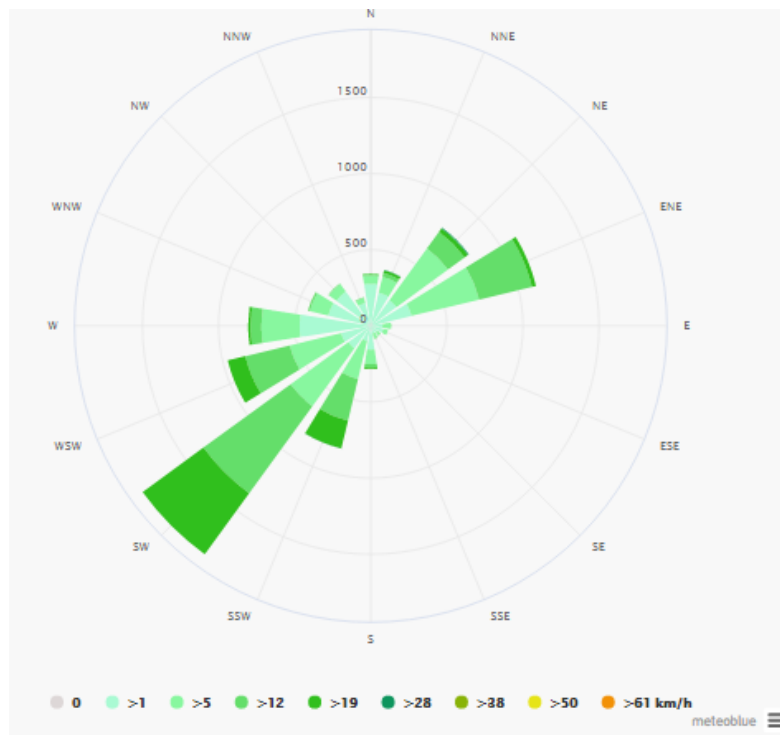


FIGURE 19 - WIND DIRECTION AND SPEED FROM THE SWAKOPMUND WEATHER STATION, ERONGO REGION

5.8 GEOLOGY

Swakopmund is located on Cenozoic fluvio-marine and alluvial deposits (soils) nestled on top of the Precambrian Damara sequence rocks and intruded by Karoo-age dolerite dykes (Bulley, 1986). The project site

engineers should be mindful of the geological composition of the site and foundation excavations and services trenches should preferably avoid zones of weathered or fractured rocks (isolated pockets) adjacent to dolerite dykes. This will prevent differential settlement of building foundations (Bulley, 1986).

Deeper founding levels (on competent bedrock material) or widened strip footings should therefore be considered for shopping centres, schools and blocks of flats in Swakopmund (Bulley, 1986).

5.9 HYDROLOGY

Groundwater conditions in Swakopmund are relatively stable due to the low rainfall groundwater is shallow and the water table can be intercepted between 1-5m below the surface. Rare zones of seepage or shallow water table however occurs e.g., on Strand Street, and this should be taken into account prior to the construction of buildings (Bulley, 1986).

5.10 SOIL

The project site comprises of Petric Calcisols soil formations, old crystalline rocks that form the basement to the Permo-Triassic Karoo Sequence and the young deposits of the Namib Desert. The crystalline basement consists of rocks of Abbabis Metamorphic Complex and Swakop Groups of the Damara Sequence (Schreiber, 1996).

5.11 FAUNA AND FLORA SPECIES

The project site is a disturbed site with some established palm trees. No endemic, threatened, or rare fauna and flora species occur on the proposed site.

5.12 SOCIO-ECONOMIC BASELINE

Namibia's GDP is recorded at 14 billion US Dollars as at 2019 (Plecher, 2020). The development of the services sector, which directly includes tourism-related products and services have created a significant positive impact on domestic and national economic growth levels; employment; and local and regional development. Examples of this are the continued development of small and medium sized tourism-based accommodation developments throughout the country as well as the large-scale tourism developments and eco-tourism with a strong focus on wildlife marketing.

5.12.1 DEMOGRAPHIC PROFILE

Namibia is one of the least densely populated countries in the world, with a population of 2.5 million. Life expectancy is 65 years and expected years at schooling is 11.7 (National Planning Commission, 2017). Namibia's population is expected to increase from an estimated 2.11 million in 2011 to 3.44 million by 2041 (63%). It is predicted that urbanisation will continue, with an increase from 43% population in urban areas in 2011 to 67% in 2041. The populations of Khomas and Erongo are projected to increase the most with over a third of Namibia's population to live in these two regions (Namibia Statistics Agency, 2011). In Erongo region, Swakopmund and Walvis Bay are the main towns expected to have an increase in urbanisation, mostly due to economic activities resulting from mining, tourism and the fishing industry.

In the 2011 Census, the population of the Erongo Region was 150 809, with a growth rate of 28.6% since 2001. The population of Namibia has been growing steadily; the population growth rate between 2001 and 2011 (the two census) was 1.4%, with urban areas growing quicker than rural areas. The highest growth rate in Namibia was recorded in the Erongo region (3.4%). This was mainly influenced by in-migration; more than 40% of residents in these regions were born elsewhere. Situated in the central Namib Desert, Swakopmund is a

fourth-largest populated town in Namibia and the capital of the Erongo region administrative district with 44 725 inhabitants (Namibia Statistics Agency, 2011).

5.12.2 GOVERNANCE

Namibia has achieved the level of ‘medium human development’ and ranks 125th on the Human Development Index out of 188 countries (National Planning Commission, 2017). Namibia is divided in 14 regions, subdivided by 121 constituencies. Each region has a regional council, elected during regional elections per constituency. Towns are governed through local authorities, in the form of municipalities.

The Namibian constitution provides for the establishment of Local authorities by laws under the Municipal Ordinance, 1963 (Ordinance 13 of 1963) and the Local Authorities Act, No. 23 of 1992. As such the Local Authorities have the power to pass by-laws for the effective administration of their Municipalities and Communities.

5.12.3 EMPLOYMENT

Unemployment rates in Namibia, particularly among the youth, are high with approximately 44.79 % of all people unemployed in 2018. In terms of employment by occupation, it is demonstrated that skilled agricultural or fishery workers made up the largest occupational group in Namibia with 46.5%, followed by the category ‘elementary occupation’ (18.7%) and then service workers (12.5%).

5.12.4 ECONOMIC ACTIVITIES

Tourism is an important sector in Namibia. It is the third largest contributor to the country’s GDP; it generates a significant number of jobs and is a valuable foreign exchange earner for the economy. In 2012, the World Travel and Tourism Council estimated the total contribution of travel and tourism to Namibia’s GDP to be 20.5% and that 27% of all employment was generated through this sector (MET, 2016). The Namibian state has long recognised and prioritised tourism development in various legislative and policy documents as a result.

Since 2016, Namibia recorded slow economic growth, registering an estimated growth of only 1.1% in 2016. The primary and secondary industries contracted by 2.0 and 7.8% respectively. During 2017 the economy contracted by 1.7, 0.7 and 1.9% in the first, second and third quarters respectively (NSA, 2018). Despite the more positive expectations, the economy retracted to an average growth of not more than 1% annually since 2017.

The tourism and mining sectors in the Erongo Region provide most of the employment opportunities.

5.13 CULTURAL HERITAGE

The mole enjoys the highest possible rating (Grade A) for historical structures in Swakopmund. Any development must be submitted to the National Heritage Council for evaluation (Erongo, 2019). An application was submitted to the National Heritage Council on the 21st August 2020 for a record of decision on the actual heritage value of the site.

A review of the National Heritage Council database as well as desktop-based heritage opinion by Dr Andreas Vogt was conducted and concluded that no known heritage finds are present in the project area. The heritage value of the site in comparison with other known heritage buildings in the broader Historic CBD is considered low. The non-clustered character of the other heritage buildings in the area does not exert a direct influence on the site itself (pers. comms. Dr Vogt, 2020).

5.13.1 HERITAGE REVIEW OF THE SITE (ERF 4747)

Swakopmund was originally established with the intent of being a harbor town by the German colonial authorities, who avoided the British annexed Walvis Bay harbour, albeit a short-lived reality which spanned from 1892 to 1904, with the construction of a wave breaker (jetty system) to ease the import and export of goods, and people to and from the town, which underwent multiple refurbishments and ultimately abandoned.

According to Dr. Vogt, the only noteworthy, but not historical building on this site was the old Badehaus, which served as a functional building. This building was removed with little community protest and replaced with an Olympic sized public swimming pool after 1971. This development was also demolished with little protest from the community. Both the Badehaus and swimming pool were never included in the Swakopmund heritage register compiled in 1986. The swimming pool was also a functional building, with no historical or symbolical relevance (Vogt, 2020).

The public and the authorities at the time, probably all agreed that the new swimming pool (also controversial in the beginning) ultimately added significantly more value to Swakopmund as a tourist destination (Vogt, 2020). It is believed that the residents of Swakopmund resolved to turn the town into a recreational destination for tourists in the 1920 after multiple community meetings were held (per comms, Dr. Vogt, 2020).

An explanation of the wider heritage context of Erf 4747 within the mole basin area is given below as taken from the assessment of Dr. Vogt.

There are a few historical buildings defining the heritage context of the mole basin: The narrower context is supplied by the following:

- The lighthouse (1903/10)
- The mole (1900-3)
- Former customs shed (today Swakopmund Museum)
- Former Vierkantvilla (trans located app. 2000)

As these were functional building structures with very little architectural finesse, they only influence their surroundings marginally. Their bearing on the design of a new residential and retail development would be near to zero.

The wider context comprises:

- The Bezirksamt (Presidential Palace) (1901)
- Altes Amtsgericht (1905)
- Kabelmesse (1899)

According to Dr Vogt, although all of them (listed above) constitute fine examples of German colonial architecture, their existence would also have near zero influence on the new residential and retail development, since there is no direct visual contact between these buildings and the new development. Although, as has been shown above, the heritage value of Erf 4747 is relatively low, there is one aspect that should be considered, namely the height of the development to be established. To this end recommendations are supplied by Dr. Vogt. See Appendix I.

Figure 20 depicts the location of Erf 4747 relative to other heritage sites in the area with a rating. Figure 21 outlines the broader conservation area within which the proposed project is located.

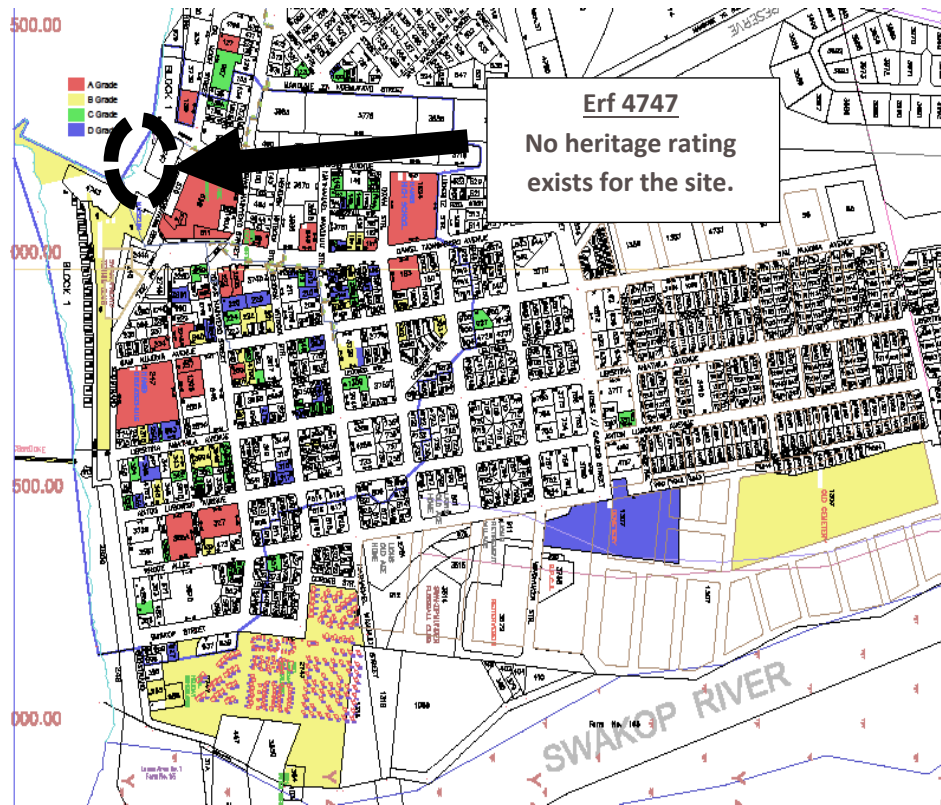


FIGURE 20 - ERF 4747 IN RELATION TO OTHER HERITAGE RELATED BUILDINGS IN THE CBD AREA. SOURCE: AESTHETIC APPROVAL GUIDELINES FOR SWAKOPMUND

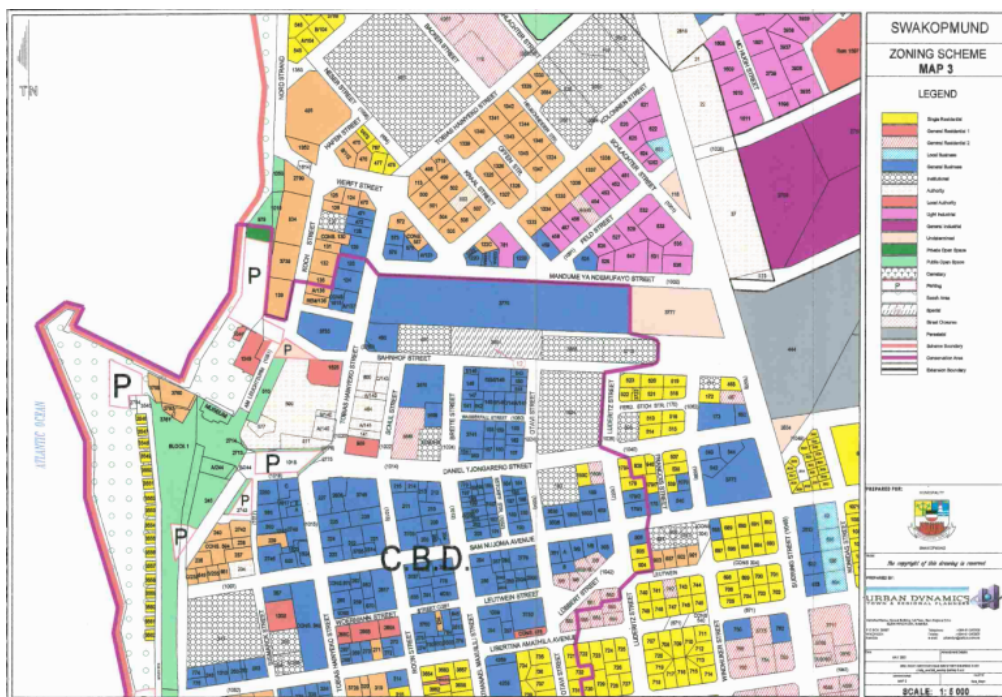


FIGURE 21 - BOUNDARIES OF CONSERVATION AREA WITHIN WHICH THE PROJECT LOCATION IS SITED.

6 IDENTIFICATION AND EVALUATION OF IMPACTS

The key stage of the ESIA process is the impact prediction and evaluation stage. This stage is the process of bringing together project characteristics with the baseline environmental characteristics and ensuring all potentially significant environmental and social impacts are identified and assessed. Impact prediction and evaluation involve envisaging the possible changes to the environment as a result of the proposed project. The recognized methodology was applied to determine the magnitude of impact and whether or not the impact was considered significant and thus warrant further investigation. The assessment considers all stages of the project's life cycle that is scoped into the assessment and is presented in this report. It is an iterative process that commences at project inception and runs through to the final design and project implementation (construction and operations). The impact prediction and evaluation stage were undertaken in June and July 2020 and the preliminary findings of the assessment are presented in this document.

6.1 INTRODUCTION

Chapter 2 provides an overview of the approach used in this ESIA process and details each of the steps undertaken to date. This chapter outlines the methods followed to identify and evaluate the impacts arising from the proposed project it includes the following:

- Details on the assessment guidance used to assess impacts;
- Lists the limitations, uncertainties and assumptions with regards to the assessment methodology;
- Details how impacts were identified and evaluated, and how the level of significance was derived; and
- Details how mitigation was applied in the assessment and how additional mitigation was identified.
- Details the Cumulative Impact Assessment (CIA) method.

6.2 ASSESSMENT GUIDANCE

The principal documents used to inform the assessment method are:

- International Finance Corporation standards and models, in particular Performance Standard 1, 'Assessment and management of environmental and social risks and impacts' (International Finance Corporation, 2017) (International Finance Corporation, 2012);
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013); and
- Namibian Draft Procedures and Guidance for ESIA and EMP (Republic of Namibia, 2008).

6.3 LIMITATIONS, UNCERTAINTIES AND ASSUMPTIONS

The following limitations and uncertainties associated with the assessment methodology were observed:

- Topic specific assessment guidance has not been developed in Namibia. A generic assessment methodology was applied to all topics using IFC guidance and professional judgement;
- International Finance Corporation CIA and Management Good Practice Handbook (International Finance Corporation, 2013) and,
- Namibian Draft Procedures and Guidance for EIA and EMP (Republic of Namibia, 2008).

A number of limitations and uncertainties were acknowledged during the ESIA process. In line with EIA best practice, assumptions have been made based on realistic worst-case scenarios, thereby ensuring that the worst-case potential environmental impacts are identified and assessed. Table 5 below contains the assumptions and uncertainties identified during the assessment process. Table 5 below contains the assumptions and uncertainties identified during the assessment process.

TABLE 6: SUMMARY OF LIMITATIONS, UNCERTAINTIES AND ASSUMPTION OF THE ESIA PROCESS

LIMITATION / UNCERTAINTY	ASSUMPTION
Program of activities	Activities involving excavations, preparation of the terrain and general earthworks, construction and eventual operations. It is assumed that construction activities will span a period of 30 months. Operations are planned to commence immediately thereafter.
Agreements	It is assumed that all agreements regarding connections to existing infrastructure and the necessary upgrade thereof, the use of facilities and support services are in place prior to the commencement of the project as per the development agreement between the Swakopmund council and proponent.
Tourism sector revival timeframe pending the outcome of the Covid-19 pandemic.	The global impact of travel restrictions between countries has essentially halted international tourism. Namibia has felt the impact and it is unknown when and under what conditions international travel may resume.
Anthropological Assessment of the site	The social assessment for this project is not meant to be viewed as an anthropologic assessment into the intricacies of cultural dynamics and its association with known landforms, buildings or other objects or activities, in this case, Erf 4747.
Wind dynamics including modification of wind patterns after building constructed	It is assumed that the proponent's technical and architectural teams have considered general wind dynamics along the coastline and the potential effects (if any) of the development on normal wind patterns during the design phases of the development, and therefore not considered further.
Property values	It is uncertain how the development will affect existing property values in and around the CBD area based on the current uncertainty within the local and global economic markets. Increased property values are expected to occur as a result of the development. A market study may be needed to assess this in detail.
Other projects	It is known to the consultant that other capital projects are planned within the municipal area. This has been incorporated into the cumulative impact assessment chapter of this report. However, only a qualitative assessment could be done due to a lack of information on scheduling information for all other projects.

Where uncertainties exist, a cautious approach has been applied, allowing the worst-case scenario for potential impacts to be identified.

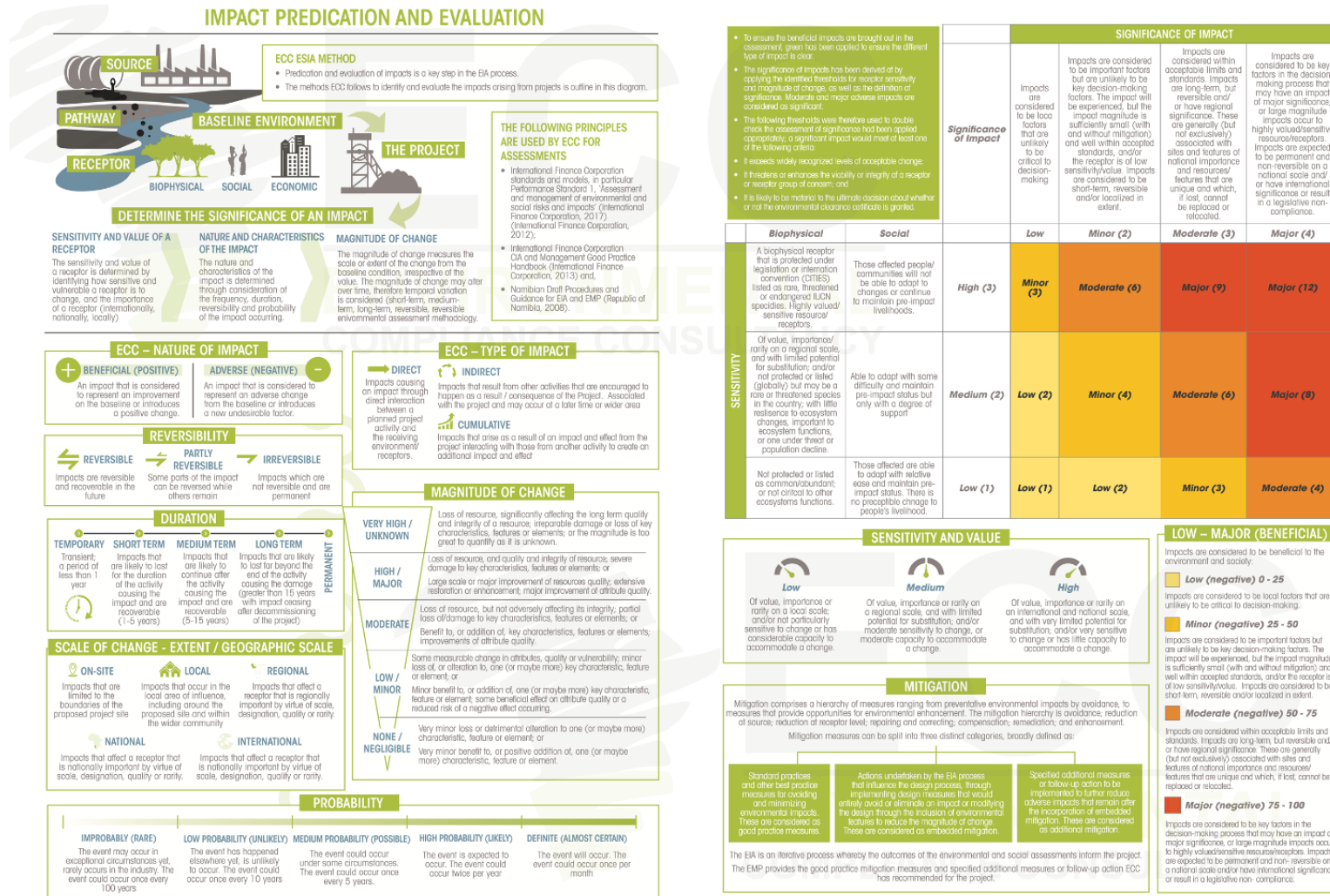


FIGURE 22 - ECCS IMPACT PREDICTION AND EVALUATION METHODOLOGY

6.4 CUMULATIVE IMPACTS

6.4.1 CUMULATIVE IMPACT ASSESSMENT METHOD

Cumulative impacts may arise as a result of other project activities or the combination of two or more projects in the project area. The Cumulative Impact Assessment (CIA) has been undertaken by applying the IFC CIA Good Practice Handbook (International Finance Corporation, 2013), which recommended a rapid CIA is undertaken. A rapid CIA takes into consideration the challenges associated with a good CIA process, which includes lack of basic baseline data, uncertainty associated with anticipated development, limited government capacity, and absence of strategic regional, sectoral or integrated resource planning schemes.

The five-step rapid CIA process has been followed:

- Step 1: Scoping - Determine spatial and temporal boundaries;
- Step 2: Scoping - Identify valued environmental and social receptors and identify reasonably foreseeable developments;
- Step 3: Determine present condition of valued environmental and social receptors (the baseline);
- Step 4: Evaluation of the significance of the cumulative impacts; and
- Step 5: Identification of mitigation measures to avoid or reduce cumulative impacts.

The following information has been applied to the assessment in line with the above steps and IFC Guidance:

- The spatial and temporal boundaries of the CIA are the extent of the site boundaries and the duration of the decline development and operation phases of the proposed project (up to months from the date of commencement);
- Valued environmental and social receptors that may be affected are those presented in Chapter 5. No additional ones have been identified through this CIA;
- The predicted future conditions of common environmental receptors have been taken into consideration in the assessment;
- The assessment findings presented in Chapter 7 have been applied to the CIA in combination with professional judgment and published environmental assessment reports; and
- A review of mitigation and monitoring measures has been undertaken, with any additional ones identified.

7 IMPACT ASSESSMENT FINDINGS AND PROPOSED MITIGATION MANAGEMENT MEASURES PROVIDED

7.1 INTRODUCTION

This chapter illustrates the envisioned impacts that could potentially occur as a result of the proposed development. The impacts identified herein were derived from applying the ESIA methodology for impact assessments as well as the professional experience base within ECC. These impacts are not considered exhaustive but are provided as guideline for the public review process. All additional impacts identified throughout the public review period by I&APs will be considered and incorporated into the final assessment report.

This chapter presents the findings of the ESIA for the proposed project as per the ESIA process, scope and methodology set out in Chapter 2 and Chapter 6. A range of potential significant impacts have been identified that may arise as a result of the proposed project. The aim of this section of the report is to focus on the significant impacts that may arise from this list. This chapter therefore only considers the significant impacts and or those that may have specific interest to the community and stakeholders. A summary of impacts that are not considered significant is discussed in Section 7.2.

Impacts that are considered significant or those of interest to the community and stakeholders are as follows:

- Socio-economic: Direct and Indirect Employment; and
- Social: The need for the project and its potential to impact the historical feel of the town.

For each potential significant or sensitive impact, a summary is provided which includes the activity that would cause an impact; the potential impacts; embedded or best practice mitigation (stated where required / available); the sensitivity of receptor that would be impacted; the severity, duration and probability of impacts; the significance of impacts before mitigation and after mitigation measures are applied.

7.2 IMPACTS NOT CONSIDERED SIGNIFICANT

As a result of an iterative development process, mitigation has been incorporated and embedded into the project, thereby designing out potential environmental and social impacts or reducing the potential impact so that it is not significant. Best practice has also played a role in avoiding or reducing potential impacts. The EMP provides best practice measures, management and monitoring for all impacts.

Impacts that have been assessed as not being significant are summarised in table 6 below and not discussed further.

TABLE 7 - SUMMARY OF NON-SIGNIFICANT POTENTIAL ENVIRONMENTAL AND SOCIAL IMPACTS

ENVIRONMENT OR SOCIAL TOPIC	POTENTIAL IMPACT	SUMMARY OF ASSESSMENT FINDINGS
Waste management	Visitor experience to the beachfront area.	Waste items and litter on the site and surrounding pedestrian sidewalks, park and parking lots. The proponent will develop a waste management plan to counter the impact of waste dispersal on and surrounding the site. Details are contained in the EMP.
Increased people/foot traffic in the immediate vicinity.	Increased footfall in the project area and surrounding vicinity.	Potential risk of negative social interactions to occur between the workforce and the public. An internal Health and Safety Management Plan will be developed by the client to address this topic and mitigation measures provided.
Air Quality	The operations of the proposed project building may discharge air pollution.	During operation, excavation activities will discharge some form of air pollution into the atmosphere and marginally affect the ambient air quality of the vicinity. Power efficient tools/machinery should be used. Dust has been included in the assessment, due to the risk it poses during construction and mitigation measures are assigned to it in the EMP.
Climate change adaptation	The potential for climate change to impact the proposed project – i.e., sea level rises and storm surges.	The proposed project building will not be adversely affected by potential climate change impacts due to sea-level rises which are predicted to be 6-25cm up to year 2030 (Robertson, Jarvis, Mendelsohn, & Swart, 2012) compared to the site elevation of 9-12m above sea level.
Climate change cause / contribute to	The proposed project contributing to climate change through the emissions of Green House Gasses.	The proposed project is considered to be of a medium size, with construction envisioned to be completed after 30 months from inception. The proposed project will implement energy efficiency technologies and will be built to consider that.

7.3 SCOPING ASSESSMENT FINDINGS

This section sets out the findings of the scoping assessment phase. Activities that could be the source of an impact have been listed, followed by receptors that could be affected. The pathway between the source and the receptor has been identified where both are present. Where an activity and or receptor has not been identified, an impact is unlikely, thus no further assessment or justification is provided. Where the activity, receptor and pathway have been identified, a justification has been provided documenting if further assessment is required or not required.

Due to the nature and localised scale of the project, and the environmental context, the potential environmental risks are limited and unlikely to be significant whilst the social effects present a greater significance. The only area where uncertainty remained during the scoping phase was the potential cumulative effects on human receptors from the predicted use of the building and correlating impact on the area's sense of place.

The receptors are a sector of the local resident population who have become accustomed to enjoying ocean views without any obstructions from this (proposed development site) vantage point as well as functional outdoor use of the space prior to its closure to those living in close proximity to the site.

7.4 SOCIO-ECONOMIC ENVIRONMENT

The term socio-economic impact assessment embraces both social impacts and economic impacts. Economic impacts include issues such as employment, changes in economic activity, and increased expenditure. The significant economic impact or impact that holds specific interest to the community and stakeholders is employment creation and is summarised in this section.

7.4.1 EMPLOYMENT

Whilst Namibia has a high unemployment rate, the Erongo Region has one of the highest employment rates in Namibia. In Swakopmund, the majority of employment is through the tourism sector, which to a large degree is already developed, but socially not diverse. Mining in the Erongo region also employs a large number of local residents. The national value and sensitivity of employment is considered to be high as it is of importance to the country and the local economy.

DIRECT EMPLOYMENT: CONSTRUCTION

Approximately 2500-3000 jobs will be generated during the construction phase. The proponent will employ local people wherever possible and feasible to fulfil the roles. Construction work will take approximately 30 months; the beneficial impact of creating 2500-3000 temporary jobs will result in a temporary impact with a low magnitude of change. A minor beneficial impact on the community and economy is therefore expected.

DIRECT EMPLOYMENT: OPERATION

Approximately 300 permanent jobs (skilled and semi-skilled) will be created in the operational stage as a direct result of the project, with the anticipated creation of downstream jobs such as goods services, and contractor works expected throughout the lifespan of the project. The magnitude of change during operation is considered as low but has long term effects thereby resulting in a minor beneficial impact on the community and economy.

SUMMARY OF EMPLOYMENT IMPACTS

TABLE 8: – SUMMARY OF IMPACTS TO LOCAL ECONOMY

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Construction works - general	<ul style="list-style-type: none"> - Community - Job seekers - Local economy 	Creation of 2500-3000 jobs over a 30-month period	Beneficial Direct Partially Reversible Regional Short Term Reversible	Medium	Minor	Beneficial Minor (9)
Operations of the proposed project	<ul style="list-style-type: none"> - Community - Job seekers - Local economy 	Creation of 300 jobs	Beneficial Direct Irreversible Regional Long Term Reversible	Medium	Minor	Beneficial Minor (9)
Downstream economic injection (multiplier effect)	<ul style="list-style-type: none"> - Local economy (goods and services trade businesses) 	Financial injection into goods and services trading businesses in the local economy	Beneficial Indirect Partially Reversible Local Long Term Reversible	Medium	Minor	Beneficial Minor (9)

7.5 SOCIAL ENVIRONMENT

7.5.1 NOISE IMPACTS FROM THE CONSTRUCTION PHASE

Construction activities and related traffic in the vicinity will increase noise levels emanating from the site. The duration of construction activities is envisioned to last for 30 months and would therefore exert an impact on visitors to amenities neighbouring the development site. The main sources of noise will be from:

- Construction vehicles moving on site;
- Limited demolition activities;
- Earthwork activities; and
- General construction activities such as drilling and loading and unloading material.

Human receptors surrounding the proposed development site are those that will be most likely affected by the construction works. Receptors within 200m of the site boundary fence of the proposed development will most likely also experience disruption from noise, however noise will reduce the further away from the site the receptor is. Receptors within the 200m radius of the proposed project site includes the residents of the An der Welle complex north of Erf 4747, which does not have a daily occupancy rate of 100%. This accommodation complex consists mostly of holiday units and far less of residential units.

TABLE 9: NOISE IMPACTS FROM THE CONSTRUCTION ACTIVITIES

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
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Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Construction activities and increased traffic	– Local residents surrounding the project site: Noise levels increasing from ambient noise levels	The local residents surrounding the proposed project site daily are likely to experience an increase in noise levels due to general construction activities, and local residents utilising the Strand Street along the site are also likely to experience an increase in noise due to increased traffic levels. Severance to traffic flow and increase in driver stress, which may lead to accidents.	Adverse Direct reversible Moderate Short-term local Possible	High	Moderate	Moderate (6)

7.5.2 SENSE OF PLACE: SENSITIVE RECEPTORS

The town of Swakopmund is dominated by a culture of tourism and its economy and regional identity is directly linked to the monetization of this sector. The local residents surrounding the proposed project site are likely to experience an increase in noise levels due to the operations of the development, and residents along the major access route to the site are also likely to see an increase in noise due to increased traffic levels.

The proposed development on Erf 4747 will modify the visual landscape of the mole area. The ocean view from Strand Street will be obstructed by the height and width of the building to a degree. Residents and tourists alike have become accustomed to experiencing unobstructed ocean views intermittently from the strand street vantage point. Historically, this site had infrastructure built on it, therefore it cannot be assigned as a pristine and undisturbed area. Nevertheless, factors that were considered were the access criteria (public space) to the operational building, the allowable use of the building, the land-based access via (around and through) the building to the beach area and the predicted visual impact caused by the building. These factors contribute to the sense of place of the site and are assessed in table 19 below. The tourism spectrum of the mole area is expected to be amplified with the addition of this structure, which dovetails with the vision of the local economic development strategy adopted by the Swakopmund council to enhance the beachfront area and develop Swakopmund as the preferred tourist destination in Namibia.

TABLE 10: IMPACT ASSESSMENT OF THE PROJECT ON SENSE OF PLACE

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Historical feel of the town tied to its sense of place	– Community (beach goers i.e., domestic and international tourists)	Modified landscape impacting on the mole’s sense of place perception	Adverse Direct Partly-reversible Negligible Moderate Medium-term Local Possible	Low	Moderate	Minor (3)

The impact will be experienced, but its magnitude is sufficiently small (with and without mitigation) and well within accepted standards. The receptor is of low sensitivity/value because of its non-vulnerability and its established tolerance to change.

7.5.3 TRAFFIC IMPACTS FROM CONSTRUCTION ACTIVITIES

During construction, increased traffic to and from the project site may disrupt normal traffic flow by residents and the community alike. Severance to local residents will be felt as the need to find alternative routes through the area may be necessitated, increasing traffic flow times and potentially causing some form of confusion on the roads which may then cause accidents. The developer is responsible for ensuring a practical traffic management plan is implemented to manage the potential effects on traffic conditions surrounding the site so as to reduce the level of significance on sensitive receptors. A traffic impact assessment is also recommended to determine baseline conditions and suitable mitigation measures to manage traffic related impacts.

TABLE 11: IMPACT ASSESSMENT OF THE PROJECT ON TRAFFIC

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Traffic flow (community and local residents)	– Community – Local residents – Visitors to the area	Disruption to normal traffic flow from pre-construction baseline conditions	Adverse Direct Partly-reversible Negligible Moderate Short-term Local Likely	High	Moderate	Minor (4)

7.5.4 VISUAL IMPACTS ASSOCIATED WITH THE PROPOSED DEVELOPMENT

Based on the viewshed diagrams below, the building can be seen at a distance of about 150 metres away from an observation height of 2m and above, above ground level. The visual sphere is represented in red. The viewshed analysis was based on the height specifications as represented in figure 23 below.

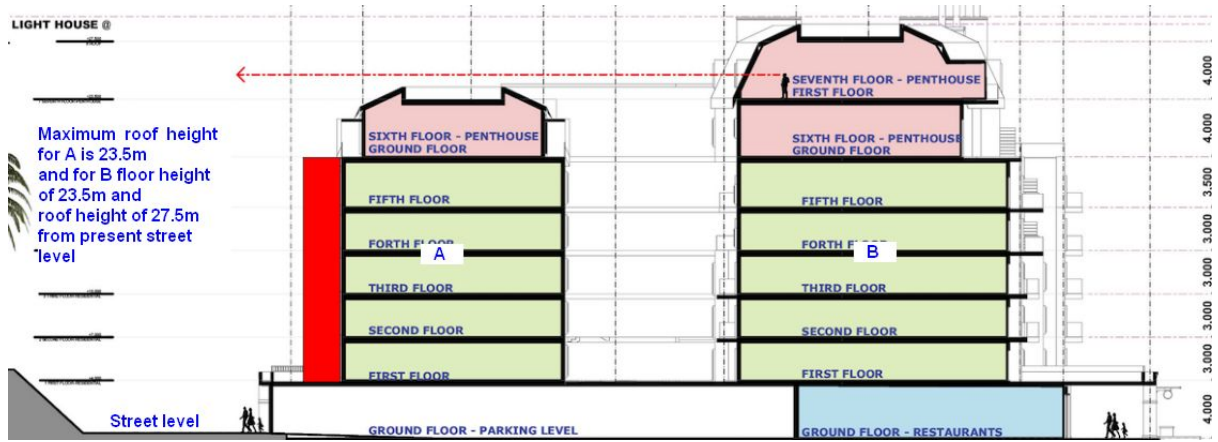


FIGURE 23 - ROOF HEIGHT FROM GROUND LEVEL

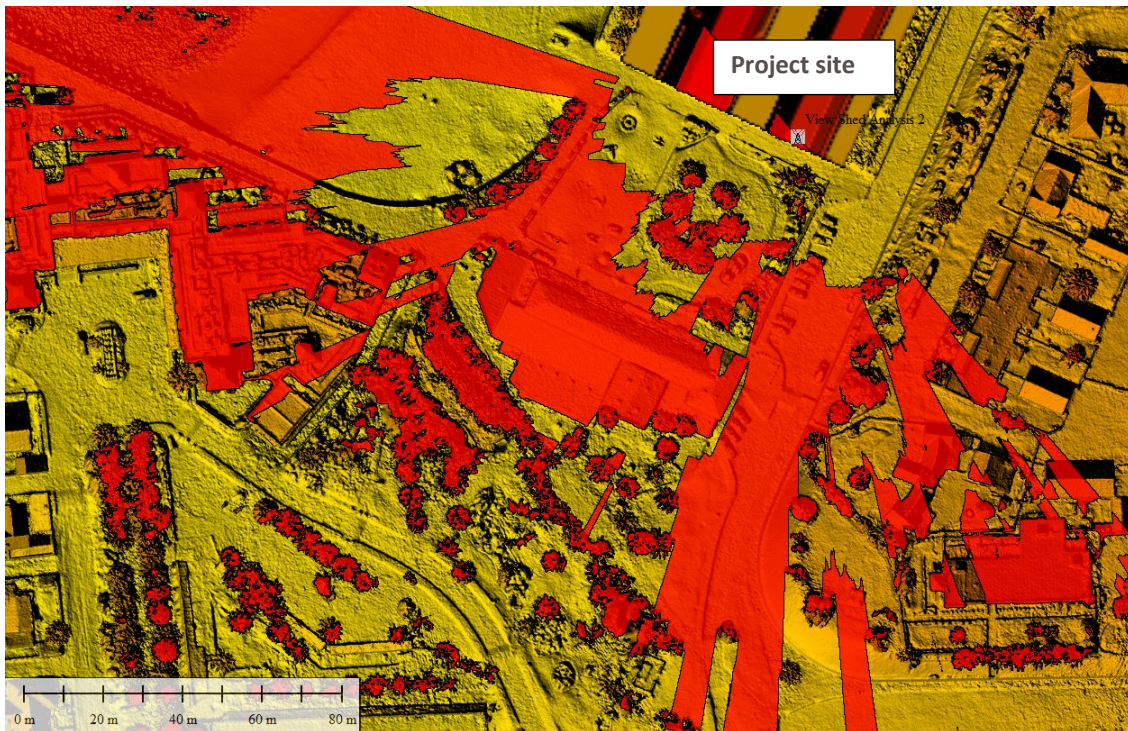


FIGURE 24 - VIEWSHED OF BUILDING IN AN EASTERLY DIRECTION FROM AN AERIAL PERSPECTIVE

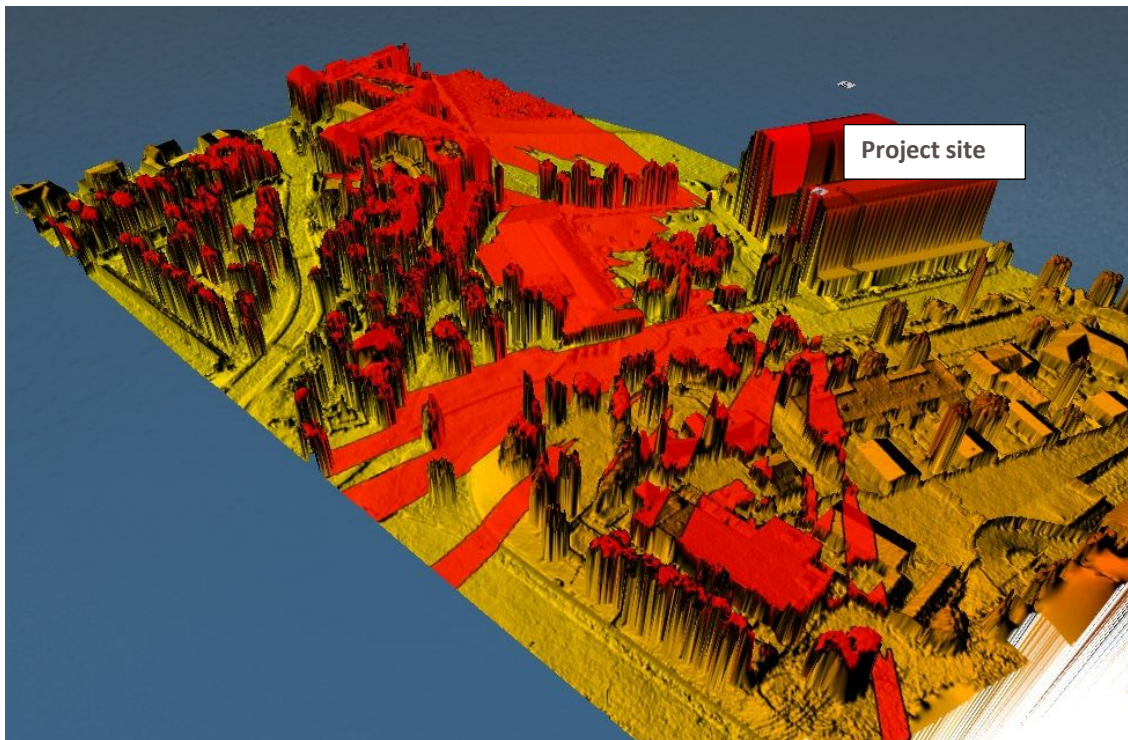


FIGURE 25 - VIEWSHED OF BUILDING FROM A NORTH EASTERLY VANTAGE POINT

CONSTRUCTION PHASE:

Erf 4747 is already barricaded by a corrugated steel fence, which effectively hide the barren scenery inside the Erf. Construction machinery, tall and elongated plant equipment (i.e., cranes) and construction vehicles will penetrate the horizon and over and above the top of the fence. This will cause a visual disturbance to onlookers and motorists passing the site. The impact will be localised and remanded to the site alone. As the building develops higher with each new floor level constructed the visual sphere will broaden and extend farther away from the site.

OPERATIONAL PHASE:

After construction has ended, the completed building will remain as a permanent feature in the seascape of the Mole basin. The visual amenity of the building will fit in with the surrounding architecture on buildings in the same vicinity. However, the size of the building and its height will introduce a new visual component in an area that is characteristically modest in terms of size and density.

TABLE 12: SUMMARY OF POTENTIAL VISUAL IMPACTS

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Construction of the proposed development	<ul style="list-style-type: none"> - Community - Local residents - Visitors to the area 	Disruption to normal visual baseline conditions of the seascape	Adverse Direct Reversible Negligible Moderate Short-term Local Likely	Medium	Moderate	Minor (4)
Operation of the proposed development	<ul style="list-style-type: none"> - Community - Local residents - Visitors to the area 	Disruption to normal visual baseline conditions of the seascape	Adverse Direct Reversible Negligible Moderate Short-term Local Likely	Medium	Moderate	Minor (4)

7.5.5 SHADOW EFFECT SIMULATION FINDINGS ON THE SURROUNDING ENVIRONMENT

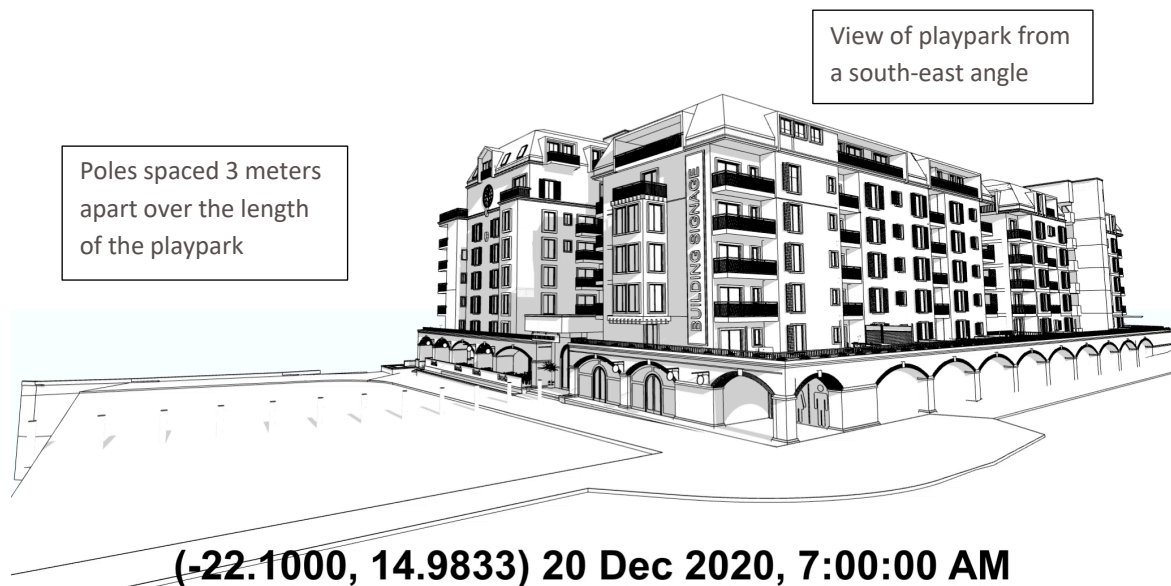
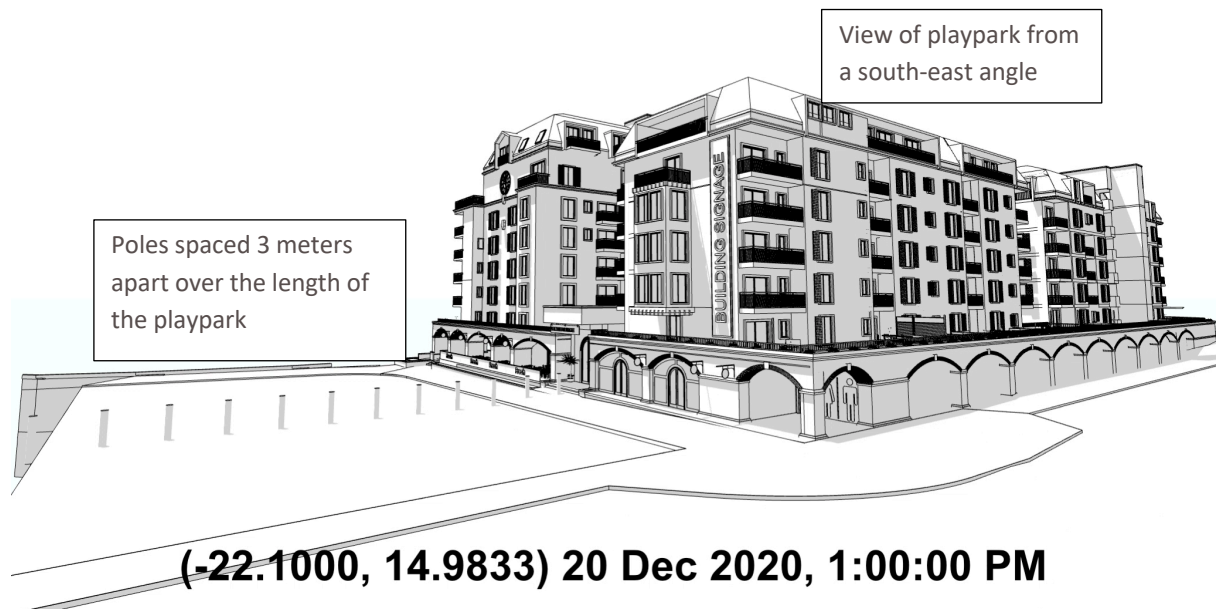
A shadow simulation was conducted bi-monthly from February 2019 to December 2019 by Chamberlain and Associates to map the exact shadow pattern cast throughout the year by the proposed building. The results of which are displayed in the simulation report in **Appendix G**. Shadow recordings were made on three different time stamps (morning, noon and afternoon) per 24 hours for every 2nd month ending in December 2019.

Based on the images generated throughout the assessment period it is evident that shadows will be cast on the surrounding area because of the height of the building. However, the directional influence of casted shadow overlays is mostly toward a west and south westerly direction and not east as was generally perceived. The farthest point in a westerly direction the shadow travels is the shoreline. This shadow overlay across the beach area is concentrated to morning hours only with the greatest overlay distance recorded between 08:47-08:59 AM for this time stamp. As noon approaches, the shadow overlay retracts to the south side of the building with a very short overlay onto the open park area next to it. By afternoon (between 15:59 -16:59 PM)

the shadow overlay from the building covers a portion of Strand street, the immediate four-way intersection between Strand street and Theo Ben Gurirab street, as well as the entrance to the seaside parking lot leading from Theo Ben Gurirab Street to the condominiums located north of the proposed building.

7.5.6 SHADOW SIMULATION OF EFFECTS ON PLAYPARK SOUTH OF THE PROPOSED DEVELOPMENT

The below screenshots were taken from a desktop shadow simulation software tool by the architects to map the movement of the buildings casted shadow over the playpark. Shadow studies allows one to view an entire project or part thereof in a real-life situation by choosing a geographic location and defining the time period over which you wish to examine lighting and shadow casting. The ARCHICAD software uses the Solar Position Algorithm from the National Renewable Energy Laboratory (USA) to calculate the solar zenith and azimuth angles. The set of data charts are categorised into summer months represented by December and winter months represented by June.



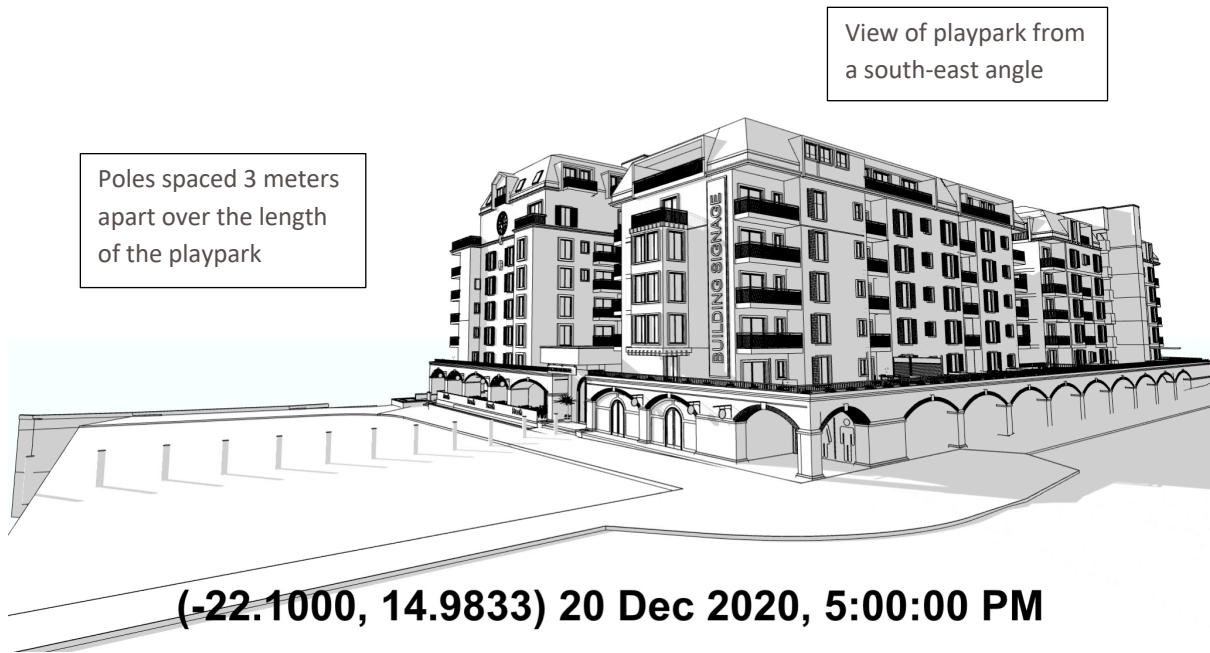
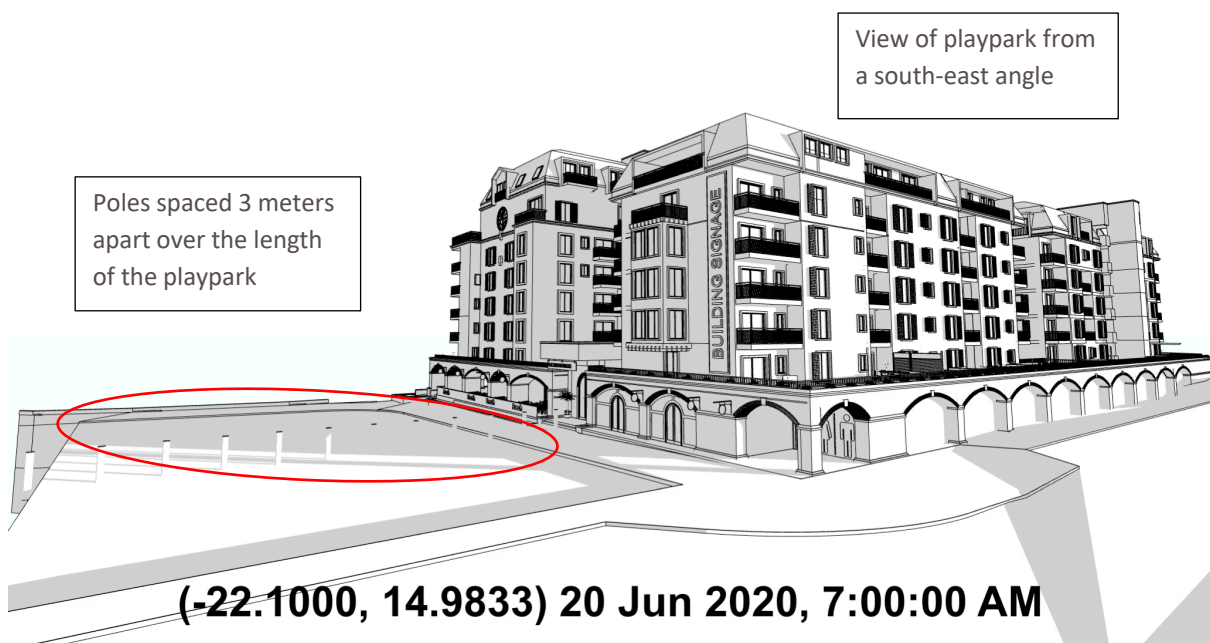


FIGURE 26 - SHADOW SIMULATION AT 3 DIFFERENT TIMESTAMPS IN DECEMBER (REPRESENTING THE SUMMER MONTHS)

INTERPRETATION OF DATA

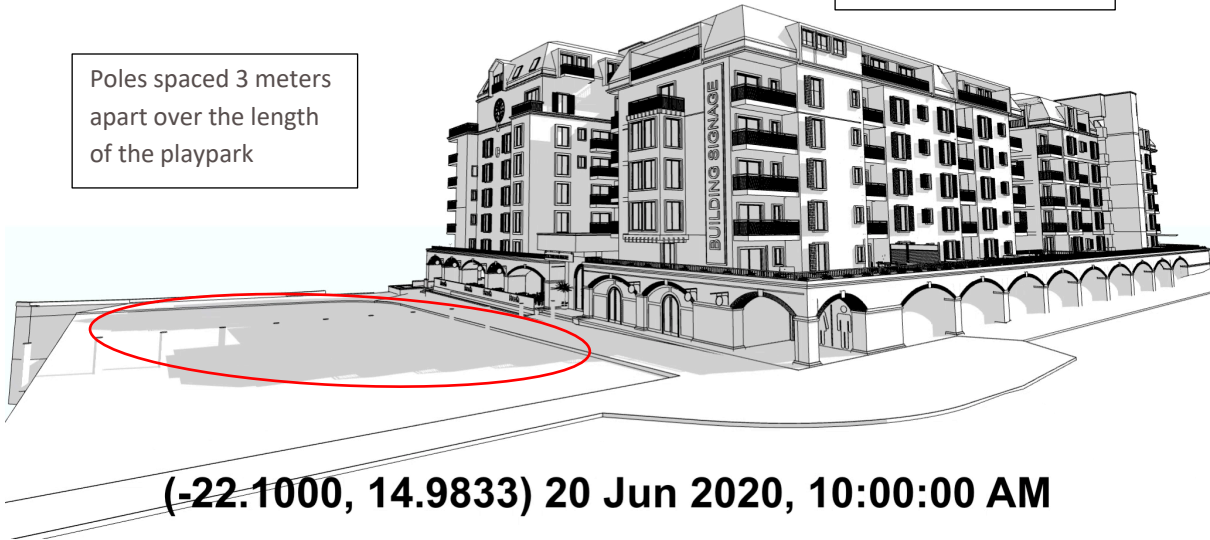
From the images above it is clear that during summer months, the playpark will not be cast in any shadow overlay caused by the proposed development. The month of December is a representative sample of baseline conditions for the entire summer season and its results are therefore accepted.

REPRESENTATIVE SAMPLE FOR WINTER MONTHS



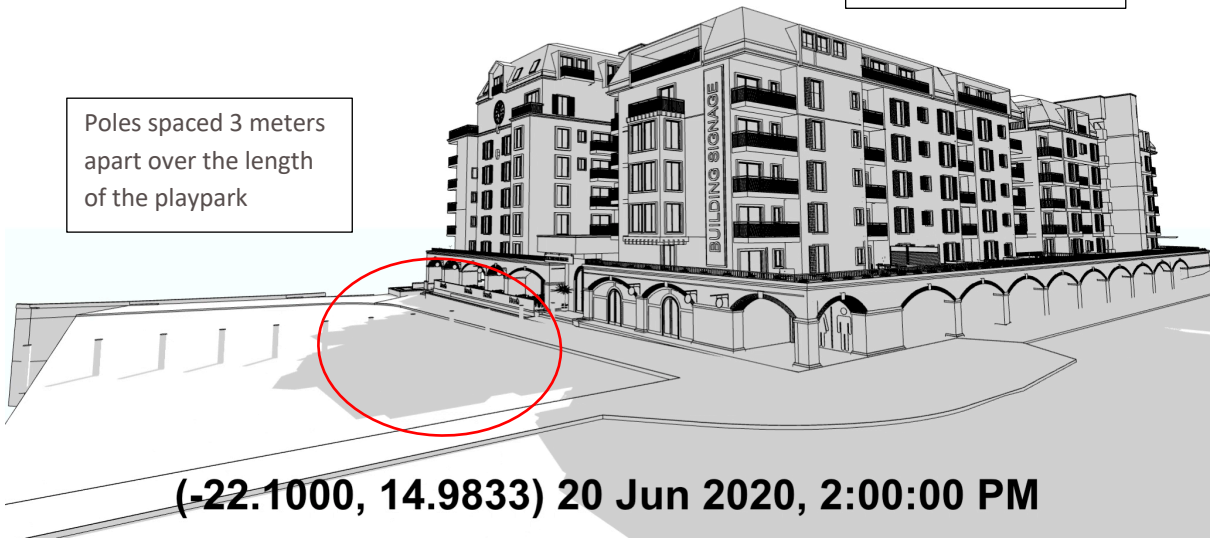
View of playpark from
a south-east angle

Poles spaced 3 meters
apart over the length
of the playpark



View of playpark from
a south-east angle

Poles spaced 3 meters
apart over the length
of the playpark



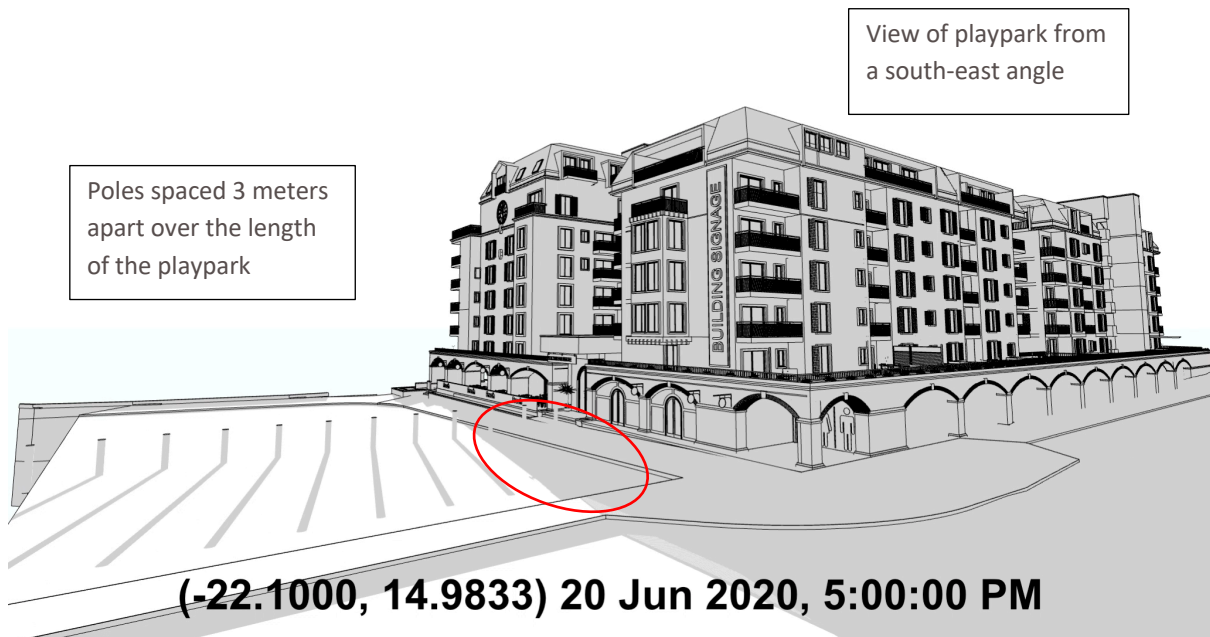


FIGURE 27 - SHADOW SIMULATION AT FOUR DIFFERENT TIME STAMPS IN JUNE (REPRESENTING WINTER MONTHS)

INTERPRETATION OF DATA

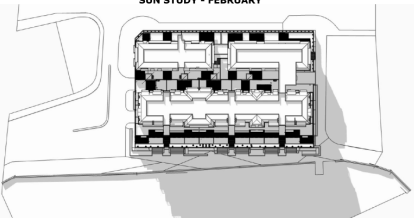
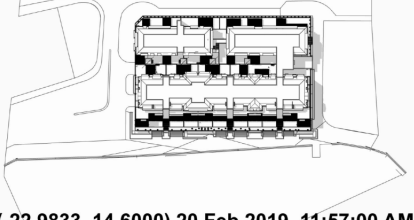
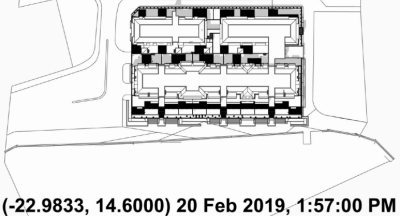
From the simulations shown above it is clear that during winter months, the playpark will be cast in shadow overlays caused by the proposed development. The furthest shadow overlay occurs at 7AM in the morning, while at 2PM the shadow has retracted to about 18 meters from the side of the building and at 5PM only covering a very small edge of the playpark in the southeast corner. The month of June is a representative sample of baseline conditions for the entire summer season and its results are therefore accepted. It is important to note that outside baseline conditions during this season is characterised by strong east winds.

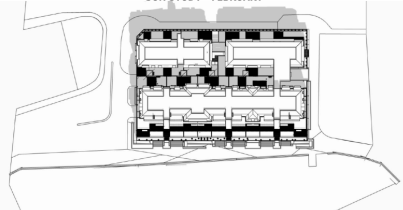
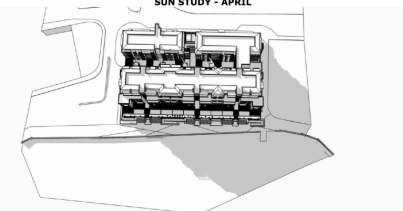
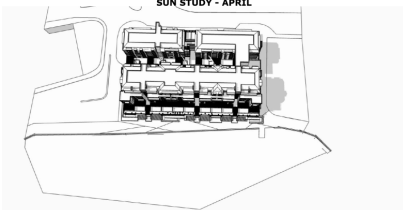
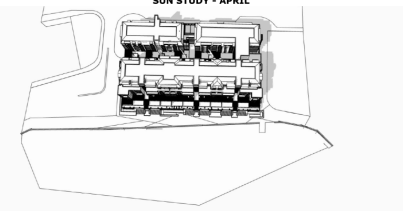

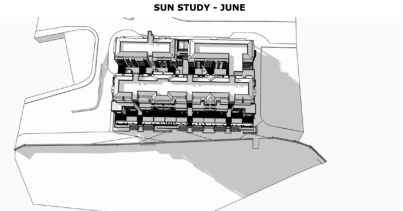
TABLE 13: IMPACTS FROM SHADOW EFFECTS AROUND THE BUILDING AND ON THE PLAYPARK

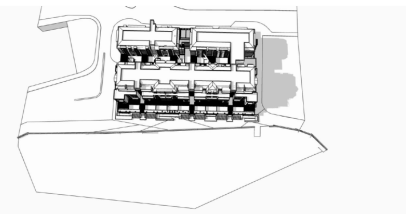
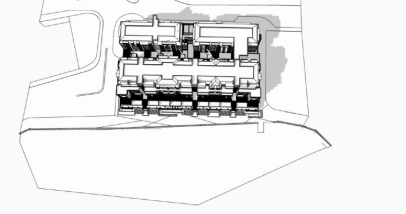

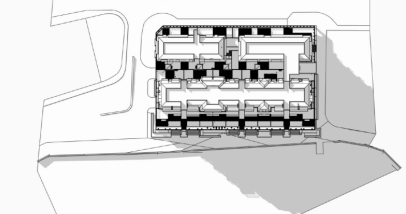
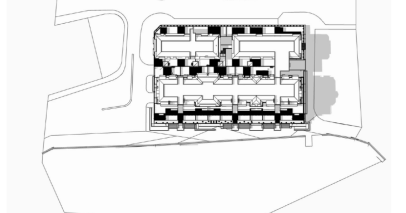
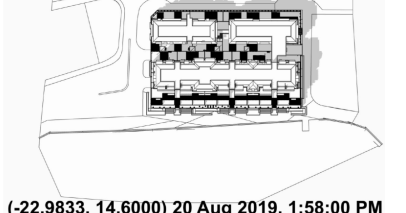
Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Shadow trajectory for the playpark (Summer months)	- Visitors to the playpark	Perceived shadow overlay on beach, south and east of the site	Adverse Indirect Non-reversible Negligible Moderate Permanent Local Possible	Low	Low	Low (1)
Shadow trajectory for the playpark (Summer months)	- Visitors to the playpark	Perceived shadow overlay on beach, south and east of the site	Adverse Direct Non-reversible Negligible Moderate Permanent	Minor	Low	Low (2)

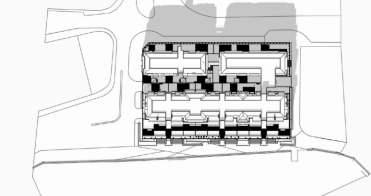
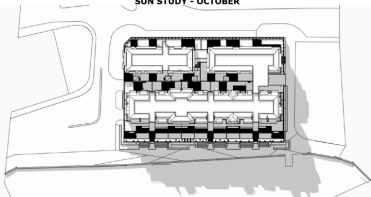
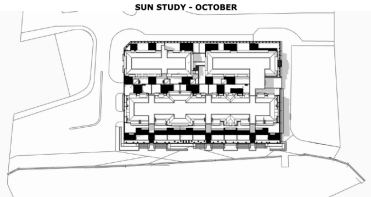
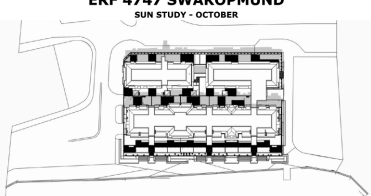
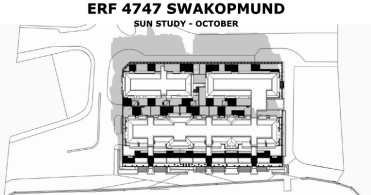
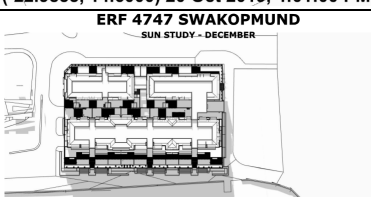
Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
			Local Possible			
Shadow trajectory (over a 12-month period)	- Community (beach goers and visitors to any of the amenities surrounding the site)	Perceived shadow overlay on beach, south and east of the site	Adverse Direct Non-reversible Negligible Moderate Permanent Local Possible	Medium	Low	Minor (4)

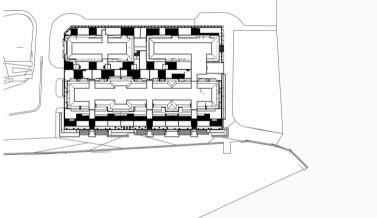
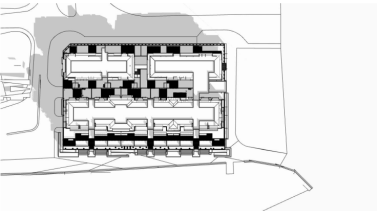
TABLE 14: SUN SIMULATION RESULTS FOR A 12 MONTH PERIOD

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
February	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - FEBRUARY</p>  <p>(-22.9833, 14.6000) 20 Feb 2019, 8:57:00 AM</p>
	NOON	<p>ERF 4747 SWAKOPMUND SUN STUDY - FEBRUARY</p>  <p>(-22.9833, 14.6000) 20 Feb 2019, 11:57:00 AM</p>
	MID-DAY	<p>ERF 4747 SWAKOPMUND SUN STUDY - FEBRUARY</p>  <p>(-22.9833, 14.6000) 20 Feb 2019, 1:57:00 PM</p>

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	PM	<p>ERF 4747 SWAKOPMUND SUN STUDY - FEBRUARY</p>  <p>(-22.9833, 14.6000) 20 Feb 2019, 3:57:00 PM</p>
April	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - APRIL</p>  <p>(-22.9833, 14.6000) 20 Apr 2019, 8:52:00 AM</p>
	NOON	<p>ERF 4747 SWAKOPMUND SUN STUDY - APRIL</p>  <p>(-22.9833, 14.6000) 20 Apr 2019, 11:52:00 AM</p>
	MID-DAY	<p>ERF 4747 SWAKOPMUND SUN STUDY - APRIL</p>  <p>(-22.9833, 14.6000) 20 Apr 2019, 1:52:00 PM</p>
	PM	<p>ERF 4747 SWAKOPMUND SUN STUDY - APRIL</p>  <p>(-22.9833, 14.6000) 20 Apr 2019, 3:52:00 PM</p>
June	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - JUNE</p>  <p>(-22.9833, 14.6000) 20 Jun 2019, 8:47:00 AM</p>

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	NOON	<p>ERF 4747 SWAKOPMUND SUN STUDY - JUNE</p>  <p>(-22.9833, 14.6000) 20 Jun 2019, 11:47:00 AM</p>
	MID-DAY	<p>ERF 4747 SWAKOPMUND SUN STUDY - JUNE</p>  <p>(-22.9833, 14.6000) 20 Jun 2019, 1:47:00 PM</p>
	PM	<p>ERF 4747 SWAKOPMUND SUN STUDY - JUNE</p>  <p>(-22.9833, 14.6000) 20 Jun 2019, 3:47:00 PM</p>
August	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - AUGUST</p>  <p>(-22.9833, 14.6000) 20 Aug 2019, 8:58:00 AM</p>
	NOON	<p>ERF 4747 SWAKOPMUND SUN STUDY - AUGUST</p>  <p>(-22.9833, 14.6000) 20 Aug 2019, 11:58:00 AM</p>
	MID-DAY	<p>ERF 4747 SWAKOPMUND SUN STUDY - AUGUST</p>  <p>(-22.9833, 14.6000) 20 Aug 2019, 1:58:00 PM</p>

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	PM	<p>ERF 4747 SWAKOPMUND SUN STUDY - AUGUST</p>  <p>(-22.9833, 14.6000) 20 Aug 2019, 3:58:00 PM</p>
October	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - OCTOBER</p>  <p>(-22.9833, 14.6000) 20 Oct 2019, 9:01:00 AM</p>
	NOON	<p>ERF 4747 SWAKOPMUND SUN STUDY - OCTOBER</p>  <p>(-22.9833, 14.6000) 20 Oct 2019, 12:01:00 PM</p>
	MID-DAY	<p>ERF 4747 SWAKOPMUND SUN STUDY - OCTOBER</p>  <p>(-22.9833, 14.6000) 20 Oct 2019, 2:01:00 PM</p>
	PM	<p>ERF 4747 SWAKOPMUND SUN STUDY - OCTOBER</p>  <p>(-22.9833, 14.6000) 20 Oct 2019, 4:01:00 PM</p>
December	AM	<p>ERF 4747 SWAKOPMUND SUN STUDY - DECEMBER</p>  <p>(-22.9833, 14.6000) 20 Dec 2019 at 08:49:00</p>

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	MID-DAY	<p style="text-align: center;">ERF 4747 SWAKOPMUND SUN STUDY - DECEMBER</p>  <p style="text-align: center;">(-22.9833, 14.6000) 20 Dec 2019 at 13:09:00</p>
	PM	<p style="text-align: center;">ERF 4747 SWAKOPMUND SUN STUDY - DECEMBER</p>  <p style="text-align: center;">(-22.9833, 14.6000) 20 Dec 2019 at 16:59:00</p>

7.6 FURTHER CONSIDERATION: CUMULATIVE IMPACTS

The EIA Regulations clearly states that cumulative impacts should be considered as part of the EIA for a proposed project. Good practice requires that, as a minimum, cumulative impacts are assessed during the ESIA process.

Cumulative impacts can arise when a single resource or receptor is affected by more than one impact from the proposed project. For example, a local resident could be affected by noise from construction vehicles and dust from ground excavation during the construction stage. In isolation, the impacts of noise and dust may be insignificant, however when combined, the impacts on the local resident may result in a significant impact. **This is termed 'Intra- Project Cumulative Impacts'.**

Cumulative impacts may also arise as a result of the combination of two or more projects. A receptor could be impacted by similar types of impact from different developments or a receptor could be impacted by different types of impact from different developments. This could occur at the same time or at different times. **This is termed Inter- Project Cumulative Impacts.** An example of this is as follows; noise generated during the construction stage of the proposed project may not cause a significant effect in isolation; however, a sensitive receptor (e.g., local resident) may be significantly impacted when noise from the proposed project is combined with noise generated from other projects. These projects could be future projects or existing projects which may have ongoing influences on the environment in the future and are expected to interact with the same environmental and social receptors as the proposed project (International Finance Corporation, 2013).

Cumulative impacts have a wide temporal and spatial scope, and are not restricted to a local area nor need to happen at the same time. It is therefore, crucial to identify a suitable study and assessment area, as well as a timeframe to assess. Cumulative impacts can also be vast and complicated; therefore it is important to focus on the significant impacts.

The six-step rapid CIA process has been followed:

- Step 1: Scoping - determine spatial and temporal boundaries;
- Step 2: Scoping - identify valued environmental and social receptors and identify reasonably foreseeable developments;
- Step 3: Determine present condition of valued environmental and social receptors (the baseline);

- Step 4: Assessment of cumulative impacts and evaluation of the significance of the cumulative impacts; and
- Step 5: Identification of mitigation measures to avoid or reduce cumulative impacts.

7.6.1 INTRA-PROJECT CUMULATIVE IMPACTS

The proposed project may result in a receptor or resource being affected by more than one impact arising from same activity and the impacts will act together to result in a combined effect. Whilst this type of CIA is not considered in the IFC assessment guidance, it is an internationally widely accepted method to ensure potential combined impacts of a development are understood and mitigated, which may be missed from the 'general' assessment.

An example of an intra-project cumulative impact within the proposed project is as follows:

During the construction phase, there will be noisy activities such as ground excavation which could generate dust. A site boundary fence would be erected, plant and machinery will be distributed across the site, and construction traffic will access the site via the local roads. If all of these activities were undertaken at the same time, a local resident living or working opposite the site would be exposed to an increase in noise levels, dust, and, views may be altered from a semi- open green space to a construction site. It may be a nuisance due to increased traffic obscuring normal traffic routes.

The cumulative impacts that may arise as a result of the proposed project are provided in Table 14 and Table 15. The impacts in the second column ('Impacts') are those presented in Sections 7.4 to 7.5, which includes embedded and best practice mitigation. The significance of the potential cumulative impacts (third column) has been identified using the assessment methodology presented in Chapter 6 and the significance matrix as well as professional judgment. These impacts include embedded and best practice mitigation that has already been identified in the assessment. Mitigation that has been identified through the assessment is listed in the last column to demonstrate the measures the project is taking to minimize the impacts as much as possible. Any additional mitigation is discussed after the tables.

During operations, the assessment has identified that there is potential to cause moderate impacts on the local residents and community. The majority of these impacts are surrounding the changes to the local developed environment and the perception of the impact from person to person. Humans are adaptable and therefore the severity of these impacts will reduce over time as residents become accustomed to their new surroundings. Environmental monitoring will be undertaken through the construction and operational phases of the proposed project.

TABLE 15: INTRA-PROJECT CUMULATIVE IMPACTS ASSESSMENT TABLE

RECEPTOR	IMPACTS			SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT	
Local residents and local community surrounding the project site.	<p>Activity: Increased traffic and general construction activities both resulting in increased noise levels and generation of dust from the project site.</p> <p>Impact: Local resident's amenity affected.</p>	<p>Activity: Increase in construction traffic and to the local flow of traffic movement.</p> <p>Impact: Severance to local residents, increased travel times on affected roads (Strand street and Theo Ben Gurirab Avenue) and increased driver stress.</p>	<p>Activity & Impact: Introduction of construction plant equipment, machinery, construction vehicles causing a visual impact to local residents and the community.</p> <p>Impact: Local resident's sense of place will be altered.</p>	Moderate	Traffic calming measures and road detours, design of the development, soft landscaping, new and upgraded facilities, downscale major noise generating activities during the festive holiday period, seize construction during the builder's holiday period.	
	MINOR ADVERSE SIGNIFICANCE	MODERATE ADVERSE SIGNIFICANCE	MODERATE ADVERSE SIGNIFICANCE			
Tourism Industry (visitors to the beachfront and museum)	<p>Activity: Increased noise background levels due expected to increased traffic on Strand Street.</p> <p>Impact: Heightened nuisance effect on the local community and visitors to the beachfront and museum, local tourism amenity and sense of place affected.</p>	<p>Activity: General construction site and visible machinery, plant equipment, trucks, etc.</p> <p>Impact: The Mole's seascape character altered and impact visitor amenity.</p>	<p>Activity: Excavations and earthmoving works causing solid particles (dusts) to become airborne and deposited outside construction site.</p> <p>Impact: Nuisance and health issues (potentially)</p>		Moderate	Restricted hours, traffic calming measures, defined routes to and from the site, maintain boundary fence, soften boundary fence with graphic visuals, scheduling of noisy activities, notice to community prior to noisy activities, dust suppression techniques, shielding of scaffolding with nets, avoid certain activities during high wind periods, avoid work during public holidays, seize earthworks and scale down ancillary works during the festive season.
	MINOR ADVERSE SIGNIFICANCE	MODERATE ADVERSE SIGNIFICANCE	LOW ADVERSE SIGNIFICANCE			

RECEPTOR	IMPACTS	SIGNIFICANCE OF IMPACT	IMPACT MANAGEMENT
<p>The museum, craft market and street café in front of the Museum</p>	<p>Activity: Construction activities on the proposed project site. Noise and dust generated.</p> <p>Impact: Potential reduction of patron visits to amenities and thereby reduced revenue.</p> <p>MINOR ADVERSE SIGNIFICANCE</p>	<p>Minor</p>	<p>Continued access along southern and western site boundary fence on the boardwalk, scheduling of noisy activities in collaboration tourism establishment's visitor times to avoid peak times and good housekeeping around the site.</p>

The local residents and community are likely to be moderately impacted on as a result of the combined impacts of the proposed project. The construction phase is expected to last for 30 months. During construction an environmental and social manager will be available to consult with and deal directly with concerns and complaints raised. The environmental and social manager will work with the community to manage impacts from the proposed development during both construction and operation.

During construction, the craft market, the street café and the Museum are likely to experience minor adverse impacts. Whilst the nature of the impacts will be of a short duration and the businesses will likely see long term benefits when the proposed project becomes operational, the proponent and the developer will work together to identify further mitigation measures that would reduce the significance of the impact on these receptors even further.

7.6.2 INTER PROJECT CUMULATIVE IMPACTS

There exists a greater potential for cumulative socio-economic effects when the proposed development is considered in conjunction with the construction of other planned and reasonably defined projects within the greater Swakopmund townlands, managed by the Swakopmund Municipality.

The shared receptor base (local residents and community) for this development and those planned will continue to be affected in the medium term as these projects are developed. The following projects have been identified to be implemented in Swakopmund:

1. Projects in close proximity to the proposed development:

- The proposed development of a one-storey ablution block structure north of Erf 4747 to the value of N\$ 3 300 000. Implementation date unknown.

2. Projects further away from the proposed development:

- The proposed development of road networks on Portion 180 and 181 of Remainder of Portion B of Swakopmund Town and Townlands No. 41 (adjacent to Maturura, Mile 4 and Vineta). Currently considered for environmental clearance.
- Various housing developments in low-income neighbourhoods (i.e., DRC) as well as bulk services infrastructure developments throughout the Swakopmund municipal area to the value of N\$ 278 000 000 for the 2019/2020 financial year. Two strategic planning documents have been commissioned by the local authority for this purpose. These are:
 - The Master Infrastructure Plan (MIP): The tender was advertised; and
 - The Coastal Sensitivity Plan (CSP): The tender was advertised.

The strategic frameworks that these documents will provide will aid targeted development and upgrading of bulk services networks throughout Swakopmund, including the mole area. A point of concern has always been the outdated water, storm water and sewage reticulation systems in Swakopmund that cannot function optimally at an occupancy rate of more than 100% during holiday periods. Therefore, the combined socio-economic benefits of an upgraded services network will greatly enhance the livelihoods of residents and the community alike.

The identified cumulative impacts for this development:

- Socio-economic benefit to local residents and the community from an investment of N\$350 000 000 from the proposed development, as well as a N\$278 000 000 bulk services and housing development investment by the municipality including the beachfront ablution blocks north of Erf 4747; and
- The additional load on the current services of Swakopmund.

TABLE 16: INTER-PROJECT CUMULATIVE IMPACTS FOR PROJECTS IN THE DIRECT VICINITY OF THE PROPOSED DEVELOPMENT

RECEPTOR	PROPOSED PROJECT ACTIVITY	PROPOSED PROJECT POTENTIAL IMPACT	OTHER PROJECTS	SIGNIFICANCE OF COMBINED IMPACT	SIGNIFICANCE OF COMBINED IMPACT AFTER ADDITIONAL MITIGATION	IMPACT MANAGEMENT
<ul style="list-style-type: none"> - Local residents - community 	General construction work onsite and movement of construction vehicles and machinery	Noise and Vibration	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Minor)	Adverse (Minor)	<p>Restricted hours, traffic calming measures, defined routes to and from the site, maintain boundary fence, soften boundary fence with graphic visuals, scheduling of noisy activities, notice to community prior to noisy activities, dust suppression techniques, shielding of scaffolding with nets, avoid certain activities during high wind periods, avoid work during public holidays, seize earthworks and scale down ancillary works during the festive season.</p>
<ul style="list-style-type: none"> - Local residents - community 	General construction work onsite and movement of construction vehicles and machinery as well as foundation excavations	Dust nuisance and related health effects	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Minor)	Adverse (Minor)	
<ul style="list-style-type: none"> - Local residents - community 	Increase movement of construction, staff and supplier vehicles in the area	Traffic alteration and necessary rerouting of traffic and increased stress on drivers	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Minor)	Adverse (Minor)	
<ul style="list-style-type: none"> - Local residents - community 	Barricading around the project site as well as the visibility of construction plant equipment and plant at heights above the barricade	Visual disturbance to local residents and the community	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Minor)	Adverse (Minor)	
<ul style="list-style-type: none"> - Local residents - community 	Establishment of the proposed building on Erf 4747	Loss of sense of place	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Low)	Adverse (Low)	

RECEPTOR	PROPOSED PROJECT ACTIVITY	PROPOSED PROJECT POTENTIAL IMPACT	OTHER PROJECTS	SIGNIFICANCE OF COMBINED IMPACT	SIGNIFICANCE OF COMBINED IMPACT AFTER ADDITIONAL MITIGATION	IMPACT MANAGEMENT
Municipal services infrastructure	Waste generation and the management thereof	Over supply of waste material into non-upgraded sewage waste reticulation systems in the CBD area.	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Adverse (Moderate)	Adverse (Minor)	Timely implementation of the upgrade to the CBD waste and water reticulation systems through the recommendations of the Master Infrastructure Plan.
<ul style="list-style-type: none"> - Local residents - community 	Establishment of the proposed building on Erf 4747	Combined socio-economic benefits	Municipal ablution blocks immediately north of erf 4747 (implementation date and construction method is unknown)	Beneficial (Minor)	Beneficial (Minor)	Developers to Invest in the local economy through labour onboarding, procurement and corporate social initiatives
<ul style="list-style-type: none"> - Local residents - community 	Establishment of the proposed building on Erf 4747	Combined socio-economic benefits	Other bulk infrastructure and housing development projects in Swakopmund commissioned by the Swakopmund municipality	Beneficial (Minor)	Beneficial (Minor)	Developers to Invest in the local economy through labour onboarding, procurement and corporate social initiatives

The combined adverse inter-project impacts on the identified receptors cannot be easily quantified mainly due to the lack of other project schedule information. A qualitative approach was then used to assess the possible combined effects that may arise should the proposed development coincide with the potential other projects identified. The other bulk infrastructure and housing projects to be developed in Swakopmund fall outside the temporal boundary of the proposed development on Erf 4747, hence the physical impacts from the two projects do not overlap. However, the socio-economic benefits on their shared receptor base are linked.

The combined beneficial socio-economic cumulative impact will be experienced by the shared receptor base for both projects. Should the two projects develop simultaneously, the local economy will experience an increase in downstream spending from both personnel and business aspects.

8 ENVIRONMENTAL MANAGEMENT PLAN

An EMP provides management options to ensure the impacts of the proposed project are minimised. An EMP is a tool used to take pro-active action by addressing potential problems before they occur. This should limit the corrective measures needed, although additional mitigation measures might be included if necessary.

The management measures should be adhered to during all stages of the construction activities of the lodge. All persons involved and partaking in the proposed activities should be made aware of the measures outlined in the EMP to ensure activities are conducted in an environmentally sound manner.

The objectives of the EMP are:

- To include all components of the development and operations of the project;
- To prescribe the best practicable control methods to lessen the environmental impacts associated with the project;
- To monitor and audit the performance of operational personnel in applying such controls; and
- To ensure that appropriate environmental training is provided to responsible operational personnel.

The draft EMP is provided in Appendix A.

9 CONCLUSION

This environmental and social impact assessment undertaken for the proposed project, followed ECC's ESIA methodology to identify if there is potential for significant effects to occur as a result of the proposed project.

All other social and environmental receptors were scoped out as requiring further assessment as it was unlikely that there would be significant effects. Through further analysis and identification of mitigation and management methods, the assessment concludes that the likely significance of effects on visual amenity is expected to be minor, although the perceived effects may be regarded in more serious light by some residents.

Comments and or additional impacts identified by the I&APs through public review process was incorporated into the assessment report.

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11 APPENDIX A – EMP

12 APPENDIX B - NON-TECHNICAL SUMMARY

13 APPENDIX C - EVIDENCE OF PUBLIC CONSULTATION

8 THURSDAY 6 AUGUST 2020

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NOTICE OF ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS
DEVELOPMENT OF RESIDENTIAL & RETAIL (INCLUDING TOURISM) ACTIVITIES ON Erf 4747 IN SWAKOPMUND, ERONGO REGION, NAMIBIA

Environmental Compliance Consultancy CC (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Lighthouse Property Investment Trust
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Swakopmund, Erongo Region, Namibia

Project: Proposed development of residential & retail (including tourism) activities on Erf 4747 in Swakopmund, Erongo Region, Namibia

Proposed activity: The proposed project is for the development of residential & retail (including tourism) activities on Erf 4747 at the Mole, Swakopmund main beach, for possible accommodation facilities, as well as associated facilities such as a fitness gym, spa, a lounge area and restaurants. The proposed development will also include the construction of office space and onsite parking. Additional activities to be carried out on site include the upgrade of the existing green space and children's playground area and the municipal boardwalk where applicable.

Application for environmental clearance certificate: In terms of the Environmental Management Act, No. 7 of 2007 ECC, on behalf of Lighthouse Property Investment Trust, is required to apply for an environmental clearance to the Ministry of Environment, Forestry and Tourism for the above-mentioned project.

Purpose of the review and comment period: The purpose of the review and comment period is to present the proposed project and to afford interested and affected parties (I&APs) an opportunity to comment on the project to ensure that all issues and concerns are captured and considered in the assessment.

Review period: The review and comment period is effective from 06th – 27th August 2020.

How you can participate: ECC is undertaking the required environmental assessment and public participation process in terms of the Act. I&APs and stakeholders are required to register for the project at: <https://eccenvironmental.com/projects/>

Environmental Compliance Consultancy
Registration Number: CC/2013/13404
Members: Mr JS Bezuidenhout or Mrs J Mooney
PO Box 21193, Klein Windhoek
Tel: +264 81 669 7608
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Purpose of the review and registration period: The purpose of the review and registration period is to introduce the proposed project and to afford registered Interested and Affected Parties (I&APs) an opportunity to comment on the Background Information Document (BID) to ensure that all issues and concerns are brought forward, captured and considered further in the assessment.

Registration period: Effective from 06th – 27th August 2020.

How you can participate: ECC is undertaking the required environmental assessment and public participation process in terms of the Act. I&APs and stakeholders are required to register for the project at: <https://eccenvironmental.com/projects/>

Environmental Compliance Consultancy
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See entry requirements and online applications on NUST website.

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Oswaldo Mendes and Carel de Jager in their Subaru Impreza at the first ever Erongo Sprint rally
Photo contributed

Zachary Martin and Amanda Hugo in their VW Polo Vivo at the first ever Erongo Sprint rally
Photo contributed



Erongo sprint rally 2020

Rudi Bowe

After the imposed Covid-19 lockdown, Walvis Bay Motor Club (WBMC) hosted the first ever Erongo Sprint rally last weekend outside Swakopmund.

The sprint rally was endorsed by the Namibia Motor Sport Federation (NMSF) and was held under the Covid-19 regulation with 15 rally cars, 3 quad bikes and 7 MX bikes.


A sprint rally is in a nutshell, a one day event in the form of a mini rally consisting of one stage with a distance of 6.37km. There are no time controls, no medals or trophies as it is a fun event under the NMSF's regulations.

The organizer of the event Allen Martin said that the event was held to show the NMSF and the sport commission that they can host a motor sport event under the Covid-19 regulations.

Martin added, with all motor sport events cancelled due to covid pandemic, WBMC are in discussions with the NMSF to host one or two rallies before the end of the year as many club and national events had to be cancelled due to Covid.

The fastest time of the day was 00.05.02 minutes and was set by Zachary Martin and Amanda Hugo who took honours by ending in the first place in his VW Polo Vivo with Oswaldo Mendes and Carel de Jager in their Subaru Impreza in a time of 00.05.39 in second place.

The full result for the day was: 1. Zachary Martin and Amanda Hugo (00.05.02) 2. Oswaldo Mendes and Carel de Jager (00.05.39) 3. Rolf Pretorius Bartie Rautenbach (00.06.02) 4. Etienne vd Heever and Cecil (00.06.10), 5. Quinton Liebenberg and Keren Till (00.06.25) 6. Gino Meyer and Riaan Hennop (00.06.25) 7. Berto Mostert and Paul van Niekerk (00.06.25) 8. Paul Oosthuizen and Johan du Plessis (00.06.30) 9. Jan Everson and Fanie Botes (00.06.32) 10. Tinus Malan and Paul van Niekerk (00.06.37) 11. Steven Marnewick and Jodine van Zyl (00.06.45) 12. Wido Bartsch and Raymond Fourie (00.06.46) 13. Jacques Kruger and Roche Louw (00.06.51) 14. Joao Coimbra and Jackie Coimbra (00.07.07), 15. Werner Bartsch and Kobus Mulder (00.07.12) Quads: 1. Marthinus Lombard (00.05.54), 2. Tom Scholtz (00.05.55) 3. Hugo Arangies (00.05.58). MX Bikes: 1. Robbie Schneider (00.06.04) 2. Gino Rossi (00.06.10) 3. Tarquin Liebenberg (00.06.21) 4. Ruan de Lange (00.06.23) 5. Andre Barnard (00.06.58) 6. Marthinus Schoeman (00.07.00) 8. Ole Steinstrater (00.08.40).



NOTICE OF AN ENVIRONMENTAL ASSESSMENT & PUBLIC PARTICIPATION PROCESS DEVELOPMENT OF RESIDENTIAL AND RETAIL (INCLUDING TOURISM) ACTIVITIES ON Erf 4747 IN SWAKOPMUND, ERONGO REGION, NAMIBIA

Environmental Compliance Consultancy (ECC) hereby gives notice to the public that an application for an environmental clearance certificate in terms of the Environmental Management Act, No. 7 of 2007 will be made as per the following:

Applicant: Lighthouse Property Investment Trust
Environmental Assessment Practitioner (EAP): Environmental Compliance Consultancy
Location: Swakopmund, Erongo Region, Namibia
Project: Proposed development of residential and retail (including tourism) activities on Erf 4747 in Swakopmund, Erongo Region, Namibia.

Purpose of this notice:


- To provide new I&APs the opportunity to register for inclusion in the public participation process.
- To afford all new and existing registered Interested and Affected Parties (I&APs) an opportunity to comment on the preliminary assessment report.

The period is effective from **12th – 27th October 2020**.

Proposed activity: The proposed project is for the development of residential and retail (including tourism) activities on Erf 4747 at the Mole, Swakopmund main beach, for possible accommodation facilities, as well as associated facilities such as a fitness gym, spa, a lounge area and restaurants, etc. The proposed development will also include the construction of office space and onsite parking. Additional activities to be carried out on site include the upgrade of the existing green space and children's playground area and the municipal boardwalk where applicable.

I&APs and stakeholders are required to register for the project at:
<https://eccenvironmental.com/projects/>
Comments are also welcome via email by using the email address listed below.

Environmental Compliance Consultancy
Registration Number: CC/2013/11404
Members: Mr JS Bezuidenhout or Mrs J Mooney
PO Box 91193, Klein Windhoek
Tel: +264 81 669 7608
E-mail: info@eccenvironmental.com
Website: <http://www.eccenvironmental.com>
Project ID: ECC-111-307-ADT-05-C



Father and sons National Trips champions

Rudi Bowe

The 2020 Namibian National Trips bowling championships were hosted by the Windhoek Bowling Club over the past weekend.

Poena Olivier and his two sons Cabous Olivier and Ronan Olivier were crowned as the Men's National Trips Bowling champions with Johan Jacobs, Colin Peake and Piet du Plooy as the runners up.

The Ladies champions are Anjuleen Viljoen, Miele van der Merwe and Elzaan de Vries with Henriette Partridge, Kobie Heesackers and Annelize Opperman as runners up.



Ladies National Trips bowling champions Anjuleen Viljoen, Miele van der Merwe and Elzaan de Vries



Men's National Trips bowling champions Poena Olivier, Cabous Olivier and Ronan Olivier



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14 APPENDIX D - ECC CVS

15 APPENDIX E - PROPOSED PROJECT DESIGNS

16 APPENDIX F - ASSESSMENT FORM

The full application is available on their website


Eco Awards Namibia

Tel: +264 (0)61 306450
 Fax: +264 (0)61 306290
 Email: admin@ecoawards-namibia.org
 Web site: www.ecoawards-namibia.org

Assessment Form:

Establishment details:
 Name: _____ No of beds: _____
 NTB Registration category _____ Telephone: _____
 And number: _____
 Physical address: _____ Fax: _____
 Postal address: _____ email: _____

Contact person:
 Name: _____ Telephone: _____
 Position: _____ Fax: _____
 Cell-phone: _____ email: _____



eco award
Namibia

CRITERIA SUBSECTION	TOTAL SCORE POSSIBLE	TOTAL SCORE APPLICABLE	OWN SCORE	ASSESSORS SCORE	AWARDED SCORE
1. Management	23	23			
2. Conservation	17	17			
3. Energy	16	16			
4. Water	20	20			
5. Waste, pollution, sewer	24	24			
6. Building & landscaping	18	18			
7. Staff & Health	36	36			
8. Guiding	6	6			
9. Social responsibility	13	13			
10. Legal/NTB Compliance	16	16			
SUBTOTAL	189	189			
PERCENTAGE	100%	100%			
<i>To calculate the percentage: divide total own score by total APPLICABLE score (i.e. exclude items not applicable to your establishment specifically and exclude bonus points), multiply the answer by 100.</i>					
11. Bonus points	10%	10%			
TOTAL FINAL SCORE	110%	110%			
TOTAL FINAL SCORE					

Number of Flowers applied for: (Circle applicable category):

40% or more = One Flower	55% or more = Two Flowers	70% or more = Three Flowers	80% or more = Four Flowers	90% or more = Five Flowers
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Date: _____
 Name of Assessor: _____
 Signature: _____
 Date of MC approval: _____
 Signature of MC Chair: _____

17 APPENDIX G – SHADOW SIMULATION

18 APPENDIX H - AESTHETIC APPROVAL GRANTED

19 APPENDIX I – HERITAGE OPINION ON ERF 4747

20 APPENDIX J - TRAFFIC STUDY ToR

APPENDIX K – GEOTECHNICAL STUDY

APPENDIX L: APPROVAL LETTER FROM STATE HOUSE