




ECC-111-307-REP-07-D

PRELIMINARY ASSESSMENT REPORT PLUS IMPACT ASSESSEMENT

Erf 4747 SWAKOPMUND, ERONGO REGION, NAMIBIA

PREPARED FOR

LIGHTHOUSE PROPERTY INVESTMENT TRUST

OCTOBER 2020

TITLE AND APPROVAL PAGE

Project Name:	Development of Residential & Retail (Including Tourism) Activities on Erf 4747 In Swakopmund, Erongo Region
Project Number	ECC-111-307-REP-07-D
Client Name:	Lighthouse Property Investment Trust
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EXECUTIVE SUMMARY

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.

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.

This assessment has been undertaken in terms of the requirements of the Environmental Management Act, No. 7 of 2007 and the Environmental Impact Assessment Regulation, 2007 (No. 30 of 2012) gazetted under the Environmental Management Act, 2007 (referred to herein as the ESIA Regulations). 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 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. Social impacts were assessed to be of greater value pertaining to this project. The most significant impacts identified were put through the impact assessment process, while non-significant impacts are addressed through the scoping process. Measures to mitigate and manage potential impacts on the environment, during the construction and operational phases, will be outlined in the EMP.

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 preliminary findings of the impact assessment 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).

1.2 BACKGROUND OF THE PROPOSED PROJECT

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 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.

The proposed development is expected to generate income and 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.

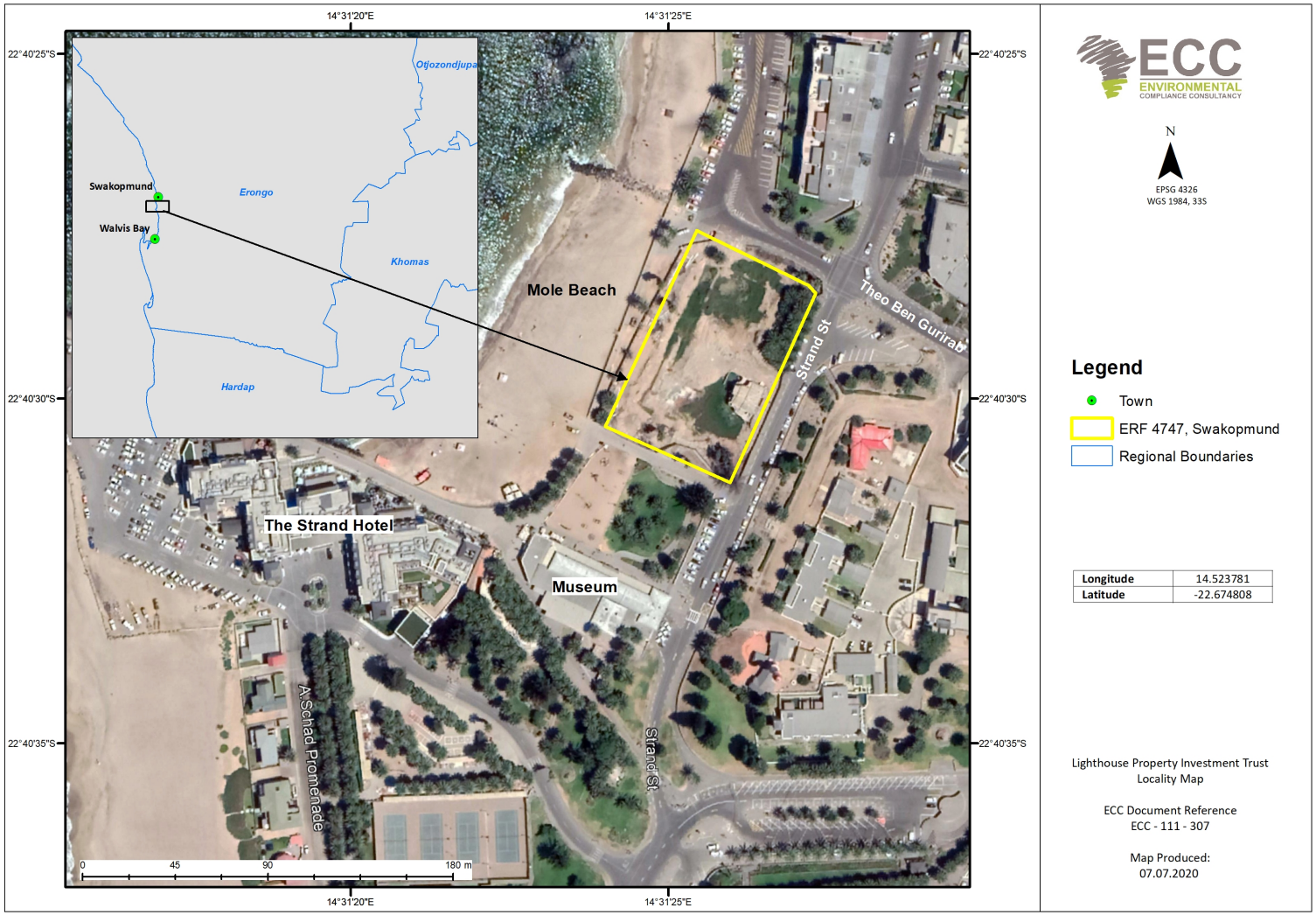

FIGURE 1: LOCALITY OF THE PROJECT SITE

1.3 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.

1.4 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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1.5 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
WASTE MANAGEMENT, TREATMENT, HANDLING AND DISPOSAL ACTIVITIES (2.1) The construction of facilities for waste sites, treatment of waste and disposal of waste. (2.3) The import, processing, use and recycling, temporary storage, transit, or export of waste	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.
TOURISM DEVELOPMENT ACTIVITIES (6) The construction of resorts, lodges, hotels or other tourism and hospitality facilities	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.

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.

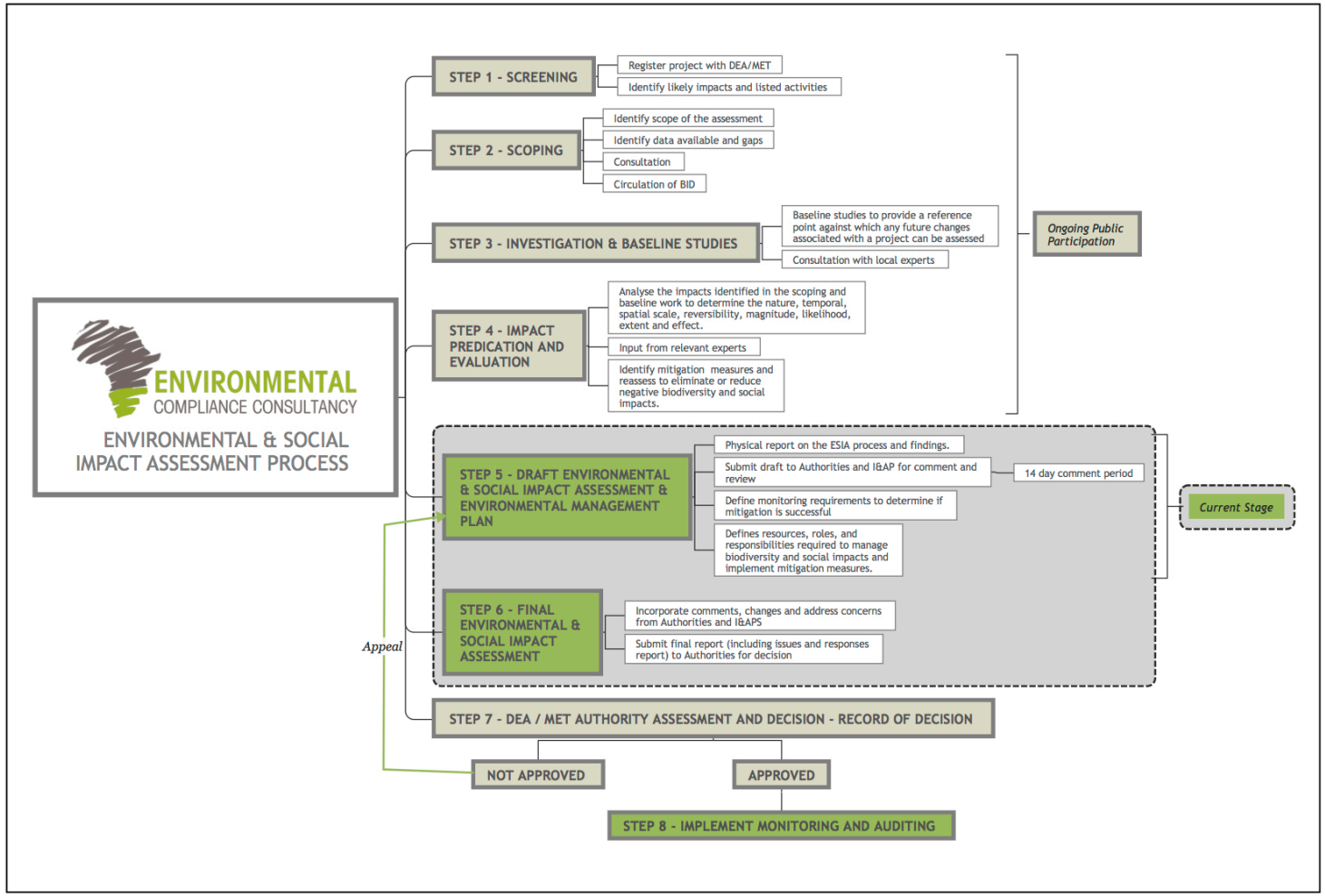


FIGURE 2 - ECC SCOPING PROCESS

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 ongoing 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

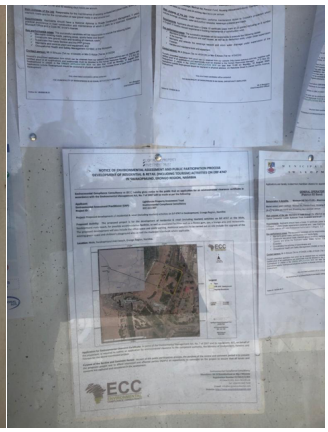
Notices regarding the proposed project and associated activities were circulated in two newspapers namely the 'Namibian' and on the 06th and the 13th of August 2020 and in the 'Informante' on the 06th and the 13th of August 2020. The purpose of this was to commence the consultation process and enable 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.


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.

2.7.5 CONSULTATION FEEDBACK

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

The public review of the preliminary assessment report will be conducted during the period of the 13th October 2020 – 28th of October 2020. The comments received from this public review period will be summarised 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 at 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 will be captured in an addendum report and attached as an appendix to the final assessment report. The review period is 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 ends 28 October 2020. After all comments from the review of the documentation has been received and incorporated into the report, I&APs are granted an additional 7-day review period to review the assessment report before submission to the government. The extended review period is 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 of the draft assessment report and specialist study and the responses to the comments made will be presented in an addendum report.

2.8 DRAFT ESIA AND EMP

The ESIA report documents the findings of the assessment process, provides stakeholders with 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 ESIA report, which follows this preliminary assessment report, will be 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 will be collated in an addendum report as an annexure to the ESIA report. All comments will be 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 will be considered and where they were deemed to be material to the decision making or enhance the ESIA will be incorporated into the ESIA report.

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

The ESIA report and appendices will be 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
Constitution of the Republic of Namibia of 1990	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: "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."	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.
Environmental Management Act, No. 7 of 2007 and its regulations, including the Environmental Impact Assessment Regulations, No. 30 of 2012	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. 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. The MEFT is responsible for the	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.

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 N0.61.	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.	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 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 Plan and Emergency Response Plan for the construction and operations of the proposed development independently to the ESIA that will be in place prior to construction.

3.2 Other Regulatory Frameworks

TABLE 3 - 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 realise the country's long-term vision. Vision 2030 states that the overall goal of the vision is to improve the quality of life of the Namibian people to a level in line with the developed world.	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.
Fifth National Development Plan (NDP5)	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	The planned project supports meeting the objectives of the NDP5 through creating opportunities for tourism domestically.

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	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. 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.	
National Policy on Tourism for Namibia	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.	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.

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	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

NATIONAL REGULATORY REGIME	SUMMARY	APPLICABILITY TO THE PROJECT
	activities to be conducted in the coastal environs of Namibia	mechanisms such as ESIAs 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 ESIAs for tourist and accommodation developments.
Swakopmund Tourism growth and development strategy	Strategic vision: "***Swakopmund is the leading destination for holiday tourists in Namibia offering a range of unique and diverse attractions, facilities and activities***". The strategy's focus areas are: • 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 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 flock to the country's national parks and other tourist destinations each year. 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.

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.

4.2 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.

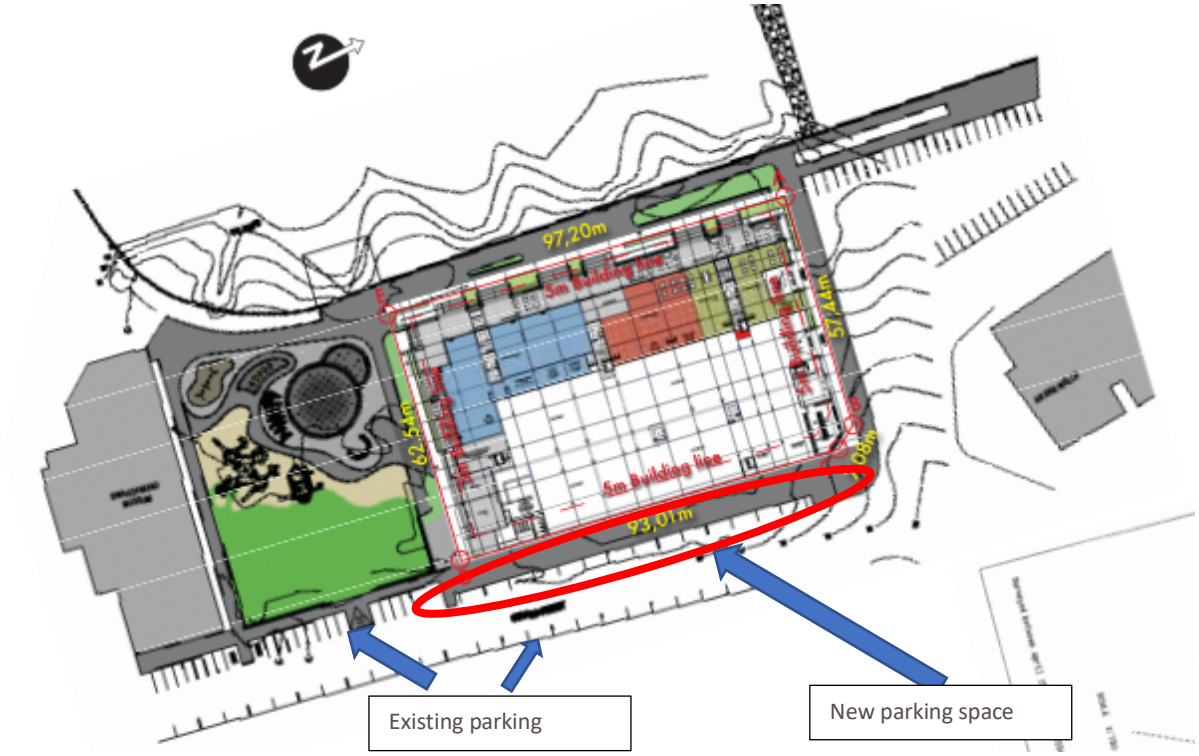


FIGURE 3: DIAGRAM INDICATING ON-STREET PARKING SPACES OUTSIDE THE BUILDING

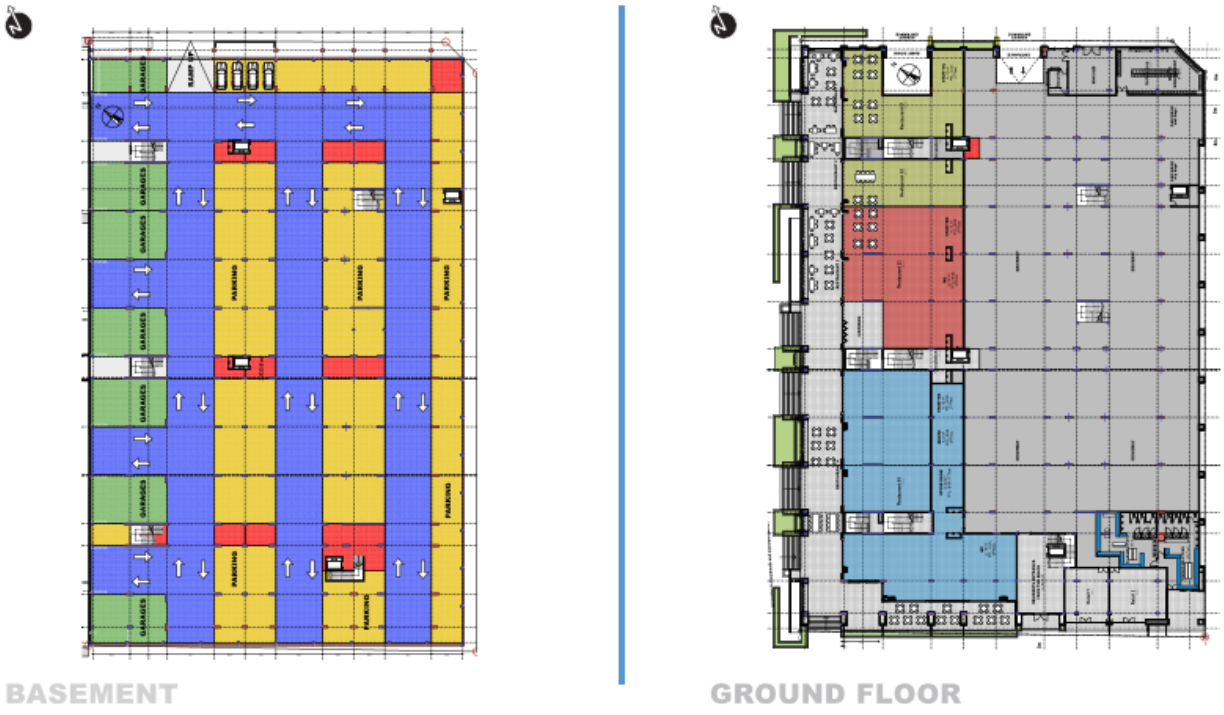


FIGURE 4: BASEMENT AND GROUND FLOOR PARKING SPACES

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 5 below of an artist's impression of the building illustrating this option.

FIGURE 5: COLOUR SCHEME TO BE USED ON BUILDING EXTERIOR APPROVED BY THE LOCAL COUNCIL (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019)

Figure 6 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 6: SIMILAR COLOUR SCHEMES ON EXISTING BUILDINGS IN THE VICINITY (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019)

4.4.3 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 7: INITIAL COLOUR SCHEME CHOSEN (NOT-PREFERRED OPTION) (SOURCE: CHAMBERLAIN AND ASSOCIATES. 2017)

4.4.4 HEIGHT OF THE BUILDING

Erf 4747 is zoned as general business as per the town planning scheme N0. 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 7 and 8 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.

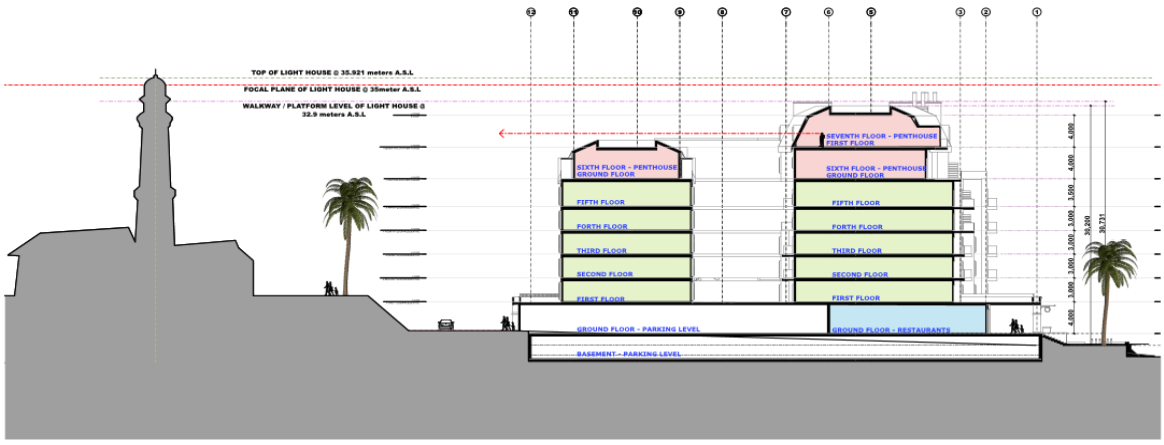


FIGURE 8: ADJUSTED HEIGHT OF THE PROPOSED BUILDING (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019)

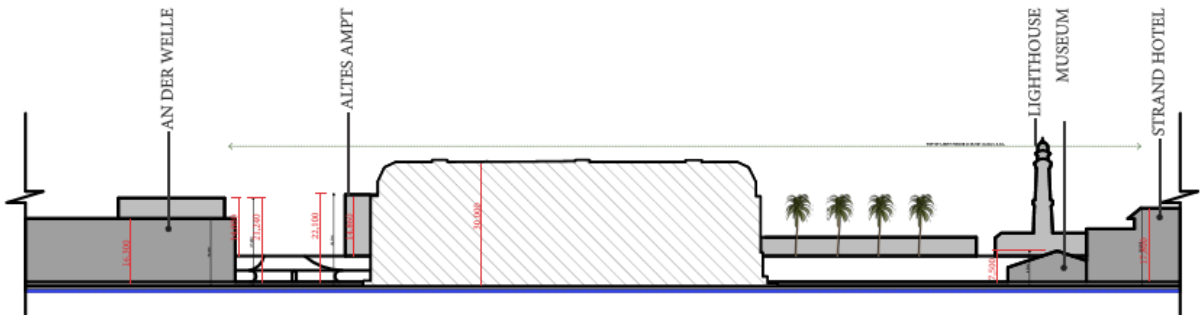


FIGURE 9: SKYLINE DIAGRAM OF ADJUSTED BUILDING HEIGHT IN RELATION TO OTHER BUILDINGS IN THE GREATER AREA (SOURCE: CHAMBERLAIN AND ASSOCIATES, 2019).

4.4.5 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 9 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 10: OTHER DESIGN COMPONENTS OF THE BUILDING

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 11. 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 11: LIGHTHOUSE INCLUDED IN THIS DESIGN

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 12: 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.

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.

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 liters 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. The development agreement signed between the proponent and the local authority provides for the upgrading of bulk infrastructure to service the required needs of the property as needed and is the responsibility of the proponent, including costs and labour.

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).

5.3 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.

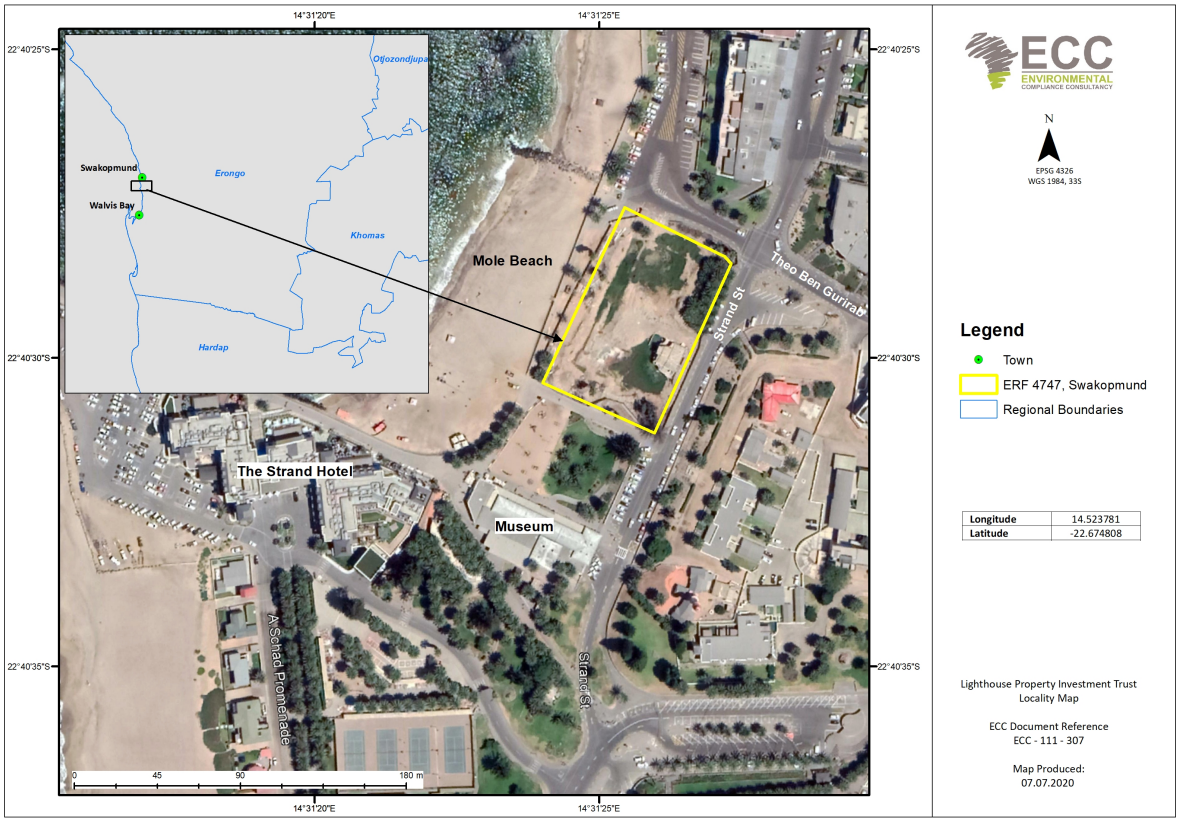


FIGURE 13 - PROJECT LOCATION

5.4 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 14 below illustrates the location of Erf 4747 in relation to surrounding infrastructure.

FIGURE 14: AERIAL VIEW NORTH-EAST FROM ERF 4747

5.5 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 center 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.

5.6 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/P (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.

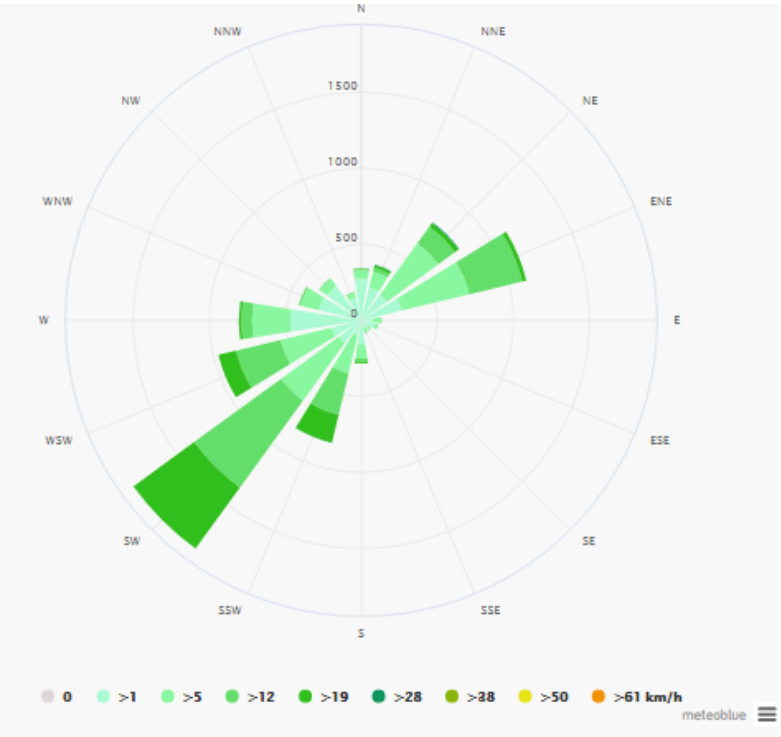


FIGURE 15 - WIND DIRECTION AND SPEED FROM THE SWAKOPMUND WEATHER STATION, ERONGO REGION

5.7 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).

5.8 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).

5.9 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).

5.10 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.

5.11 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.

5.11.1 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).

5.11.2 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.

5.11.3 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%).

5.11.4 Economic activities

Tourism is an important sector in Namibia. It is the third largest contributor to the country's GDP; it generates a significant amount 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.

5.12 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).

5.12.1 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 16 depicts the location of Erf 4747 relative to other heritage sites in the area with a rating.

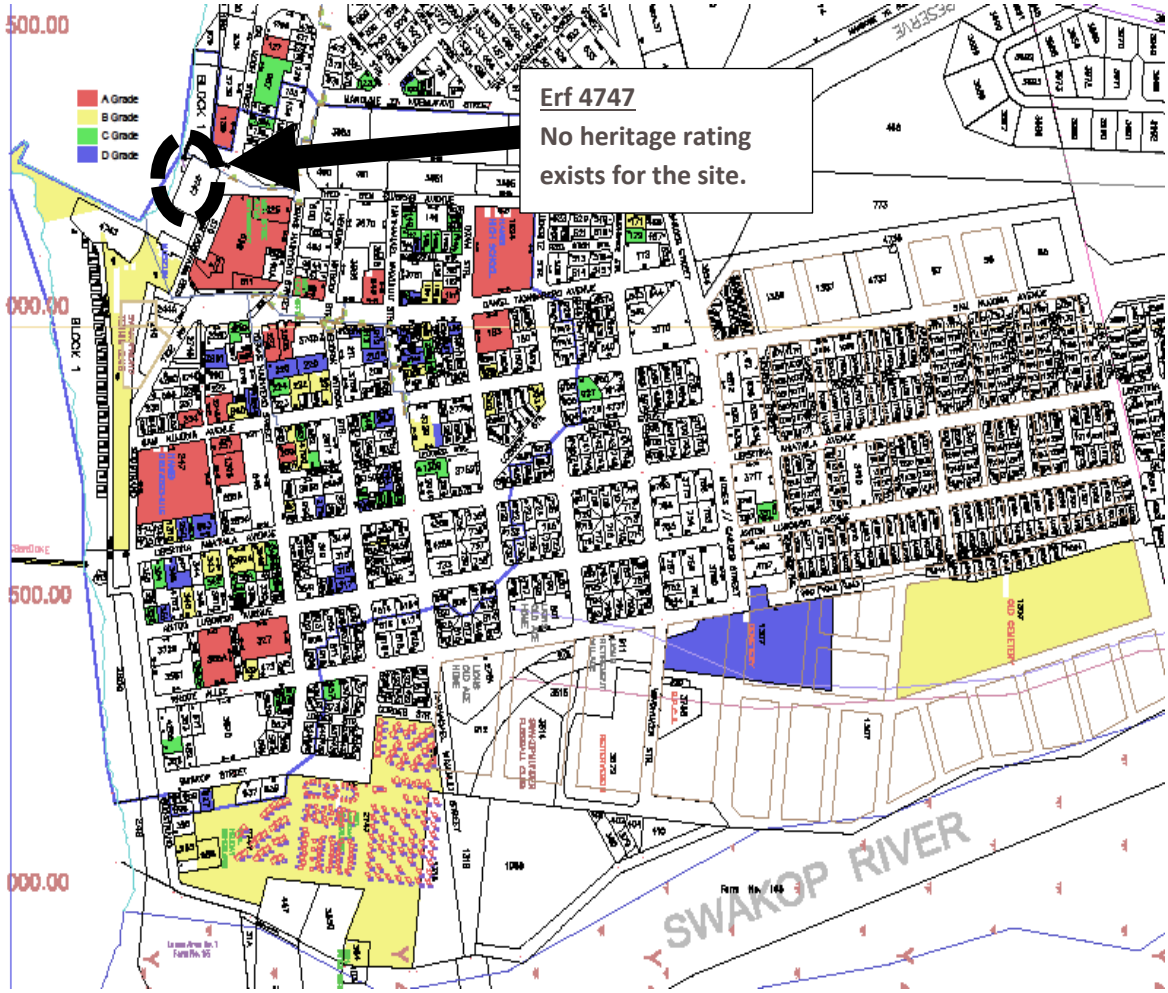


FIGURE 16: ERF 4747 IN RELATION TO OTHER HERITAGE RELATED BUILDINGS IN THE CBD AREA. SOURCE: AESTHETIC APPROVAL GUIDELINES FOR SWAKOPMUND

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.

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;

A number of limitations and uncertainties were acknowledged during the ESIA process. Table 5 below contains the assumptions and uncertainties identified during the assessment process.

TABLE 5: 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, 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.
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.

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

6.4 DETERMINATION OF SIGNIFICANCE

The evaluation and identification of the environmental and social impacts require the assessment of the project characteristics against the baseline characteristics, ensuring all potentially significant impacts are identified and assessed. The significance of an impact is determined by taking into consideration the combination of the sensitivity and importance or value of environmental and social receptors that may be affected by the proposed project, the nature and characteristics of the impact, and the magnitude of potential change. The magnitude of change (the impact) is the identifiable changes to the existing environment which may be negligible, low, minor, moderate, high, or very high; temporary/short term, long-term or permanent; and either beneficial or adverse.

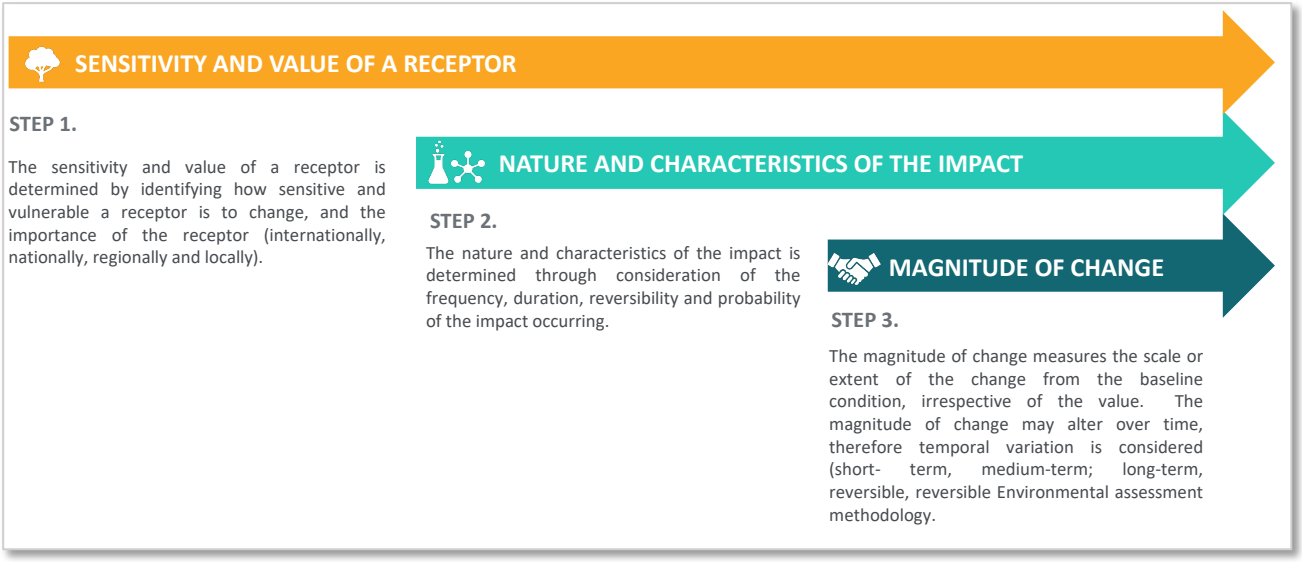


FIGURE 17:- DETERMINATION OF SIGNIFICANCE

The tables below set the description and thresholds used in determining impact significance.

TABLE 6: - NATURE OF IMPACT

NATURE	
Term	**Description**
Beneficial (Positive)	An impact that is considered to represent an improvement on the baseline or introduces a positive change.
Adverse (Negative)	An impact that is considered to represent an adverse change from the baseline or introduces a new undesirable factor.

TABLE 7:- TYPE OF IMPACT

TYPE	
Term	**Description**
Direct	Impacts causing an impact through direct interaction between a planned project activity and the receiving environment/receptors.
Indirect	Impacts that result from other activities that are encouraged to happen as a result / consequence of the Project. Associated with the project and may occur at a later time or wider area
Cumulative	Impacts that arise as a result of an impact and effect from the project interacting with those

	from another activity to create an additional impact and effect

TABLE 8:- REVERSIBILITY OF IMPACT

REVERSIBILITY	
Term	**Description**
Reversible	Impacts are reversible and recoverable in the future
Partly Reversible	Some parts of the impact can be reversed while others remain
Irreversible	Impacts which are not reversible and are permanent

TABLE 9: - MAGNITUDE OF CHANGE

MAGNITUDE OF CHANGE	
Term	**Description**
None / negligible	Very minor loss or detrimental alteration to one (or maybe more) characteristic, feature or element; or Very minor benefit to, or positive addition of, one (or maybe more) characteristic, feature or element.
Low / Minor	Some measurable change in attributes, quality or vulnerability; minor loss of, or alteration to, one (or maybe more) key characteristic, feature or element; or Minor benefit to, or addition of, one (or maybe more) key characteristic, feature or element; some beneficial effect on attribute quality or a reduced risk of a negative effect occurring.
Moderate	Loss of resource, but not adversely affecting its integrity; partial loss of/damage to key characteristics, features or elements; or Benefit to, or addition of, key characteristics, features or elements; improvements of attribute quality.
High / Major	Loss of resource, and quality and integrity of resource; severe damage to key characteristics, features or elements; or Large scale or major improvement of resources quality; extensive restoration or enhancement; major improvement of attribute quality.
Very high / unknown	Loss of resource, significantly affecting the long term quality and integrity of a resource; irreparable damage or loss of key characteristics, features or elements; or the magnitude is too great to quantify as it is unknown.

TABLE 10:- DURATION OF IMPACT

DURATION	
Term	**Description**
Temporary	Transient; a period of less than 1 year
Short term	Impacts that are likely to last for the duration of the activity causing the impact and are recoverable (1-5 years)
Medium term	Impacts that are likely to continue after the activity causing the impact and are recoverable (5-15 years)
Long term	Impacts that are likely to last far beyond the end of the activity causing the damage (greater than 15 years with impact ceasing after decommissioning of the project)
Permanent	Permanent

TABLE 11 - SCALE OF CHANGE

SCALE OF CHANGE - EXTENT / GEOGRAPHIC SCALE	
Term	**Description**
On-site	Impacts that are limited to the boundaries of the proposed project site
Local	Impacts that occur in the local area of influence, including around the proposed site and within the wider community
Regional	Impacts that affect a receptor that is regionally important by virtue of scale, designation, quality or rarity.
National	Impacts that affect a receptor that is nationally important by virtue of scale, designation, quality or rarity.
International	Impacts that affect a receptor that is internationally important by virtue of scale, designation, quality or rarity.

TABLE 12 - PROBABILITY OF CHANGE

PROBABILITY	
Term	**Description**
Improbably (Rare)	The event may occur in exceptional circumstances yet, rarely occurs in the industry. The event could occur once every 100 years
Low probability (Unlikely)	The event has happened elsewhere yet, is unlikely to occur. The event could occur once every 10 years
Medium Probability (Possible)	The event could occur under some circumstances. The event could occur once every 5 years.
High Probability (Likely)	The event is expected to occur. The event could occur twice per year
Definite (Almost certain)	The event will occur. The event could occur once per month

TABLE 13 - SIGNIFICANCE DESCRIPTION

SIGNIFICANCE OF IMPACT	DESCRIPTION
Low – Major (Beneficial) All scores	Impacts are considered to be beneficial to the environment and society:
Low (negative) 0 - 25	Impacts are considered to be local factors that are unlikely to be critical to decision-making.
Minor (negative) 25 - 50	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.
Moderate (negative) 50 - 75	Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/features that are unique and which, if lost, cannot be replaced or relocated.
Major (negative) 75 - 100	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. Impacts are expected to be permanent and non- reversible on a national scale and/or have

	international significance or result in a legislative non- compliance.

TABLE 14:- SENSITIVITY AND VALUE OF RECEPTOR

SENSITIVITY AND VALUE	DESCRIPTION
Low	Of value, importance or rarity on a local scale; and/or not particularly sensitive to change or has considerable capacity to accommodate a change.
Medium	Of value, importance or rarity on a regional scale, and with limited potential for substitution; and/or moderate sensitivity to change, or moderate capacity to accommodate a change.
High	Of value, importance or rarity on an international and national scale, and with very limited potential for substitution; and/or very sensitive to change or has little capacity to accommodate a change.

TABLE 15 – SIGNIFICANCE OF IMPACT

				Signifance of Impact			
			Signifance of Impact	Impacts are considered to be local factors that are unlikely to be critical to decision-making.	Impacts are considered to be important factors but are unlikely to be key decision-making factors. The impact will be experienced, but the impact magnitude is sufficiently small (with and without mitigation) and well within accepted standards, and/or the receptor is of low sensitivity/value. Impacts are considered to be short-term, reversible and/or localized in extent.	Impacts are considered within acceptable limits and standards. Impacts are long-term, but reversible and/or have regional significance. These are generally (but not exclusively) associated with sites and features of national importance and resources/features that are unique and which, if lost, cannot be replaced or relocated.	Impacts are considered to be key factors in the decision-making process that may have an impact of major significance, or large magnitude impacts occur to highly valued/sensitive resource/receptors. Impacts are expected to be permanent and non- reversible on a national scale and/or have international significance or result in a legislative non- compliance.
	Biophysical	Social		Low	Minor (2)	Moderate (3)	Major (4)
Sensitivity	A biophysical recepeotr that is protected under legislation or internaiton conventions (CITES) listed as rare, threatened or endangered IUCN specidices. Highly valued/sensitive resource/receptors	Those affected people/communities will not be able to adapt to changes or continue to maintain-pre impact livelihoods.	High (3)	Minor (3)	Moderate (6)	Major (9)	Major (12)
	Of value, importance or rarity on a regional scale, and with limited potential for substitution; and/or Not protected or listed (gloabbally) but may be a rare or threatened species in coutnry; with little reslisence to ecosystem changes, imporant to ecosystem functions, or one under threat or popultion declinet.	Able to adapt with some difficulty and maintain preimpact status but only with a degree of support	Medium (2)	Low (2)	Minor (4)	Moderate (6)	Major (8)
	Not protected or listed as common / abundant; or not crtical to other ecosystems functions	Those affected are able to adapt with relative ease and maintain preimpacrt status. There is no perceptible change to people's livelihood.	Low (1)	Low (1)	Low (2)	Minor (3)	Moderate (4)

To ensure the beneficial impacts are brought out in the assessment, green has been applied to ensure the different type of impact is clear. The description for each level of significance presented in Table 15 was also followed when determining the level of significance of a beneficial impact.

The significance of impacts has been derived at by applying the identified thresholds for receptor sensitivity and magnitude of change, as well as the definition of significance. **Moderate and major adverse impacts are considered as significant**.

The following thresholds were therefore used to double check the assessment of significance had been applied appropriately; a significant impact would meet at least one of the following criteria:

- It exceeds widely recognized levels of acceptable change;
- It threatens or enhances the viability or integrity of a receptor or receptor group of concern; and

- It is likely to be material to the ultimate decision about whether or not the environmental clearance certificate is granted.

6.5 MITIGATION

Mitigation comprises a hierarchy of measures ranging from preventative environmental impacts by avoidance, to measures that provide opportunities for environmental enhancement. The mitigation hierarchy is avoidance; reduction at source; reduction at receptor level; repairing and correcting; compensation; remediation; and enhancement.

Mitigation measures can be split into three distinct categories, broadly defined as:

1. Actions undertaken by the ESIA process that influence the design process, through implementing design measures that would entirely avoid or eliminate an impact or modifying the design through the inclusion of environmental features to reduce the magnitude of change. These are considered as embedded mitigation.
2. Standard practices and other best practice measures for avoiding and minimizing environmental impacts. These are considered as good practice measures.
3. Specified additional measures or follow-up action to be implemented to further reduce adverse impacts that remain after the incorporation of embedded mitigation. These are considered as additional mitigation.

The ESIA is an iterative process whereby the outcomes of the environmental and social assessments inform the project. Considerable mitigation has been built into the proposed project as potentially significant adverse environmental impacts have been identified and design changes have been identified to overcome or reduce them. The EMP (Appendix A) provides the good practice measures and specified additional measures or follow-up action.

Embedded mitigation and good practice mitigation have been taken into account in the assessment. Additional mitigation measures have been identified when the significance of impact requires it and causes the impact to be further reduced. Where additional mitigation has been identified, a final assessment of the significance of impacts (residual impacts) was carried out taking into consideration the additional mitigation.

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 at 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 16 below and not discussed further.

TABLE 16 - 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.
Visual impact caused by construction activities	Modified visual impact to neighbours / landowners/ tourists/ residents causing a loss of a direct ocean view to the ocean from Strand street traffic users	Visual impacts are addressed in the EMP and mitigation measures are provided.
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 addresses 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 17: – SUMMARY OF IMPACTS TO LOCAL ECONOMY

Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Construction works - general	– 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	– 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)	– 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.

TABLE 18: NOISE IMPACTS FROM THE CONSTRUCTION ACTIVITIES

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 the construction of the development, and local residents utilisiing the Strand Street along the site are also likely to experience an increase in noise due to increased traffic levels.	Adverse Direct reversible Moderate Temporary On-site 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 19: 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 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.

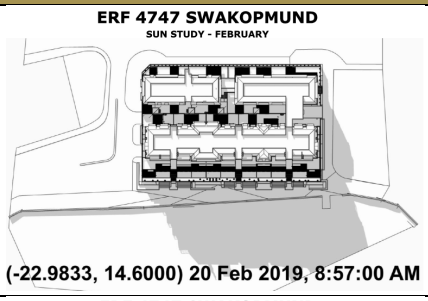
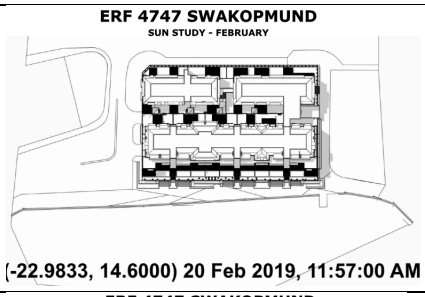
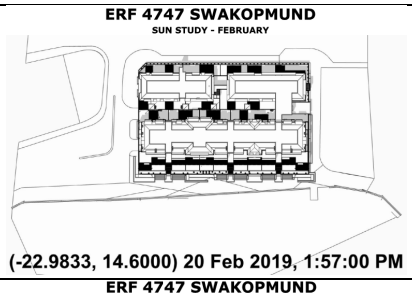
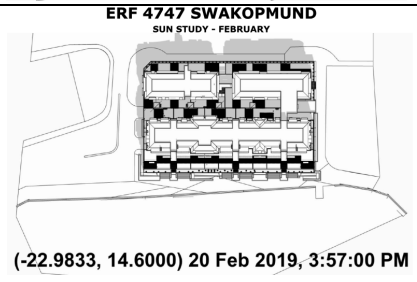
Based on the images generated throughout the assessment period it is evident that shadows will be cast on the surrounding area because of the height of the building. However, the directional influence of casted shadow overlays is mostly toward a west and south westerly direction and not east as was generally 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.

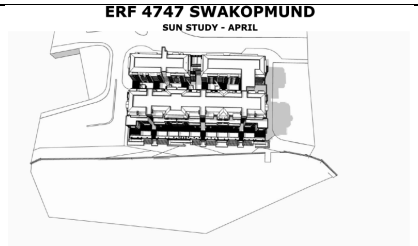
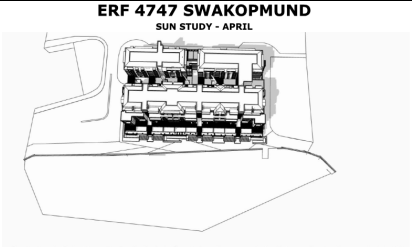
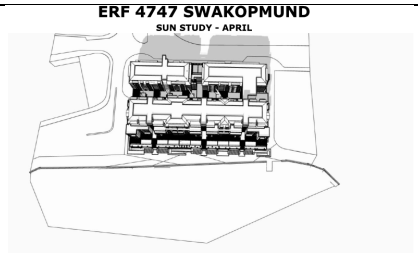
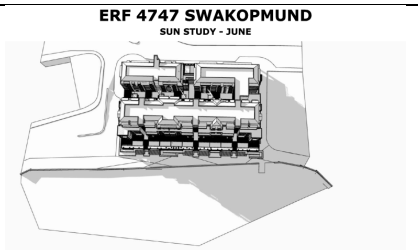
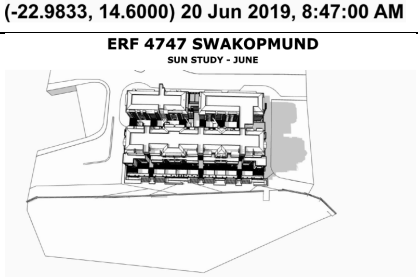
TABLE 20: IMPACTS FROM SHADOW EFFECTS AROUND THE BUILDING

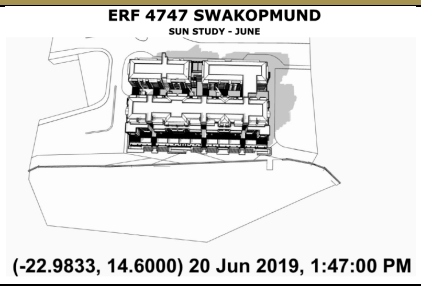
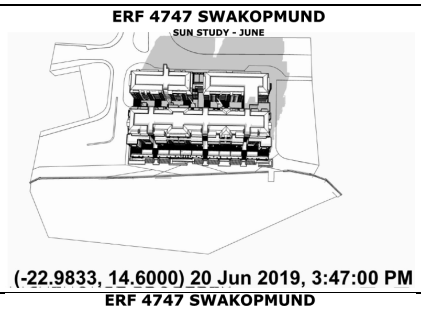
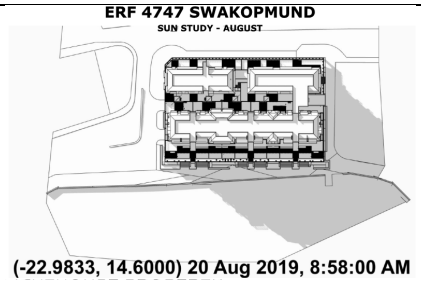
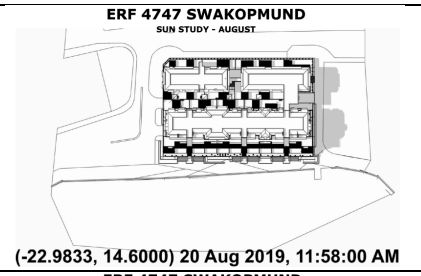
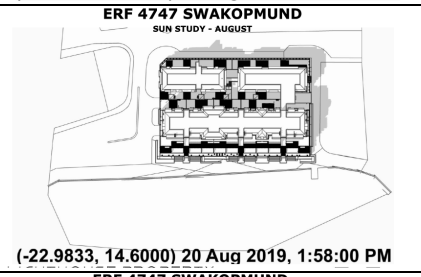
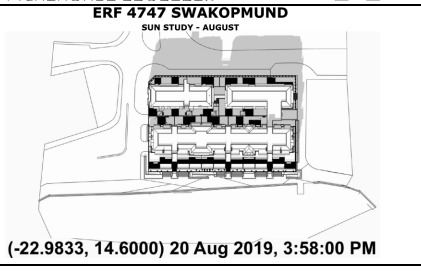
Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
Shadow trajectory (over a 12-month period)	– Community (beach goers and visitors to any of the	Perceived shadow overlay on beach, south	Adverse Direct Non-reversible	Medium	Low	Minor (4)

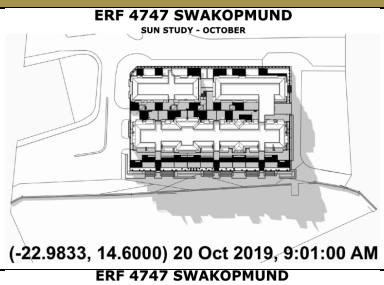
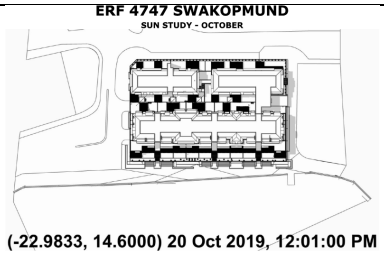
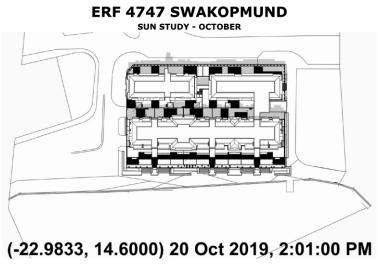
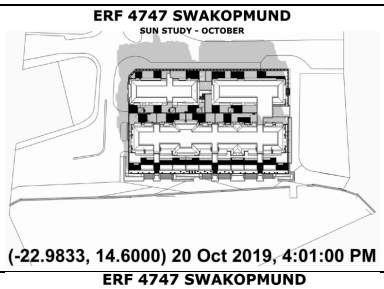
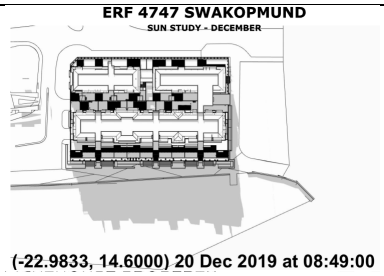
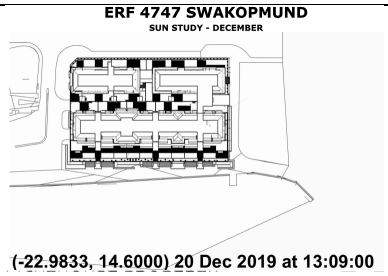
Activity	Receptor	Impact	Nature of impact	Value & Sensitivity	Magnitude of change	Significance of impact
	amenities surrounding the site	and east of the site	Negligible Moderate Permanent Local Possible			

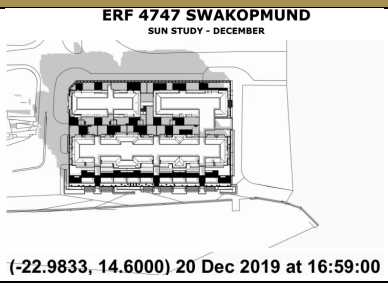
TABLE 21: SUN SIMULATION RESULTS

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
February	AM	
	NOON	
	MID-DAY	
	PM	

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
April	AM	 (-22.9833, 14.6000) 20 Apr 2019, 8:52:00 AM
	NOON	 (-22.9833, 14.6000) 20 Apr 2019, 11:52:00 AM
	MID-DAY	 (-22.9833, 14.6000) 20 Apr 2019, 1:52:00 PM
	PM	 (-22.9833, 14.6000) 20 Apr 2019, 3:52:00 PM
June	AM	 (-22.9833, 14.6000) 20 Jun 2019, 8:47:00 AM
	NOON	 (-22.9833, 14.6000) 20 Jun 2019, 11:47:00 AM

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	MID-DAY	
	PM	
August	AM	
	NOON	
	MID-DAY	
	PM	

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
October	AM	
	NOON	
	MID-DAY	
	PM	
December	AM	
	MID-DAY	

MONTH	TIME	DIAGRAM (SIMULATION RESULT)
	PM	

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 preliminary 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 preliminary 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 the current public review process will be incorporated into the assessment report and resubmitted to I&APs for additional comment prior to submission to government for a record of decision. All comments are to be provided in writing (preferably via email) to Environmental Compliance Consultancy as per the contact details below:

Environmental Compliance Consultancy
PO BOX 91193
Klein Windhoek, Namibia
Tel: +264 81 669 7608
Email: info@eccenvironmental.com

10 REFERENCES

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11 APPENDIX A - EMP

12 APPENDIX B - NON-TECHNICAL SUMMARY (AVAILABLE ON WEBSITE)

13 APPENDIX C - EVIDENCE OF PUBLIC CONSULTATION (INCLUDED IN FINAL ASSESSMENT REPORT)

14 APPENDIX D - ECC CVS (INCLUDED IN FINAL ASSESSMENT REPORT)

15 APPENDIX E - PROPOSED PROJECT DESIGNS

16 APPENDIX F - ASSESSMENT FORM

The full application is available on their website

Eco Awards Namibia

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Email: admin@ecoawards-namibia.org
Web site: www.ecoawards-namibia.org

eco award Namibia

Assessment Form:

Establishment details:

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

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

	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%			
	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.					
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

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