

ENVIRONMENTAL SCOPING ASSESSMENT STUDY

CREATION OF A PUBLIC ROAD (SUBDIVISION OF ERVEN 2167, 2168 AND 2169, HENTIES BAY)

ERONGO REGION

30 NOVEMBER 2020



PROJECT INFORMATION

STUDY PHASE	Scoping Phase
PROJECT TITLE	Creation of a Public Road (Subdivision of Erven 2167, 2168 and 2169, Henties Bay)
DEVELOPMENT LOCATION	Extension 6, Henties Bay (ERONGO REGION)
COMPETENT AUTHORITY	Ministry of Urban and Rural Development
PROPONENT	Low Investments Twenty Six Close Corporation
ENVIRONMENTAL ASSESSMENT PRACTITIONER	Urban Green cc P O Box 11929 Klein Windhoek Telephone: +264-61-300 820 Fax: +264-61-401 294 E-mail: urbangreen@iway.na Website: www.urbangreenafrica.net



Draft Environmental Scoping Report

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ABBREVIATIONS AND ACRONYMS

BID	Background and Information Document
BMP	Best Management Practices
CV	Curriculum Vitae
DEA	Department of Environmental Affairs
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GG	Government Gazette
GN	Government notice
I&AP	Interested and Affected Party
IUCN	International Union for Conservation of Nature
MAWF	Ministry of Agriculture, Water and Forestry
MET	Ministry of Environment and Tourism
PPP	Public Participation Process
RA	Roads Authority
ToR	Terms of Reference

APPENDICES

- Appendix A:** Application for Environmental Clearance Certificate
- Appendix B:** Environmental Management Plan
- Appendix C:** CV of EAP responsible for the Environmental Assessment
- Appendix D:** Public Consultation
- Appendix D1: List of pre identified I&APs and Authorities
- 1st Round of Public Consultation*
- Appendix D2: Notification letters sent to all neighbouring owners
- Appendix D3: Background Information Document (BID)
- Appendix D4: Proof of registered post sent to neighbouring property owners
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- Appendix D11: On-site notice
- Appendix D12: List of registered I&APs and Authorities
- Appendix D13: Correspondence received and sent during the 1st round of the PPP

1 INTRODUCTION

This chapter of the report provides a background and motivation to the proposed development; the study's terms of reference, approach and methods applied; purpose of this report, the assumptions and limitations of the study, and opportunity to comment on this report.

1.1 DEVELOPMENT BACKGROUND

Louw Investments Twenty Six Close Corporation, the registered owner of Erven 2167, 2168 and 2169, Extension 6, Henties Bay is of the intention to subdivide the said erven into smaller more affordable erven for sale to the general public.

The three mentioned erven are currently large erven ($\pm 4,000\text{m}^2$) zoned for 'general residential 1' purpose with a density of 1:100, which provides for sectional title developments, i.e. townhouse developments. As a result of the current economic times, the size and zoning of the three erven, there is currently no demand or interest from the public, **which has led to the decision of the owner to subdivide the three erven into smaller more affordable erven.**

Given the current status of the three erven and surrounding urban environment the subdivision layout required the creation of streets to provide access to the smaller erven. The planning (i.e. design) and construction of public roads requires an Environmental Clearance Certificate (ECC), as stipulated by the List of Listed Activities (GG. No. 29 of 2012) provided for under section 27(3) of the Environmental Management Act, No. 7 of 2007.

Subsequent to the above, Urban Green cc has been appointed by the Proponent to undertake an ESA and apply for an Environmental Clearance Certificate for the proposed development, i.e. planning and construction of public roads, as provided for by the Environmental Management Act, (Act No. 7 of 2007).

The planning and construction of the public roads (with internal electricity lines) is here after referred to as the 'proposed development'.

1.2 TERMS OF REFERENCE

This environmental assessment's terms of reference is set by section 8 of the Environmental Impact Assessment Regulations (GN. No. 30 of 2012), provided for by Section 56 of the Environmental Management Act (No. 7 of 2007).

1.3 STUDY APPROACH AND METHODS

The study's approach and methods were guided by the Terms of Reference (Section 1.2) and the relevant legislation (Chapter 4).

The EA process is a planning, design and decision-making tool used to inform the relevant authorities and proponent what the consequences of their decisions will be in biophysical and social terms. As such, it identifies potential impacts (negative and positive) that the proposed development may have on the environment; as well as identifying potential opportunities and constraints the environment may pose to the proposed development.

The steps followed as part of this EA process are registration of application for an ECC and execution of the Scoping Phase (content of this report). A flowchart indicating the process being followed is presented by Figure 1.1 below.

1.3.1 REGISTRATION OF APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE

The first step followed as part of this EA process was to identify the listed activities, which the proposed project entails, as stipulated in the '*List of Activities that may not be undertaken without an Environmental Clearance Certificate*' (GN. No. 29 of 2012) and register the mentioned with the Office of the Environmental Commissioner.

The listed activities identified for which an ECC is required are listed below.

- Activity 10.1(b) – Infrastructure
The construction of public roads
- Activity 10.2(A) – Route determination
Public roads
- Activity 1(b) – Electricity
Electricity lines.

In accordance with Section 32 of the EMA, applications for an ECC should be submitted with the relevant Competent Authority, which for this proposed development was identified to be the Ministry of Urban and Rural Development. The mentioned authority was informed in writing on 07 October 2020 of the proponent's intention to apply for an ECC with the Environmental Commissioner (Appendix A).

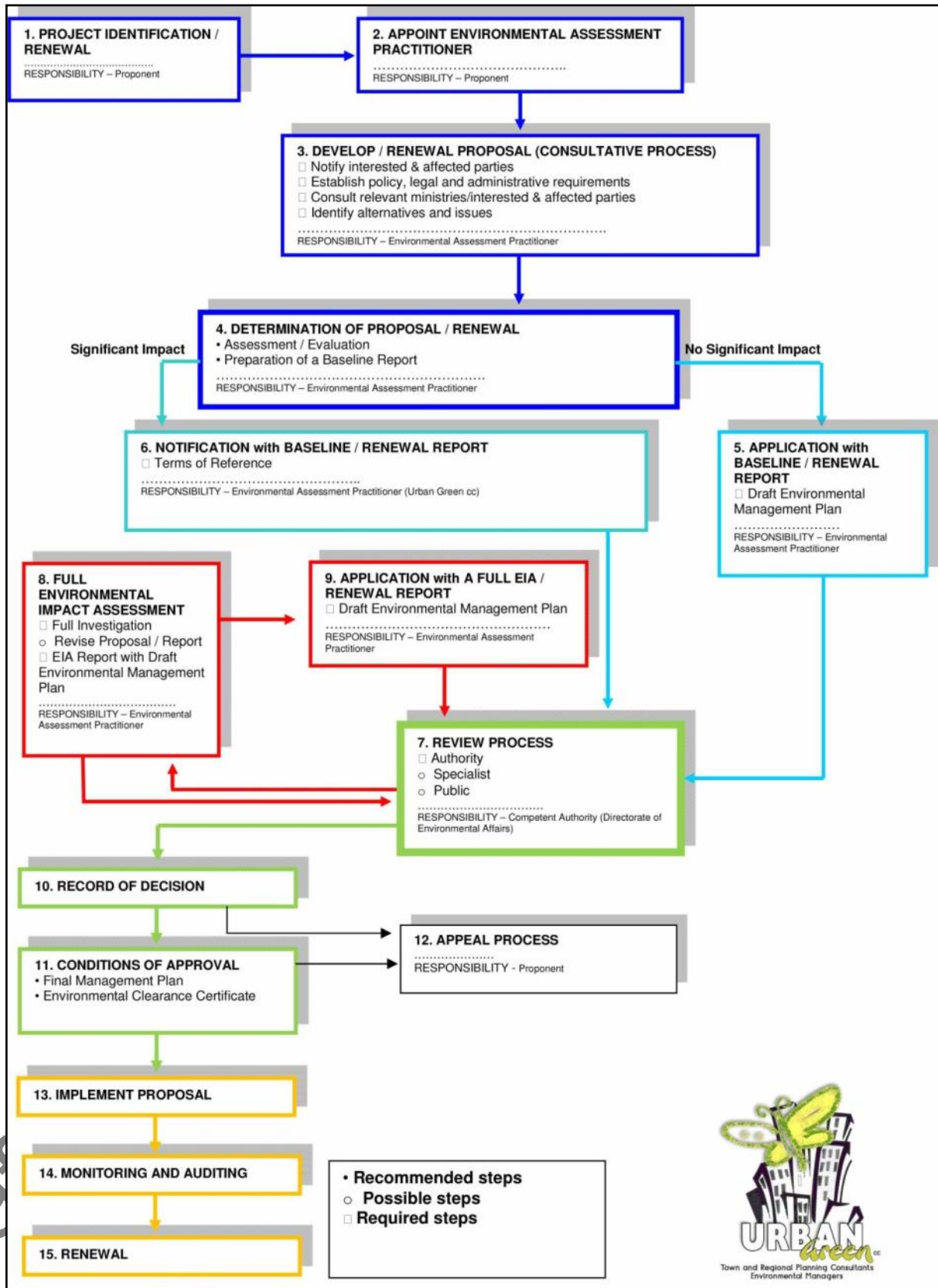


Figure 1.1: Diagrammatic representation of Namibia's Environmental Assessment process

1.3.2 SCOPING STAGE AIMS

The next step followed as part of this EA process was the scoping stage. The identification of impacts and their significance, as well as public consultation (as prescribed by Regulation 21 to 24 of the EIA Regulations (GN. No. 30 of 2012), are important elements of the scoping stage. Hence, during the scoping stage issues/impacts that are likely to be significant are identified and those that are less significant are evaluated and if warranted, eliminated.

1.3.3 SCOPING STAGE METHOD

The method followed during the scoping stage was as per requirements set by the Environmental Impact Assessment Regulations (GN. No. 30 of 2012), which included –

- Giving notice to all potential interested and affected parties (I&APs) of the application (ECC application);
- Public consultation as per Regulation 21 which included the -
 - Opening and maintaining a register of all I&APs;
 - Receiving and recording of all comments and representations received from I&APs following the public consultation processes;
- Preparing a scoping report by subjecting the proposed application to scoping by -
 - Assessing the potential effects of the proposed listed activity on the environment;
 - Assessing whether and to what extent the potential effects identified can be mitigated and whether there are any significant issues and effects that require further investigation;
 - Identifying feasible alternatives related to the proposed development;
 - Setting the Terms of Reference for further investigations (if required);
 - Informing I&APs of the way forward in the EA process;
 - Ensuring informed, transparent, and accountable decision-making by the relevant authorities; and
 - Inviting all registered I&APs to comment on the scoping report.
- Informing all registered I&APs of the decision of the office of the Environmental Commissioner.

1.4 PURPOSE OF THE DRAFT SCOPING REPORT

This draft scoping report serves the purpose of informing and presenting the study (i.e. environmental assessment process followed to date, the receiving environment, the expected impacts [if any] along with mitigation measures, and issues raised by Interested and Affected

Parties) to all registered Interested and Affected Parties (I&APs) for purpose of providing comment, as per section 23 of the Environmental Impact Assessment Regulations (GN. No. 30 of 2012).

1.5 STUDY ASSUMPTIONS AND LIMITATIONS

In undertaking the environmental assessment (EA) and compiling the scoping report, the following assumptions and limitations apply:

- It is assumed that all the information provided by the proponent and authorities consulted is accurate and that those aforementioned have disclosed all necessary information available;
- It is assumed that all permit or licence requirements, other than the ECC, associated with the development will be addressed as separate investigations and are not included in this EA process;
- It is assumed that there will be no significant changes to the proposed development or the affected environment between the compilation of this report and implementation of the development that could substantially influence findings and recommendations with respect to mitigation and management, etc.;
- The EA process involved the assessment of impacts on the current conservation value of affected land and not on either the historic or potential future conservation value; and
- The assessment is based on the prevailing environmental (social and biophysical) and legislative context at the time of writing.

1.6 OPPORTUNITY TO COMMENT ON THIS DRAFT SCOPING REPORT

This Draft Scoping Report is made available for a 14-day review and comment period (30 November to 7 December 2020). All registered I&APs and Authorities has been informed of the availability of this Draft Scoping Report via email.

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Comments on the Draft Scoping Report should reach Urban Green cc no later than 7 December 2020 by close of business for inclusion in the Final Scoping Report.

2 PROJECT TEAM AND EXPERTISE

2.1 ROLE PLAYERS

The role players in this project are set out in Table 2.1.

Table 2.1: Project role players

ORGANISATION	PROJECT ROLE
Department of Environmental Affairs	Decision-making authority for environmental authorisation
Ministry of Urban and Rural Development	Competent Authority
Louw Investments Twenty Six Close Corporation	Proponent
Urban Green cc	Environmental Assessment Practitioner (EAP)
Urban Green cc	Public participation

2.2 EXPERTISE OF THE EAP

The qualifications and expertise of the environmental assessment practitioner (EAP), as required by section 8(a) of the EIA Regulations, are set out in Table 2.2 below. A detailed CV of the EAP is attached as Appendix C.

Table 2.2: Qualifications and expertise of the environmental consultants

NAME	Mr Brand van Zyl
Responsibility on the Project	EAP; project management; public & stakeholder consultation; impact assessment and mitigation formulation; reporting and application for Environmental Clearance
Qualifications	M. Degree in Environmental Management; M. Degree Town and Regional Planning; Bachelor of Arts Urban Geography
Professional Registration	Namibian Council for Town and Regional Planners Member of the Green Building Council of South Africa
Experience in years	16
Experience	Brand van Zyl has been involved in various Environmental Impact Assessment studies throughout Namibia and of different kind.

3 LEGAL AND REGULATORY REVIEW

For environmental protection and sustainable renewable resource management to the benefit of all, legislation from different spheres under control of different ministries have been adopted and enacted by parliament. In support to the goal of sustainable renewable resource management, various international treaties and conventions have also been agreed to by Namibia.

There are several sectoral laws that fall under the general rubric of environmental laws. Sectoral laws are generally specific and apply to sectors such as forestry, water, mining and so forth. A development, such as this, is expected to have certain impacts and would therefore have to comply with some or other legislative requirement/s before commencement.

This chapter provides an overview to the legislation that is applicable to both the assessment process and the various activities making up the proposed development. It is accordingly divided into: (i) the legal framework for environmental management in Namibia; and (ii) national sectoral legislative requirements applicable to the activities of the development.

3.1 NAMIBIAN LEGAL FRAMEWORK FOR EIA

Several Namibian legislation and policies have environmental considerations with respect to the proposed development.

The aforementioned instruments accounting for the legal framework for conducting an environmental assessment is listed in Table 3.1 below.

Table 3.1 Legislation guiding the EIA

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
ENVIRONMENTAL ASSESSMENT LEGAL FRAMEWORK		
The Namibian Constitution (1990)	<p>Article 95 (1) states that “<i>the State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at... maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of natural resources on a sustainable basis</i>”</p> <p>Article 100 stipulates that all natural resources are vested in the state, unless otherwise legally owned. The use of such resources is only allowed within reasonable limits and beyond such limits, permission should be</p>	The development should support the provisions of the Namibian Constitution

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
	obtained from a competent authority responsible for the use and governance of the concerned natural resources.	
Environmental Management Act (No 7 of 2007)	<p>Section 3(2) of the EMA provides a set of principles that give effect to the provisions of the Namibian Constitution for integrated environmental management.</p> <p>Section 27(3) stipulates that no party, whether private or governmental, can conduct a listed activity without an ECC obtained from the Environmental Commissioner.</p> <p>Section 40(1) stipulates that an ECC remains valid for a period not exceeding three years, subject to cancellation or suspension.</p>	<p>The development should adhere to the principles provided in the EMA.</p> <p>An ECC should be obtained for the development.</p> <p>The proponent should renew the ECC (if granted) every three years.</p>
EIA Regulations 2012 (GG No. 4878 GN No. 29 and 30)	<p>Provides for the process to be followed in undertaking an environmental assessment, stipulating particular requirements with regards to public consultation, the identification of impacts and establishing the significance thereof, as well as the content of an environmental scoping report.</p> <p>Of particular interest is the transfer of an ECC, which is regulated by section 20 of the EIA Regulations.</p>	<p>The EA process should be undertaken as prescribed in the EIA Regulations.</p> <p>Transfer of the ECC should be done as per the requirements, at the time when so required.</p>

3.2 NAMIBIAN SECTORAL LEGISLATIVE REQUIREMENTS

A number of Namibian legislation and policies have environmental considerations in respect of the proposed development, as listed in Table 3.2 below.

Table 3.2 Cross-sectoral legislation applicable to the development

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
NATIONAL SECTORAL LEGISLATION		
Water Act No. 54 of 1956, as amended	Makes provision for a number of functions pertaining to the management, control and use of water resources, water supply and the	The proponent should ensure that water use during the construction phase is as sustainable as possible and

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
	<p>protection of water resources.</p> <p>Of importance is that the Act -</p> <ul style="list-style-type: none"> • Prohibits the pollution of underground and surface water bodies. • Liability of clean-up costs after closure / abandonment of an activity. 	that no pollution takes place.
Soil Conservation Act No. 76 of 1969, as amended	Prevention and combating of soil erosion; conservation, improvement and manner of use of soil and vegetation, and protection of water sources.	
Hazardous Substances Ordinance No. 14 of 1974, as amended	The Ordinance applies to the manufacture, sale, use, disposal and dumping of hazardous substances, and is administered by the Minister of Health and Social Services. Its primary purpose is to prevent hazardous substances from causing injury, ill health or the death of human beings.	During the construction and operation phases, any hazardous waste needs to be handled, stored, and disposed of in a responsible manner and at appropriate waste sites.
Atmospheric Pollution Prevention Ordinance No 11 of 1976, as amended	Provides for the prevention of the pollution of the atmosphere. Part IV of this ordinance deals with dust control and provides for the proclamation of dust control areas.	Excessive dust emissions should be avoided as it could be categorised as causing a public nuisance under common law.
Public Health Act No. 36 of 1919, as amended Health and Safety Regulations GN 156/1997 (GG 1617)	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.”	The proponent has a general obligation not to cause any nuisance, which may have an implication on human health.
Labour Act No. 11 of 2007, as amended	<p>The Labour Act (No. 6 of 1992), the New Labour Act (no. 11 of 2007) and Government Notice 156 of 1997: Labour Act, 1992: Regulations Relating to the Health and Safety of Employees at Work, governs working conditions of employees.</p> <p>These regulations are prescribed for among others safety relating to hazardous substances, exposure limits and physical hazards. Special consideration must be given</p>	<p>The proponent (including their appointed contractors) needs to comply with health and safety regulations pertaining to the health and safety of employees during construction.</p> <p>Operational activities should not result in any potential negative health implications</p>

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
	to: <ul style="list-style-type: none"> • Chapter 3: Welfare and Facilities at Work-Places • Chapter 4: Safety of Machinery • Chapter 5: Hazardous Substances • Chapter 6: Physical Hazards and general provision 	to the residents and/or larger community.
Road Traffic and Transport Act 52 of 1999 and its 2001 Regulations, as amended	Provides for the control of traffic on public roads and the regulations pertaining to road transport, including the licensing of vehicles and drivers. Part 5 of the 2001 Regulations lays out detailed provisions pertaining to vehicle loads – i.e. types of loads and the appropriate manner in which loads for different vehicle classes should be carried.	All personnel and vehicles active during the construction phase should be appropriately licensed. Construction materials transported/delivered to the construction site should adhere to the requirements of the 2001 Regulations – i.e. should not exceed limits stipulated and should be transported in a safe manner.
National Heritage Act (Act 27 of 2004), as amended	The Act requires the identification of cultural and archaeological sites within the study area, registration and protection thereof.	All protected heritage resources (e.g. human remains etc.) discovered, need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before they may be relocated. Heritage resources need to be considered by a heritage specialist.

4 DESCRIPTION OF THE RECEIVING ENVIRONMENT

This chapter describes the details pertaining to the site on which the proposed development will take place and surroundings.

This chapter provides the basis for assessing the likely negative and positive impacts that the proposed development might have on the receiving environment (e.g. natural and social), as well as the significance thereof, which again will inform the applicable mitigating measures to be applied during the design stage, construction and operation.

4.1 LOCATION

The proposed development is located within the Town of Henties Bay, a small holiday town located along the central coast of Namibia along the Atlantic Ocean, about 65km north of Swakopmund, the Regional Capital.

The site, on which the proposed development will take place, i.e. Erven 2167, 2168 & 2169, Henties Bay, is located within Extension 6 Henties Bay, located to the southern parts of the larger town along the beach (see Figure 4.1).

4.2 SURROUNDING URBAN ENVIRONMENT

Erven 2167, 2168 & 2169 is located within an existing developed urban area (see Figures 4.1) known as Henties Bay Extension 6. From the aerial photo (Figure 4.2) it is evident that the larger part of Extension 6 has been developed, with only a few vacant erven remaining, as is the case with Erven 2167, 2168 & 2169.

The surrounding urban area is characterised by a variety of land uses and activities, of which the most prominent in Extension 6 is residential, as seen from Figure 4.3. The most prominent of the residential land uses is the 'single residential' allowing one dwelling per erf, with a few 'general residential erven' earmarked for higher density developments such as townhouses or flats.

A variety of residential erf sizes and densities exists, range from small 400m² erven with a density of 1:300 to larger erven of 1,000m² with a density of 1:900.

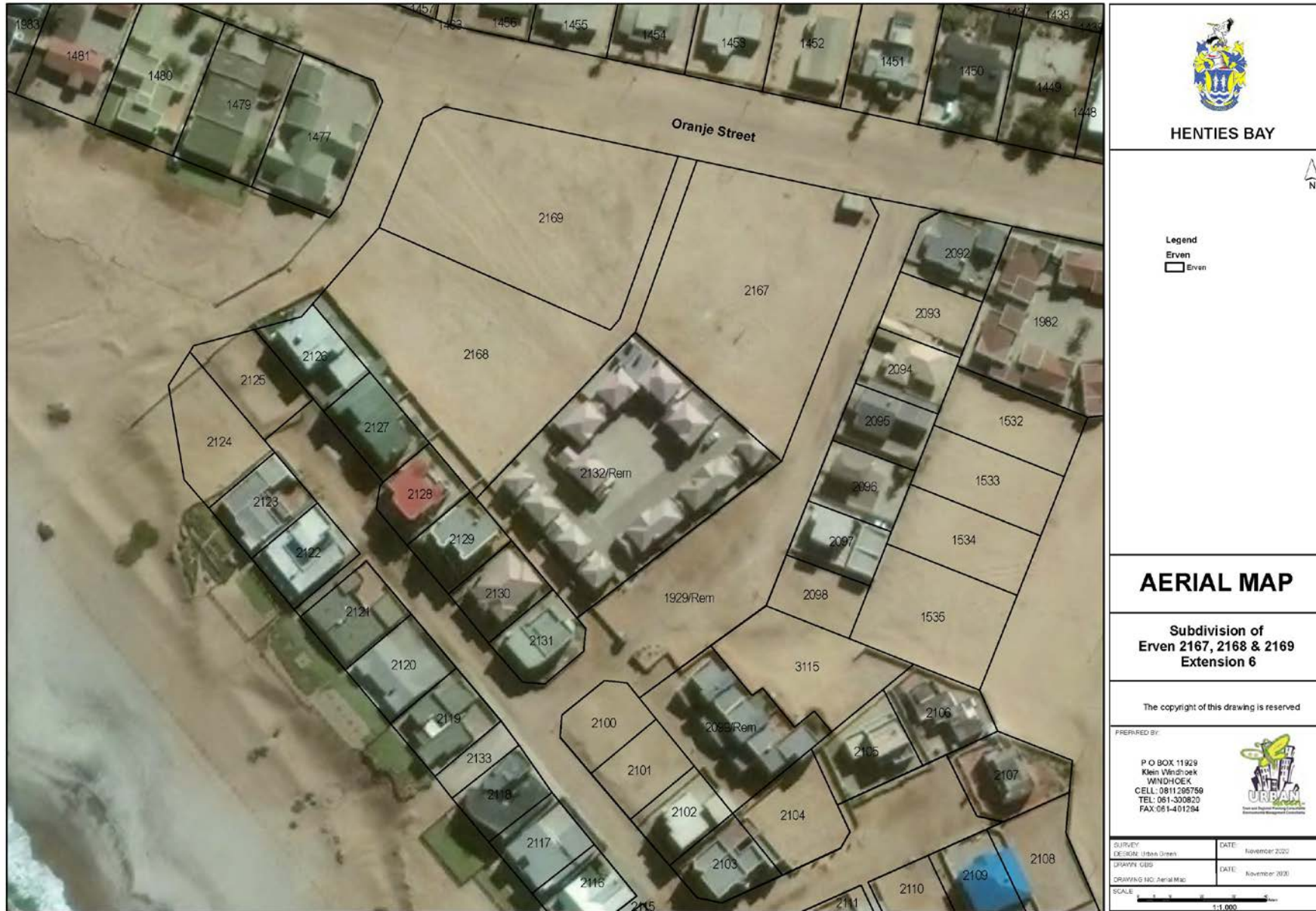
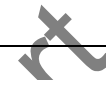
The entire township is defined by a well-planned and developed road network providing effective accessibility throughout and with the larger town. All roads are gravel road, which are wetted with salt sea water and compacted. Given the low rainfall no storm water infrastructure exists. All municipal infrastructure exists and is well developed throughout town.



Figure 4.1: Locality of the Proposed Development

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HENTIES BAY



Legend
Erven

AERIAL MAP

Subdivision of
Erven 2167, 2168 & 2169
Extension 6

The copyright of this drawing is reserved

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CLIENT: Urban Green	DATE: November 2020
DRAWN: GEB	DATE: November 2020
DRAWING NO: Aerial Map	
SCALE: 1:1,000	

Figure 4.2: Aerial Photo

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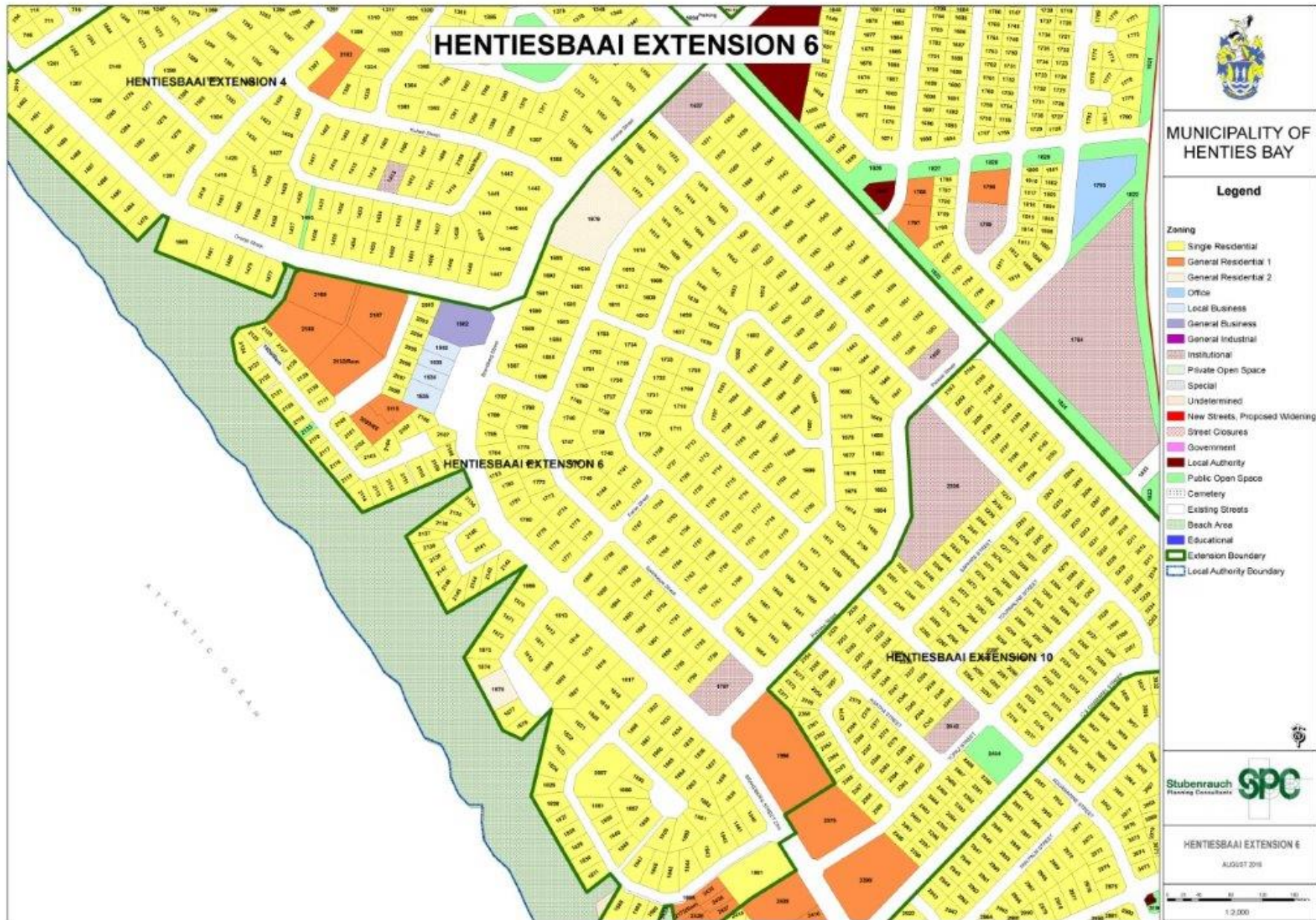
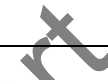


Figure 4.3 Land Use Map

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4.3 ERVEN 2167, 2168 & 2169, HENTIES BAY

4.3.1 Development Status

As can be seen from the two photos below (Photos 4.1 & 4.2), the sites of the proposed development are vacant and bear no evidence of any natural vegetation.



4.3.2 Current Layout, zoning & Size

Erven 2167, 2168 and 2169, Extension 6, Henties Bay is currently zoned 'general residential 1' with a density of 1:100.

The sizes of the erven can be seen in Table 4.1 below:

Table 4.1: Erf sizes

ERF	SIZE
Erf 2167	4 169m ²
Erf 2168	4 408m ²
Erf 2169	3 995m ²

4.3.3 Current Development Potential

Given the size of the tree erven and the zoning (see point 4.3.2), the three erven can be developed as three separate sectional title developments or townhouse developments. The amount of dwellings that is allowed to be developed is indicated by Table 4.2 below.

Table 4.2: Development Potential

ERF	AMOUNT OF DWELLINGS
Erf 2167	41
Erf 2168	44
Erf 2169	39
Total	124

The current development potential of the three erven in combination allows for 124 dwellings.

4.3.4 Road Access

Access to Erven 2168 and 2169 is obtained exclusively from Oranje Street. For purpose of access from Oranje Street to Erf 2168, a long panhandle has been provided, as can be seen from Figure 4.2. No other possibility of access exists to 2168 and 2169.

Erf 2169 is a corner erf obtaining access from both Oranje Street and Hentie van der Merwe Street, as can be seen from Figure 4.2.

4.3.5 Municipal Services

All three erven are fully serviced with municipal services (i.e. water, electricity and sewage) provided by the Henties Bay Municipality.

4.4 BIOPHYSICAL ENVIRONMENT

4.4.1 CLIMATE AND AIR QUALITY

The central coastal region of Namibia is characterised by a scarcity of rain, with the Henties Bay area receiving an average annual rainfall of less than 50 mm (Mendelsohn, et al., 2009). Along the coast, the air remains humid throughout the year as a result of moist air feeding off the Atlantic. During the least humid month of the year (June) the average humidity value for the greater area of Henties Bay is between 30-50%. During the most humid month of the year (February) the average humidity value for the greater area of Henties Bay is between 80-100% (Mendelsohn, et al., 2009). Winds from the south and west predominate along the coast, but occasional hot and dry east (or berg) winds create unpleasant conditions (Mendelsohn, et al., 2009).

Average annual temperatures in the greater Henties Bay area are between 16 °C – 22 °C.

Strong winds during the winter months have the ability to generate dust (i.e. sand storms), which again impact on air quality. Winds near Henties Bay display two main trends; high velocity and frequency south to south-westerly winds in summer and high velocity, low frequency east to north-easterly winds during winter.

No air quality monitoring station exists at Henties Bay or at any locality within the vicinity of the project site and therefore no measurable/quantifiable air quality indicators are available. Given the lack of any real industrial sector and Henties Bay being a holiday resort with very few permanent residents, air quality (i.e. smells and smoke) is very good. Vehicular emissions are expected, but considered negligible.

4.4.2 TOPOGRAPHY AND SURFACE WATER

Henties Bay is located on the northern and southern sides of the Omaruru River mouth, basically splitting the town in two halves. The built up areas of the town are located on two dunes on either side of the river mouth. These two dunes are known locally as the north- and south dunes. Extension 6, Henties Bay, where the proposed development sites are located, is on the south dune.

The town of Henties Bay is located within the Central Western Plains where the broad plain extends inland for a couple of hundred kilometres.

Erven 2167, 2168 & 2169, Henties Bay Extension 6 has a flat topography with a gentle slope westwards towards the ocean. As a result, drainage at the site is poorly developed with no bodies of surface water present. The nearest open water body is the Atlantic Ocean located about 500m to the west of the site.

4.4.3 GEOLOGY AND HYDROLOGY

The town of Henties Bay and surroundings is covered by thick desert sand of quaternary age, which is underlain by the Damara Sequence rocks of the Swakop Group. All underlying formations are classified as hard rock formations.

The general geology of Henties Bay and in specific the site consists of fine sand with a silty clay content. Being located on a sand dune, Erven 2167, 2168 & 2169, Henties Bay Extension 6 is characterised by deep sandy soils.

Underground water flow takes place within fractures and faults. The area of Henties Bay does not form part of any water control area.

4.4.4 BIODIVERSITY

The area forms part of the Namib Desert biome characterised by the Central Desert vegetation type, which is dominated with sparse shrubs and grasses.

Thick fog or low stratus clouds are a regular occurrence in Henties Bay, which forms an important water source to succulents and lichen flora, as well as small insects and reptiles.

Given the sites locality within a build-up urban area no vegetation has remained (see section 4.3.1 above). During the site visit no small animals or any other were observed.

4.5 SOCIO-ECONOMIC ENVIRONMENT

According to the 2011 census data, there are approximately 108,000 people in the Erongo Region, which has the highest human development index in the country. Erongo has an HIV prevalence rate of 27%, the highest in the country and significantly higher than the average rate of 19.9%. The rate of tuberculosis in the region is high compared to the rest of the country, with most cases reported in Swakopmund and Walvis Bay.

The Erongo Regional Development Plan (RDP) (based on the National Development Plan and Vision 2030) aims to transform Erongo into a region with a more diversified economy in an effort to create employment and wealth in the region, and more equitable distribution of resources, facilities and services throughout the region and among its inhabitants.

Sixty-three per cent of the population in the Erongo Region is urbanised. There is a wide diversity of living situations and standards of living, but with the lowest Gini coefficient (a measure of inequality) in the country. The Erongo Region has the highest population growth rate (5.39% over the years since 2001). Most people in Erongo are settled in the towns of Walvis Bay, Swakopmund and Henties Bay on the coast, and in the inland towns of Omaruru, Karibib, Arandis, Usakos and Uis.

The main languages spoken at home in the Erongo Region are the Oshiwambo language at 39%; Afrikaans language at 20%; Nama/Damara at 19% and Otjiherero language at 10% as compared to the Khomas Region where 41% communicates in Oshiwambo language, 19% in Afrikaans, 12% in Nama/Damara and 10% in Otjiherero. Approximately 79% of the population aged 15 years and up belong to the labour force (i.e. economically active) in the Erongo Region 70% of the population is employed while 30% are unemployed. The inactive group, which consists of homemakers, 11%, students 46% and the severely disabled, retired, or old age income recipients 35% makes up of the regions' population. The main source of income in this region is from wages and salaries at 73%, business and non-farming activities at 9% and farming at 3%. Cash remittance makes up 5% respectively. The older age group makes up 8% of the region's income.

The town of Henties Bay is mainly a holiday town with a population of about 3,000 permanent residents. The economy is poorly developed and mainly dependent on tourism and holiday activities.

4.6 HISTORICAL, ARCHAEOLOGICAL AND CULTURAL SITES

No sites of any historical importance or sites of archaeological and/or cultural importance exist within Henties Bay or at the site.

However, due to the historical presence of the San people expected in the area, care should be exercised during excavations to ensure that where archaeological artefacts are found, that they are reported to the relevant authorities for further archaeological assessment.

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5 PROPOSED DEVELOPMENT DESCRIPTION

This chapter provides a description of the proposed development. The content of this chapter is based on and derived from information as provided by the proponent.

5.1 LOCALITY

The location of the public street is at Erven 2167, 2168 and 2169, located in Henties Bay Extension 6, as indicated by Figure 4.1.

The status quo to Erven 2167, 2168 and 2169, Extension 6, Henties Bay is presented in Chapter 4, above.

5.2 PROPOSED DEVELOPMENT

The 'proposed development' for which an environmental clearance certificate is applied for is for the **planning and eventual construction of a public road** (with internal electricity line), which is as a result of a subdivision of Erven 2167, 2168 and 2169, as indicated by Figure 5.1.

Given the status of Erven 2167, 2168 and 2169, Henties Bay (see section 4.3 above), along with the surrounding street layout, access to some of the erven not having access from the current township streets had to be created by means of a new street to be created over Erven 2167 and 2169, as indicated by Figure 5.1.

5.3 NEED AND DESIRABILITY

For purpose of planning and creating a sensible access to all proposed erven a public road had to be created of a minimum width of 13m, as required by the Urban and Regional Planning Act (No. 5 of 2018).

Erven 2167, 2168 and 2169, Henties Bay are currently large erven ($\pm 4,000\text{m}^2$) zoned for 'general residential 1' purpose with a density of 1:100, which provides for sectional title developments, i.e. townhouse developments of 124 dwellings in total.

Given the size and zoning of the three erven and currently poor economic times, there is currently no demand or interest for larger townhouse type erven, **which has led to the decision of the owner to subdivide the three erven into smaller more affordable erven**, as indicated by Figure 5.1.

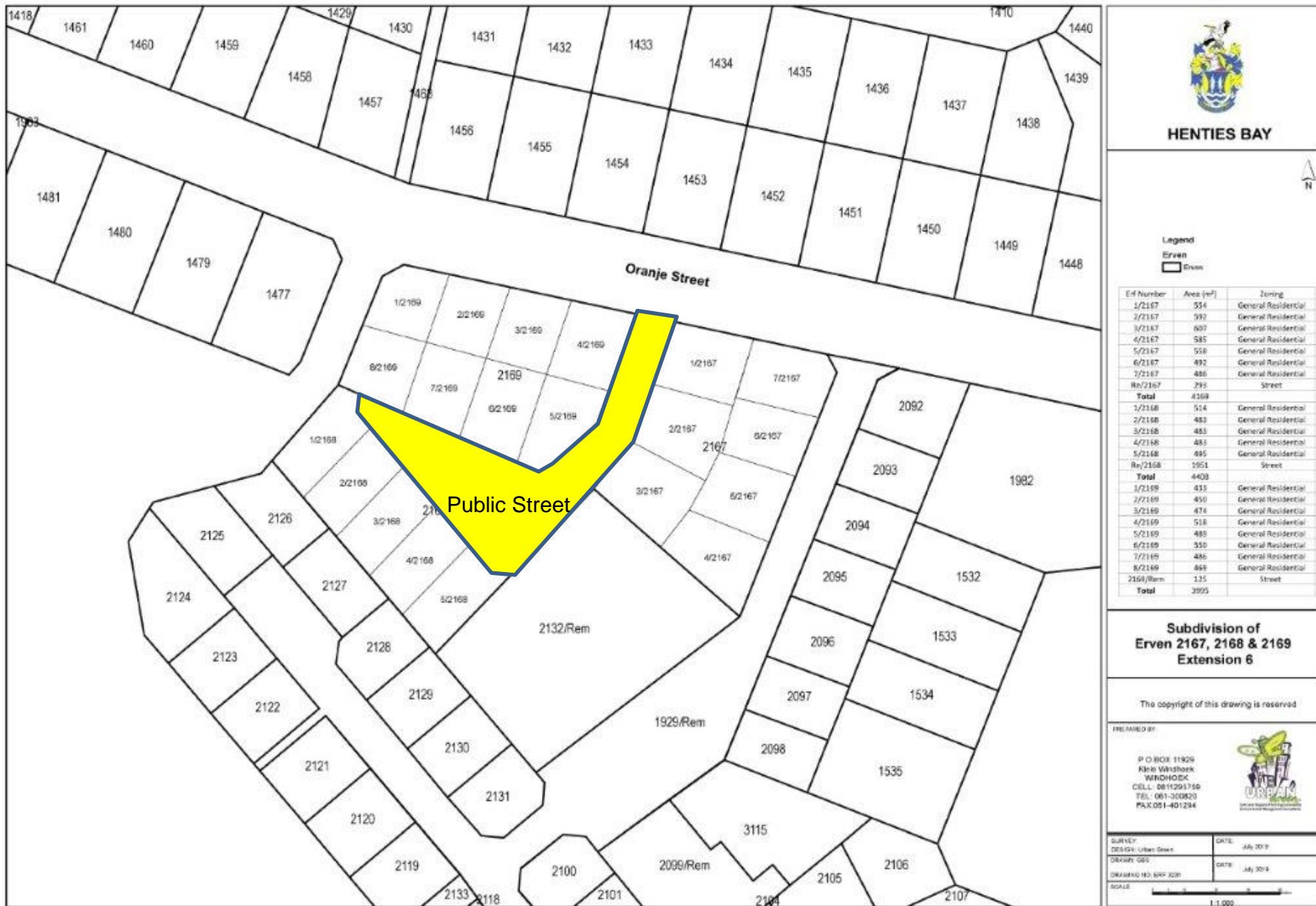


Figure 5.1: Proposed Subdivision of Erven 2167, 2168 and 2169, Extension 6, Henties Bay

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5.4 ROAD CONDITION AND SPECIFICATIONS

The condition of the road to be constructed will be of similar nature than the streets within Extension 6 and larger town, i.e. compacted gravel roads occasionally wetted with sea water and compacted.

The road width from Oranje Street will be 13m, where after the road will widen, as indicated by Figure 5.1 above. The total road surface area of 2,500m² represents 19% of the total developable area.

5.5 CONSTRUCTION PHASE

5.5.1 TIME FRAME

The construction period for the public roads is expected to take about two weeks.

5.5.2 CONSTRUCTION METHOD AND VEHICLES

The method of constructing the roads includes –

- Setting out the road alignment;
- Excavations and preparation for base;
- Transporting and adding base material;
- Wetting and compacting of base material;
- Transportation and adding top material and compacting;
- Wetting and compacting of top material;
- Rehabilitation of surroundings.

The construction vehicles that will be used are a tipper truck, grader and compactor.

5.5.3 CONSTRUCTION ACTIVITIES

Some of the typical activities associated with construction of roads and related utility services may include:

- Setting-up of a temporary –
 - construction yard;
 - site office and parking area;
 - batching area;
 - ablution facilities;
 - stockpile area and waste disposal facility; and

- Transportation of construction materials as well as construction labourers;
- Site clearing, excavations and earth moving (i.e. trench digging), with the associated construction machinery, to prepare the site for construction;
- Pouring of concrete and brick work;
- Generation of construction waste, temporary storage and removal from site;
- Usage of water for daily construction activities and generation of wastewater;
- Post-construction rehabilitation of disturbed area;

Most of the activities expected to occur during the construction phase are exclusive to the construction phase and is short-lived.

5.6 OPERATIONAL PHASE

Activities associated with the operational phase, but not necessarily limited to, are:

- Traffic movement and noises associated with vehicle movement; and
- Maintenance of public roads and utility services by the local authority.

6 PUBLIC CONSULTATION

Public consultation and participation are an important aspect of an EA process. During public consultation, potential impacts that the development may have on the natural and/or socio-economic environments, were identified.

The public consultation process assists the Environmental Assessment Practitioner (EAP) in identifying all potential impacts and to what extent further investigations are needed. Public consultation can also aid in the process of identifying possible mitigations measures.

Public consultation for the purposes of this development was done as prescribed by Regulations 21 to 24 of the Environmental Impact Assessment Regulations (GN. 30 of 2012).

This chapter describes in detail the full extent of the public consultation process that was followed and the I&APs and authorities that were notified of the study being undertaken. It also includes the main issues and concerns raised during the public consultation process and comments received on the Background Information Document (BID) distributed during the first round of public consultation.

6.1 PUBLIC ENGAGEMENT

6.1.1 FIRST ROUND OF CONSULTATION

Engagement with the public and authorities as part of the first round of public consultation commenced on the 16th of October 2020 and concluded on the 6th of November 2020. During the first round of consultation, I&APs and authorities were given an opportunity to register and submit comments and/or concerns on the proposed development.

6.1.1.1 Activities of Public Engagement

Activities undertaken to date to ensure effective and adequate I&AP involvement, are as follows:

- A list of predetermined I&APs and authorities was compiled. A total of 32 I&APs was included in the database (Appendix D1).
- Notification letters (Appendix D2) with Background Information Document (BID) (Appendix D3) was sent via registered post (Appendix D4) on the 15th of October 2020 to all neighbouring property owners (Appendix D1).
- A notification email (Appendix D5) with BID (Appendix D3) was sent to all I&APs (Appendix D1) on the 15th of October 2020.
- Notification letters (Appendix D6) with BID (Appendix D3) was hand delivered on the 15th of October 2020 to all applicable Line Ministries and State-Owned Enterprises situated in Windhoek (Appendix D7).

- Notification letters (Appendix D6) with BID (Appendix D3) was courier on the 15th of October 2020 to all applicable Line Ministries and State-Owned Enterprises situated within the Erongo Region (Appendix D8).
- Public notices announcing the commencement of the EA and an invitation to register as an I&AP were placed in 'The Republikein' and 'Namibian' on 16 October 2020 and 23 October 2020 (Appendix D9).
- A notice was placed at the Henties Bay Municipality Customer Care Centre (Appendix D10) on-site (Appendix D11).
- A register was opened and maintained and included all registered I&APs who submitted comments or raised their concerns (Appendix D12).

6.1.1.2 Comments Received and Responses Provided

All comments and feedback received from I&APs and authorities are summarised in Table 6.1 below, while a copy of the original correspondence is attached as Appendix D13.

Table 6.1: Comments received during the first round of public consultation

NO.	NAME	COMMENTS	NAME	RESPONSE
1.	Mr P.A Nel (04/11/2020)	<p>Good day All,</p> <p>Please see below response from P A Nel, P.O. Box 59.</p> <p>Herewith I decline your request to build sectional title units, reasons following;</p> <ol style="list-style-type: none"> 1. The decrease in property value. 2. Noise, due to the many units. 3. Surrounding neighbours also declined the request. <p>Kind regards</p> <p>Jolene Janse van Rensburg</p>	Urban Green cc (05/11/2020)	<p>Dear Mr. P.A. Nel,</p> <p>Your email communication below refers.</p> <p>Please allow me to explain a few things with respect to the study and project having relevance to Erven 2167, 2168 and 2169, Henties Bay.</p> <p>First of all, the study being undertaken is an environmental assessment for purpose of obtaining an environmental clearance FOR THE PURPOSE OF CONSTRUCTING A PUBLIC ROAD, a road that will provide access to the erven to be created following the subdivision of Erven 2167, 2168 and 2169, Henties Bay. This is explained in the Background Information Document that you have received along with the letter dated 15 October 2020. So, please note that this request is NOT a request for rezoning and/or subdivision, but for the creation of a public road to provide access to the proposed subdivision of Erven 2167, 2168 and 2169, Henties Bay, for which NO request from the public is required.</p> <p>Please let me know if you have any comments/concerns with respect to the creation of a public street to provide access to the proposed subdivided Erven 2167, 2168 and 2169, Henties Bay?</p> <p>Secondly, the current zoning of the erven is 'General Residential 1' as per the Henties Bay Town Planning Scheme. The CURRENT STATUS of the three erven allows for sectional title developments. THIS IS HOWEVER NOT WHAT IS INTENDED... As explained in the Background Information Document that you have</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
				<p>received along with the letter dated 15 October 2020, it is the client's intention NOT to do sectional title developments on Erven 2167, 2168 and 2169, Henties Bay, but subdivide Erven 2167, 2168 and 2169, Henties Bay into smaller erven as indicated by Appendix B of the attached Background Information Document. These erven to be created as a result of the subdivision are all erven of much similar size as your Erf 2096.</p> <p>Thirdly, you are the only person indicating 'decline', none of the other surrounding neighbours indicated a 'decline'. Once again, the study being undertaken is an environmental assessment for purpose of obtaining and environmental clearance FOR THE PURPOSE OF CONSTRUCTING A PUBLIC ROAD, a road that will provide access to the erven to be created following the subdivision of Erven 2167, 2168 and 2169, Henties Bay. We are NOT seeking your approval or not, but your comment/concerns with respect to the creation of a public street to provide access to the proposed subdivided Erven 2167, 2168 and 2169, Henties Bay.</p> <p>Should you have any comment/concerns with respect to the creation of a public street to provide access to the proposed subdivided Erven 2167, 2168 and 2169, Henties Bay, please let me know.</p> <p>Should you have any further queries, please let me know?</p> <p>Regards</p> <p>Brand van Zyl</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
2.	D van der Merwe – Body Corporate Oppieduin Henties Bay (06/11/2020)	<p>To Whom it may concern</p> <p>Herewith we, Body Corporate, Oppieduin Henties Bay would like to put our concern forward regarding the new development on ERF 2167, 2168 & 2169. We don't have any problem with the development in itself, our concern being the two roads namely RE 2168/street and REM 2169/street, which will give access to the various erven and later on dwellings in the new development.</p> <p>Our units are number 1 - 14 in the adjacent Oppieduin Complex. The two streets mentioned, RE 2168 and REM 2169, will run directly against five of existing unit's boundary wall, our main bedrooms and the guest rooms will endure a lot of noise as well as dust, especially during certain times of the year.</p> <p>Easter weekend and December holidays in particular will have a major impact on our privacy and will result in a lot of noise pollution and dust coming into some of the units.</p> <p>We would thus like to ask the developer to rearrange Erven RE/2168 and REM/2169, which will become the streets giving access to the various houses?</p> <p>Awaiting your reply in this matter urgently. Please feel free to contact us on the below cell phone number if anything is not clear.</p> <p>Regards, Dokes Van Der Merwe</p>	Urban Green cc (06/11/2020)	<p>Dear Mr. D. van der Merwe,</p> <p>We acknowledge receipt of your email below with concerns/comments.</p> <p>With respect to your concern about densification and resulting impacts (i.e. more noise, more people, more vehicles, change of character) the following comments. The current zoning of the erven is 'General Residential 1' with a density of 1:100, as per the Henties Bay Town Planning Scheme.</p> <p>The current zoning and size of the erven allows for three sectional title developments to the total of 125 dwelling units (i.e. houses).</p> <p>It is NOT the client's intention to do sectional title developments on Erven 2167, 2168 and 2169, Henties Bay (i.e. 125 dwelling units), but subdivide Erven 2167, 2168 and 2169, Henties Bay into 20 erven in total.</p> <p>By subdividing the three erven, a total of 20 erven is created. The impact of a sectional title development of 125 in comparison to 25 speaks for itself and does NOT result in an increase of impacts, but in actual fact results in a decrease of people, traffic, noise, etc.</p> <p>What is also important to note is that the current situation with reference to Erf 2168 does not allow for any other access possibility apart from the provided panhandle from Oranje Street, as indicated by the attached erf diagrams.</p> <p>We will however discuss your request with the land</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
				owner and come back to you on the matter. Regards Brand van Zyl
3.	Mr D van der Merwe (06/11/2020)	<p>To Whom it may concern</p> <p>Herewith I, D I van der Merwe would like to put my concern forward regarding the new development on ERF 2167, 2168 & 2169. I don't have any problem with the development in itself, my concern being the two roads namely RE 2168/street and REM 2169/street which will give access to the various erven and later on dwellings in the new development.</p> <p>My unit is number 13 in the adjacent Oppidum Complex. The two streets mentioned, RE 2168 and REM 2169, will run directly against my boundary wall, my main bedroom and one of the guest rooms will endure a lot of noise as well as dust, especially during certain times of the year. Easter weekend and December holidays in particular will have a major impact on our privacy and will result in a lot of noise pollution and dust coming into my unit.</p> <p>I would thus like to ask the developer to rearrange Erven RE/2168 and REM/2169, which will become the streets giving access to the various houses?</p> <p>Awaiting your reply in this matter urgently. Please feel free to contact me on the below cell phone number if anything is not clear.</p>	Urban Green cc (06/11/2020)	<p>Dear Mr. D. van der Merwe,</p> <p>We acknowledge receipt of your email below with concerns/comments.</p> <p>What is important to note is that the current situation with reference to Erf 2168 does not allow for any other access possibility apart from the provided panhandle from Oranje Street, as indicated by the attached erf diagrams. Also, the proposed development (i.e. subdivided development) will allow for less dwellings to be constructed in comparison with the current sectional title development potential of the three erven, hence the impact with respect to noise and dust will be less during the operational phase, which were highlighted from your side as concerns.</p> <p>We will however discuss your request with the land owner and come back to you on the matter.</p> <p>Regards Brand van Zyl</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
		Regards Dokes Van Der Merwe		
4.	Mr J Joubert (06/11/2020)	<p>Dear Mr van Zyl</p> <p>ERVEN 2167, 2168 & 2169, Ext 6 HENTIES BAY - APPLICATION FOR ENVIRONMENTAL CLEARANCE</p> <p><u>Register as I&AP and comments/concerns on proposed development</u></p> <p>As owner of Erf 1453, Oranje street Henties Bay, I hereby register as an Interested and Affected Parties in the matter of the proposed subdivision and development of Erven 2167, 2168 & 2169, Ext 6 Henties Bay, Erongo Region.</p> <p>In the matter of the proposed subdivision and development of Erven 2167, 2168 & 2169, Ext 6 Henties Bay, I raise the following comments and concerns:</p> <ul style="list-style-type: none"> • I object to the proposed subdivision of the Erven 2167, 2168 & 2169, Ext 6 Henties Bay as set out in the Environmental Scoping Assessment Study document (dated 8 October 2020) schedule of page 2 of said document. The objection is based on the following factors: <ul style="list-style-type: none"> ○ The proposed subdivision is to create single residential erven of between 433 square meters to 607 square meters. The proposed density of these erven (after subdivision) are not commensurate with the surrounding areas and neighbourhoods. 	Urban Green cc (06/11/2020)	<p>Dear Mr. J. Joubert</p> <p><u>RE: APPLICATION FOR AN ENVIRONMENTAL CLEARANCE CERTIFICATE FOR CONSTRUCTION OF PUBLIC ROADS AS PART OF THE SUBDIVISION OF ERVEN 2167, 2168 AND 2169, EXTENSION 6, HENTIES BAY (ERONGO REGION)</u></p> <p>Your letter dated 6 November 2020 received via email with reference to the above refers.</p> <p>We confirm receipt of your comments and you have been registered as an Interested and Affected Party.</p> <p>Please allow me to explain a few things with respect to the study being conducted and project having relevance to Erven 2167, 2168 and 2169, Henties Bay.</p> <p>First of all, <u>the study being undertaken is an environmental assessment</u> (not a town planning study) for purpose of obtaining and environmental clearance FOR THE PURPOSE OF CONSTRUCTING A PUBLIC ROAD (as provided for by the Environmental Management Act), a road that will provide access to the erven to be created following the subdivision of Erven 2167, 2168 and 2169, Henties Bay.</p> <p>The environmental assessment study is thus NOT DONE for purpose of the intended subdivision, but for reason of the public street that will be created.</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
		<ul style="list-style-type: none"> ○ The erven 2167, 2168 & 2169 is listed in Ext. 6, but is also adjacent to erven in Ext 4, Henties Bay and to sea-facing erven. ○ The erven in Oranje Street are of a size of 1'000 square meter and above. ○ The subdivision propose to create 20 additional erven and with the accompanying households. ○ This will dramatically increase the human and vehicle traffic in the area/neighbourhood. Due to the current density and size of the adjacent erven, the neighbourhood does not have the quantum of human and vehicle traffic that the proposed division would bring to the area. ○ The large increase in the proposed households will also dramatically increase the noise activity in the neighbourhood. ○ In addition the access road is directly in line with my bedroom which could be an disturbance with the amount of additional traffic entering and exiting with regards to the additional amount of erven proposed • The development of the open space of erven 2167, 2168 & 2169 are not discouraged, but it must be performed in a responsible manner as not to negatively impact the social environment of the surrounding areas and current neighbourhood. 		<p>Secondly, with respect to your concern about densification and resulting impacts (i.e. more noise, more people, more vehicles, change of character) the following comments. The current zoning of the erven is 'General Residential 1' with a density of 1:100, as per the Henties Bay Town Planning Scheme.</p> <p>The current zoning and size of the erven allows for three sectional title developments to the <u>total of 125 dwelling units</u> (i.e. houses).</p> <p>It is NOT the client's intention to do sectional title developments on Erven 2167, 2168 and 2169, Henties Bay (i.e. 125 dwelling units), but subdivide Erven 2167, 2168 and 2169, Henties Bay <u>into 20 erven in total</u>.</p> <p>By subdividing the three erven, a total of 20 erven is created. The impact of a sectional title development of 125 in comparison to 25 speaks for itself and does NOT result in an increase of impacts, but in actual fact results in a decrease of people, traffic, noise, etc.</p> <p>These erven to be created as a result of the subdivision range from 433m² to 607 m², of which similar size erven exists within the area. A sectional title development of a density of 1:100 provides for 100m² 'erven' or space per unit. The smallest erf created is 4 times the current allowable density development. The size of erven created through the subdivision, which is far larger than the 100m² of the sectional title development will thus have less of an impact.</p> <p>Thirdly, the character of the immediate and larger surroundings are of different residential densities ranging</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
		<ul style="list-style-type: none"> The proposed development will negatively impact the human health and safety of the current area through the large increase in vehicle traffic pollution, noise pollution and aesthetics of the accommodation types that possible will be erected (small erven with smaller house vs large erven and houses in area). The proposed development should not impact the current value of the surrounding area by introducing a very large number of lesser sized and valued erven. <p>Please keep me informed of the progress and developments in terms of the EIA and proposed development as laid out in the Environmental Scoping Assessment Study document distributed by you</p> <p>Kind Regards, Jacques Joubert</p>		<p>from 1:100 to 1:900, which was initially created during the township establishment for purpose of different type of residential activities (i.e. sectional title developments and single title developments) at different densities (i.e. 1:100 to 1:900).</p> <p>The character of the neighbourhood is thus not defined or characterised by your 1,000m² erven, but by the mixture of densities and erf sizes ranging from 100m² to 1,000m².</p> <p>The erven created through the subdivision falls well within this range of erf sizes that defined the character of the urban area.</p> <p>The subdivisions, which is not the topic of this study, will thus results in a lower density development having less of an impact than what is currently allowed on Erven 2167, 2168 & 2169, Extension 6. By developing Erven 2167, 2168 & 2169, Extension 6 according to the current density of 1:100 WILL result in a MUCH higher impact as per your concerns, but the opposite is intended.</p> <p>Please let me know if you have any comments/concerns with respect to the creation of a public road to provide access to the proposed subdivided Erven 2167, 2168 and 2169, Henties Bay?</p> <p>Should you have any further information please contact us.</p> <p>Yours faithfully, Brand van Zyl</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
	Mr J Joubert (09/11/2020)	Thank you – noted and no further input from my side		
5.	Mr J van Rensburg (06/11/2020)	<p>Dear Mr van Zyl</p> <p>ERVEN 2167, 2168 & 2169, Ext 6 HENTIES BAY - APPLICATION FOR ENVIRONMENTAL CLEARANCE</p> <p><u>Register as I&AP and comments/concerns on proposed development</u></p> <p>As owner of Erf 1453, Oranje street Henties Bay, I hereby register as an Interested and Affected Parties in the matter of the proposed subdivision and development of Erven 2167, 2168 & 2169, Ext 6 Henties Bay, Erongo Region.</p> <p>In the matter of the proposed subdivision and development of Erven 2167, 2168 & 2169, Ext 6 Henties Bay, I raise the following comments and concerns:</p> <ul style="list-style-type: none"> • I object to the proposed subdivision of the Erven 2167, 2168 & 2169, Ext 6 Henties Bay as set out in the Environmental Scoping Assessment Study document (dated 8 October 2020) schedule of page 2 of said document. The objection is based on the following factors: <ul style="list-style-type: none"> ○ The proposed subdivision is to create single residential erven of between 433 square meters to 607 square meters. The proposed density of these erven (after subdivision) are not commensurate with the surrounding areas and neighbourhoods. 	Urban Green cc (06/11/2020)	<p>Dear Mr. J. van Rensburg</p> <p><u>RE: APPLICATION FOR AN ENVIRONMENTAL CLEARANCE CERTIFICATE FOR CONSTRUCTION OF PUBLIC ROADS AS PART OF THE SUBDIVISION OF ERVEN 2167, 2168 AND 2169, EXTENSION 6, HENTIES BAY (ERONGO REGION)</u></p> <p>Your letter dated 6 November 2020 received via email with reference to the above refers.</p> <p>We confirm receipt of your comments and you have been registered as an Interested and Affected Party.</p> <p>Please allow me to explain a few things with respect to the study being conducted and project having relevance to Erven 2167, 2168 and 2169, Henties Bay.</p> <p>First of all, <u>the study being undertaken is an environmental assessment</u> (not a town planning study) for purpose of obtaining and environmental clearance FOR THE PURPOSE OF CONSTRUCTING A PUBLIC ROAD (as provided for by the Environmental Management Act), a road that will provide access to the erven to be created following the subdivision of Erven 2167, 2168 and 2169, Henties Bay.</p> <p>The environmental assessment study is thus NOT DONE for purpose of the intended subdivision, but for reason of the public street that will be created.</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
		<ul style="list-style-type: none"> ○ The erven 2167, 2168 & 2169 is listed in Ext. 6, but is also adjacent to erven in Ext 4, Henties Bay and to sea-facing erven. ○ The erven in Oranje Street are of a size of 1'000 square meter and above. ○ The subdivision propose to create 20 additional erven and with the accompanying households. ○ This will dramatically increase the human and vehicle traffic in the area/neighbourhood. Due to the current density and size of the adjacent erven, the neighbourhood does not have the quantum of human and vehicle traffic that the proposed division would bring to the area. ○ The large increase in the proposed households will also dramatically increase the noise activity in the neighbourhood. ○ In addition the access road is directly in line with my bedroom which could be an disturbance with the amount of additional traffic entering and exiting with regards to the additional amount of erven proposed • The development of the open space of erven 2167, 2168 & 2169 are not discouraged, but it must be performed in a responsible manner as not to negatively impact the social environment of the surrounding areas and current neighbourhood. 		<p>Secondly, with respect to your concern about densification and resulting impacts (i.e. more noise, more people, more vehicles, change of character) the following comments. The current zoning of the erven is 'General Residential 1' with a density of 1:100, as per the Henties Bay Town Planning Scheme.</p> <p>The current zoning and size of the erven allows for three sectional title developments to the <u>total of 125 dwelling units</u> (i.e. houses).</p> <p>It is NOT the client's intention to do sectional title developments on Erven 2167, 2168 and 2169, Henties Bay (i.e. 125 dwelling units), but subdivide Erven 2167, 2168 and 2169, Henties Bay <u>into 20 erven in total</u>.</p> <p>By subdividing the three erven, a total of 20 erven is created. The impact of a sectional title development of 125 in comparison to 25 speaks for itself and does NOT result in an increase of impacts, but in actual fact results in a decrease of people, traffic, noise, etc.</p> <p>These erven to be created as a result of the subdivision range from 433m² to 607 m², of which similar size erven exists within the area. A sectional title development of a density of 1:100 provides for 100m² 'erven' or space per unit. The smallest erf created is 4 times the current allowable density development. The size of erven created through the subdivision, which is far larger than the 100m² of the sectional title development will thus have less of an impact.</p> <p>Thirdly, the character of the immediate and larger surroundings are of different residential densities ranging</p>

NO.	NAME	COMMENTS	NAME	RESPONSE
		<ul style="list-style-type: none"> The proposed development will negatively impact the human health and safety of the current area through the large increase in vehicle traffic pollution, noise pollution and aesthetics of the accommodation types that possible will be erected (small erven with smaller house vs large erven and houses in area). The proposed development should not impact the current value of the surrounding area by introducing a very large number of lesser sized and valued erven. <p>Please keep me informed of the progress and developments in terms of the EIA and proposed development as laid out in the Environmental Scoping Assessment Study document distributed by you</p> <p>Kind Regards, Johann van Rensburg</p>		<p>from 1:100 to 1:900, which was initially created during the township establishment for purpose of different type of residential activities (i.e. sectional title developments and single title developments) at different densities (i.e. 1:100 to 1:900).</p> <p>The character of the neighbourhood is thus not defined or characterised by your 1,000m² erven, but by the mixture of densities and erf sizes ranging from 100m² to 1,000m².</p> <p>The erven created through the subdivision falls well within this range of erf sizes that defined the character of the urban area.</p> <p>The subdivisions, which is not the topic of this study, will thus results in a lower density development having less of an impact than what is currently allowed on Erven 2167, 2168 & 2169, Extension 6. By developing Erven 2167, 2168 & 2169, Extension 6 according to the current density of 1:100 WILL result in a MUCH higher impact as per your concerns, but the opposite is intended.</p> <p>Please let me know if you have any comments/concerns with respect to the creation of a public road to provide access to the proposed subdivided Erven 2167, 2168 and 2169, Henties Bay?</p> <p>Should you have any further information please contact us.</p> <p>Yours faithfully, Brand van Zyl</p>

7 ASSESSMENT OF ENVIRONMENTAL ISSUES, POTENTIAL IMPACTS AND MITIGATIONS

This chapter provides a description and assessment of the key issues of concern and potential impacts associated with the proposed project (i.e. construction of public roads), which results from the subdivision of Erven 2167, 2168 and 2169, Extension 6, Henties Bay. Mitigation measures relevant to the planning, design, construction, and operational phases of the development as appropriate are recommended. These measures are aimed at avoiding, minimising, or rehabilitating negative impacts or enhancing potential benefits. The significance of potential impacts without and with mitigation is also provided.

7.1 METHODOLOGY OF ASSESSMENT

The assessment process consisted of two phases, the first being the screening phase and the second the scoping phase, as explained below.

7.1.1 SCREENING METHODOLOGY

Each of the potential impacts identified during public consultation and the scoping assessment was screened according to a set of questions (Figure 7.1), which resulted in highlighting the key impacts requiring further assessment.

This list of impacts that were subjected to a scoping assessment is presented in Table 7.2 and Table 7.13, below, as per the evaluation criteria presented in Table 7.1.

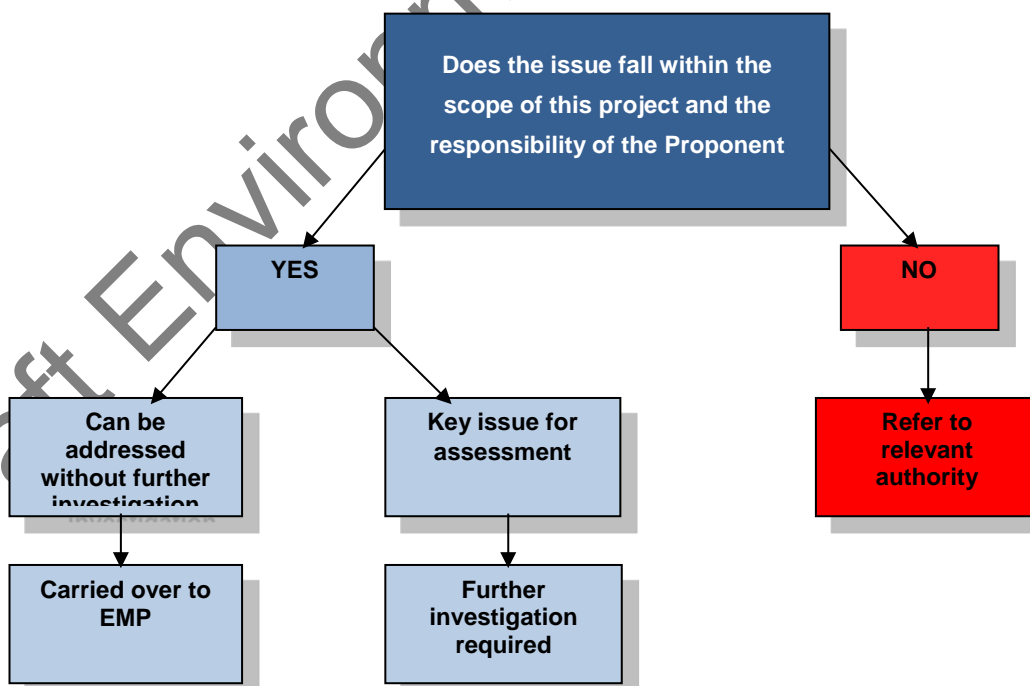


Figure 7.1: Screening process for determining key impacts

7.1.2 SCOPING ASSESSMENT METHODOLOGY

The key impacts, identified after carrying out screening (see Section 7.1.1 above), were evaluated in terms of duration (time scale), extent (spatial scale), intensity (magnitude), probability, and status, in combination with providing the expected significance. The means of arriving at the different significance ratings is explained in Table 7.1 below.

These criteria are used to ascertain the *significance* of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The significance of an impact is derived by considering the temporal and spatial scales and magnitude. Such significance is also informed by the context of the impact, i.e. the character and identity of the receptor of the impact.

Table 7.1: Criteria for impact evaluation

CRITERIA	CATEGORY
Impact	This is a description of the expected impact
Nature	<p>Positive – environment overall will benefit from the impact</p> <p>Negative – environment overall will be adversely affected by the impact</p> <p>Neutral – environment overall will not be affected</p>
Extent	<p>Site Specific: Expanding only as far as the activity itself (<i>onsite</i>)</p> <p>Small: Restricted to the site's immediate environment within 1 km of the site (<i>limited</i>)</p> <p>Medium: Within 5 km of the site (<i>local</i>)</p> <p>Large: Beyond 5 km of the site (<i>regional</i>)</p>
Duration	<p>Reviews the lifetime of the impact, as being -</p> <p>Very short – days, <3 days</p> <p>Short - days, <1 month)</p> <p>Medium - months, <1 year</p> <p>Long - years, 1 -10 years</p> <p>Permanent - >10 years</p>
Intensity	<p>Establishes whether the magnitude of the impact is destructive or innocuous and whether it exceeds set standards, and is described as –</p> <p>None (No environmental functions and processes are affected);</p> <p>Low (Environmental functions and processes are negligibly affected);</p> <p>Medium (Environment continues to function but in a noticeably modified manner);</p> <p>High (Environmental functions and processes are altered such that they temporarily or permanently cease and/or exceed legal standards/requirements).</p>
Probability	<p>Considers the likelihood of the impact occurring and is described as –</p> <p>Improbable (low likelihood),</p>

CRITERIA	CATEGORY
	<p>Probable (distinct possibility),</p> <p>Highly probable (most likely) or</p> <p>Definite (impact will occur regardless of prevention measures).</p>
Significance (no mitigation)	<p>None (A concern or potential impact that, upon evaluation, is found to have no significant impact at all)</p> <p>Low (Any magnitude, impacts will be localised and temporary. Accordingly, the impact is not expected to require amendment to the project design)</p> <p>Moderate (Impacts of moderate magnitude locally to regionally in the short term. Accordingly, the impact is expected to require modification of the project design or alternative mitigation)</p> <p>High (Impacts of high magnitude locally and in the long term and/or regionally and beyond. Accordingly, the impact could have a “no go” implication for the project unless mitigation or re-design is practically achievable)</p>
Mitigation	Description of possible mitigation measures
Significance (with mitigation)	<p>None (A concern or potential impact that, upon evaluation, is found to have no significant impact at all)</p> <p>Low (Any magnitude, impacts will be localised and temporary. Accordingly, the impact is not expected to require amendment to the project design)</p> <p>Moderate (Impacts of moderate magnitude locally to regionally in the short term. Accordingly, the impact is expected to require modification of the project design or alternative mitigation)</p> <p>High (Impacts of high magnitude locally and in the long term and/or regionally and beyond. Accordingly, the impact could have a “no go” implication for the project unless mitigation or re-design is practically achievable)</p>
Confidence level	<p>The degree of confidence in the predictions, based on the availability of information and specialist knowledge.</p> <p>Low (based on the availability of specialist knowledge and other information)</p> <p>Medium (based on the availability of specialist knowledge and other information)</p> <p>High (based on the availability of specialist knowledge and other information)</p>

7.1.3 MITIGATION APPLICATION METHODOLOGY

There is a hierarchy of actions which can be undertaken to respond to any development or activity. These cover avoidance, minimisation, and compensation. It is possible and considered sought after to enhance the environment by ensuring that positive gains are included in the development. If negative impacts occur then the hierarchy, as a guiding philosophy, recommends the following steps.

- **Impact avoidance:** This step is most effective when applied at an early stage of project planning. It can be achieved by:

- not undertaking certain actions or elements that could result in adverse impacts;
 - avoiding areas that are environmentally sensitive; and
 - putting in place preventative measures to stop adverse impacts from occurring.
- **Impact minimisation:** This step is usually taken during impact identification and prediction to limit or reduce the degree, extent, magnitude, or duration of adverse impacts. It can be achieved by:
 - scaling down or relocating the proposal;
 - redesigning elements of the project; and
 - implementing mitigation measures to manage the impacts.
 - **Impact compensation:** This step is usually applied to remedy unavoidable residual adverse impacts. It can be achieved by:
 - rehabilitation of the affected site or environment, for example, by habitat enhancement;
 - restoration of the affected site or environment to its previous state or better; and
 - replacement of the same resource values at another location (off-set), for example, by wetland engineering to provide an equivalent area to that lost to drainage or infill.

The decision as to which combination of alternatives and mitigation measures to apply lies with Louw Investments Twenty Six Close Corporation as the proponent, and their acceptance and approval ultimately with the relevant Competent Authority.

7.2 POTENTIAL IMPACTS IDENTIFIED

The information presented in this section has mainly been drawn from the assessment conducted by the EAP and public consultation undertaken.

For this assessment's purpose the issues and impacts identified are grouped according to the main development phases – i.e. the construction phase and operational phase. Sections 7.2.1 and 7.2.2 give a broad overview of each potential impact expected during the two phases, while a comprehensive assessment outcome with mitigations is presented for each potential impact.

7.2.1 CONSTRUCTION-RELATED IMPACTS

Construction impacts are apart from a few, mostly temporary in nature, but may result in permanent damage if not addressed in time and in an effective manner. Details concerning the potential impacts expected during the construction phase are briefly discussed below.

Detailed mitigation measures and environmental requirements having direct relevance to the expected construction impacts are presented in the tables below and in the Environmental Management Plan (Appendix B).

Table 7.2 below presents the potential impacts expected to occur during the construction phase of the proposed development (i.e. construction of roads & internal electricity), while Table 7.3 to Table 7.12 presents each potential impact and outcome in detail.

Table 7.2: Key issues and potential impacts expected during the construction phase

IMPACT	CAUSE
Erosion & Sedimentation	Trenches & excavated areas
Visual Aesthetics and Sense of Place	Poorly planned construction sites
Socio-Economic	Dust nuisance
	Noise and vibration nuisance
	Traffic safety
	Health, safety, and security
	Employment creation (positive impact)
Heritage and Archaeological Resources	Removal and/or disturbance
Natural Resources (water)	Unacceptable high levels of consumption
	Wastage

7.2.1.1 Erosion and Sedimentation

This aspect entails the potential of flooding and resulting erosion and sedimentation.

Construction activities are associated with the removal of surface vegetation and loosening of soil (i.e. trenches; roads), which all contributes to increased water velocity and resulting erosion and sedimentation.

The site currently holds no vegetation and rainfall within this part of the Country is sparse and not associated with floodwaters to cause any significant erosion and/or sedimentation. The impact is expected to have a **low** pre-mitigation significance rating and **none** post-mitigation significance rating. Mitigation measures proposed in both Table 7.3 below and the EMP (Appendix B) should be applied.

Table 7.3 below presents the assessment outcome.

Table 7.3: Impact assessment pertaining to erosion and sedimentation

CRITERIA	DESCRIPTION
Risk Event	Erosion and Sedimentation
Nature of Impact	Neutral
Extent	Site Specific
Duration	Medium
Intensity	None
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	Avoid unnecessary and excessive disturbance of topsoil. Limit on-site vehicle speed. Apply dust suppressant to unpaved areas. Limit or even prohibit activities during high winds.
Significance (with mitigation)	None
Confidence level	High
Legal Implications	Soil Conservation Act 76 of 1969

7.2.1.2 Visual Aesthetics and Sense of Place

Construction activities are known to have a visual impact owed to the nature of the activity, although temporary in lifespan. The significance of this impact is linked to the topography and vegetation occurrence at the site, as well as the scale and distance between the impact and the receptor.

Considering the flat topography, lack of vegetation cover and short distance to surrounding receptors, the construction site would be highly visible. However, given the location (being in an urban environment), the small scale of the construction activities expected in the development area, temporary nature thereof and short period (2 weeks), no significant change to the visual character of the landscape is expected.

The sense of place at the construction site will temporarily change to that associated with a construction site. Poorly planned construction activities will result in unnecessary disturbance to the areas adjacent to the development site and should therefore be avoided. Therefore, caution should be applied from the side of the appointed contractor not to unnecessarily detract from the existing visual character and sense of place of the receiving environment.

The impact is expected to have a **moderate** pre-mitigation significance rating and **low** post-mitigation significance rating. Mitigation measures proposed in both Table 7.4 below and the EMP (Appendix B) should be applied.

Table 7.4 below presents the assessment outcome.

Table 7.4: Impact assessment pertaining to visual aesthetics and sense of place

CRITERIA	DESCRIPTION
Risk event	Visual aesthetics and sense of place
Nature of Impact	Negative
Extent	Site specific
Duration	Medium
Intensity	Low
Probability	Probable
Significance (no mitigation)	Moderate
Mitigation	<p>Undertake rehabilitation of the disturbed areas.</p> <p>Restrict the amount of structures on site and restrict the height to a maximum of 2 meters.</p> <p>If possible, structures (if any) should be painted in natural colours to lessen the visual impact.</p> <p>The contractor's site (if any) should be located and screened in such a way that it minimises, as far as practicably possible, the visibility of the site.</p> <p>Limit construction vehicle movement in the area to a minimum and use designated pre-demarcated routes having the least possible impacts on residents.</p> <p>Keep the construction site tidy and clean of any construction waste. The appointed contractor should ensure that adequate temporary disposal facilities are available on site. Products that can be re used or recycled need to be kept separate. Waste should be disposed of regularly and at appropriate facilities.</p>
Significance (with mitigation)	Low
Confidence level	High

7.2.1.3 Socio-economic Implication

Construction activities are associated with a variety of impacts that has either a direct or indirect implication on the surrounding residents' living conditions and/or socio-economic status, as covered below.

(i) Income Generation & Skills Transfer (Employment)

Construction makes use of larger numbers of unskilled labour, as well as skilled labour although to a lesser extent, which does not only contribute to income generation and a security of better livelihoods but contributes to skills transfer as well. The real impact thereof depends on the size of the workforce required and duration of the construction phase.

Considering the socio-economic standing of Henties Bay Town, a serious need for employment opportunities and improved living conditions exists, which would contribute to achieve Vision 2030.

It is important that local people be employed and that the necessary opportunities exist for unskilled labour to undergo on the job training and skills enhancement.

Table 7.5 below presents the assessment outcome.

Table 7.5: Impact assessment pertaining to income generation & skills transfer

CRITERIA	DESCRIPTION
Risk event	Income Generation & Skills Transfer (Employment)
Nature of Impact	Positive
Extent	Large
Duration	Medium to permanent
Intensity	High (to the unemployed)
Probability	Definite
Significance (no mitigation)	High (to the unemployed)
Mitigation	No mitigation required
Significance (with mitigation)	High (to the unemployed)
Confidence level	High

(ii) Economic Benefit to the Construction Industry

The construction of the roads as well as other services will have a direct positive implication on the currently struggling construction industry, which is one of the most important employers. It is crucial that local contractors be appointed and that as many as possible of the locally available construction material be used throughout the construction of the road and other utility services.

Table 7.6 below presents the assessment outcome.

Table 7.6: Impact assessment pertaining to economic benefit to the construction industry

CRITERIA	DESCRIPTION
Risk event	Economic Benefit to the Construction Industry
Nature of Impact	Positive
Extent	Large
Duration	Medium
Intensity	High
Probability	Definite
Significance (no mitigation)	High
Mitigation	No mitigation required
Significance (with mitigation)	High
Confidence level	High

(iii) Dust & Emissions

The air quality in the area is considered good, based on the potential impact that current activities in the area are likely to have on air quality.

Dust and emissions are associated with construction activities (i.e. digging; clearing; excavating; transport of materials) of which the severity is related to the extent of the development and the nature of the receiving environment.

Henties Bay is prone to seasonal strong winds, i.e. easterly winds, which results in dust storms.

Considering the small scale of the public road (2,500m²) and short construction period (2 weeks), dust nuisance is not expected to be of any significance. The construction time in the year should consider the time when easterly winds occur. However, dust control is considered important (i.e. Atmospheric Pollution Prevention Ordinance No 11 of 1976, as amended & Public Health Act No. 36 of 1919, as amended), which requires effective mitigations (Appendix B).

Table 7.7 below presents the assessment outcome.

Table 7.7: Impact assessment pertaining to dust and emissions

CRITERIA	DESCRIPTION
Risk event	Dust and emissions
Nature of Impact	Negative.
Extent	Small
Duration	Short

CRITERIA	DESCRIPTION
Intensity	Low
Probability	Definite
Significance (no mitigation)	Moderate
Mitigation	<p>Regular dust suppression, if required, during times of strong winds, should minimise dust impacts mainly with respect to the contractor's staff. Dust suppression by means of wetting should only be done with treated wastewaters.</p> <p>Construction activities during high winds should be limited to those activities not generating dust.</p> <p>Handling and transport of erodible materials should be avoided under high wind conditions.</p> <p>No fires should be allowed on-site for any what purpose and construction waste are not allowed to be burned on-site.</p> <p>It is imperative that all machinery and vehicles on site is road worthy and do not give rise to excessive smoke or emissions.</p> <p>The contractor's personnel are to be provided with access to dust masks.</p>
Significance (with mitigation)	Low
Confidence level	High

The impact is expected to have a **moderate** pre-mitigation significance rating and **low** post-mitigation significance rating. Mitigation measures proposed in both Table 7.7 above and the EMP (Appendix B) should be applied.

(iv) *Construction Noise & Vibration*

Noises and vibrations are synonymous with the construction phase, as heavy construction vehicles and machinery operates. The scale of the construction activities and type of construction activity, as well as the locality of the surrounding receptors determine the significance to this construction impact.

The severity of these impacts is likely to be more significant to those receptors living close by, compared to those further away. The prevailing wind direction and strength may increase the impact-radius of construction noises.

Considering the small scale of the public road (2,500m²) and short construction period (2 weeks), construction noises and vibration is not expected to be of any significance. The construction time in the year should consider the time when most of the neighbouring property owners will be at home, i.e. holidays.

Table 7.8 below presents the assessment outcome.

Table 7.8: Impact assessment pertaining to noise and vibration

CRITERIA	DESCRIPTION
Risk event	Noise and Vibration
Nature of Impact	Negative.
Extent	Small
Duration	Medium
Intensity	Low
Probability	Probable
Significance (no mitigation)	Moderate
Mitigation	<p>Inform immediate neighbours of construction activities to commence and provide for continuous communication between the neighbours and resident engineer.</p> <p>The contractor shall not use sound amplification equipment on site unless in emergency situations.</p> <p>Limit construction times to acceptable daylight hours.</p> <p>Screen construction activities from residential, social, and business entities as far as reasonably possible.</p> <p>The World Health Organization (WHO) guideline on maximum noise levels (guidelines for Community Noise, 1999) to prevent hearing impairment can be followed during the construction phase. This limits noise levels to an average of 70db over a 24-hour period with maximum noise levels not exceeding 110db during the period.</p> <p>All construction vehicles and machinery should be kept in good working condition. If any noise-related complaints are registered the applicable construction vehicles and machinery should be fitted with noise reduction devices.</p> <p>Personnel working in noisy environments must be issued with hearing protectors.</p>
Significance (with mitigation)	Low
Confidence level	High

The impact is expected to have a **moderate** pre-mitigation significance rating and **low** post-mitigation significance rating. Mitigation measures proposed in both Table 7.8 above and the EMP (Appendix B) should be applied.

(v) *Traffic & Safety*

Construction activities are associated with an increase in vehicles of different kinds to and from the site, which inevitably increase risk and conflict.

All intersections and junctions should be considered dangerous and requires caution from both the construction vehicle drivers and other road users. Strict road safety measures will have to be applied during the construction phase.

Considering the small scale of the public road (2,500m²) and short construction period (2 weeks), construction noises and vibration is not expected to be of any significance. The construction time in the year should consider the time when most of the neighbouring property owners will be at home, i.e. holidays.

Table 7.9 below presents the assessment outcome.

Table 7.9: Impact assessment pertaining to traffic and safety

CRITERIA	DESCRIPTION
Risk event	Traffic and Safety
Nature of Impact	Negative.
Extent	Small
Duration	Medium
Intensity	Low
Probability	Probable
Significance (no mitigation)	Low
Mitigation	<p>Appropriate signs should be in place along the roads being used by construction vehicles notifying road users of the construction activity and roads used by construction vehicles.</p> <p>Drivers of construction vehicles should have valid driver's licenses with ample experience on proper road usage and manners on-site as well as when making use of public roads.</p> <p>Construction vehicles' need to be in a road worthy condition and maintained throughout the construction phase.</p> <p>Provide traffic signals and road markings where necessary to ensure safe traffic movement.</p>
Significance (with mitigation)	Low-none
Confidence level	High

The pre-mitigation impact is regarded as **low** which can be reduced to **low-none** after appropriate mitigation measures have been implemented. Mitigation measures proposed in both Table 7.9 above and the EMP (Appendix B) should be applied.

(vi) Health, Safety & Security

Areas within which construction activities take place can be associated with criminal activity, posing a security risk to those residing in the area. It is not to say that these criminal activities are as a result of the construction staff but it is known to happen in the vicinity of construction sites.

In addition, construction of the development has the potential of accidental injury, either minor or major accidents, to both construction workers and nearby residents. On-site safety of all personnel is an important responsibility of the appointed contractor and should be adhered to in accordance with the requirements of the Labour Act (No 11 of 2007) and the Public Health Act (No. 36 of 1919).

Ensuring that the construction activities do not pose any danger to the surrounding residents is important. The contractor's site and construction site should be properly secured to prevent any access from unauthorised people and/or surrounding residents.

Table 7.10 below presents the assessment outcome.

Table 7.10: Impact assessment pertaining to health, safety, and security

CRITERIA	DESCRIPTION
Risk event	Health, Safety and Security
Nature of Impact	Negative
Extent	Small
Duration	Medium
Intensity	Low
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	<p>Ensure that all construction personnel are trained depending on the nature of their work.</p> <p>Provide for a first aid kit and trained person to apply first aid when necessary.</p> <p>Restrict unauthorised access to the site and implement access control measures.</p> <p>Clearly demarcate the construction site boundaries along with signage of no unauthorised access.</p> <p>Clearly demarcate dangerous areas and no-go areas on site.</p> <p>Staff and visitors to the site must be fully aware of all health safety measures and emergency procedures.</p> <p>The contractor must comply with all applicable occupational health and safety requirements. The workforce should be provided with all</p>

CRITERIA	DESCRIPTION
	necessary Personal Protective Equipment including earplugs. All affected landowners should be notified at least one month in advance who the appointed contractor is and provided with details about the proposed construction activities and timeline.
Significance (with mitigation)	Low-none
Confidence level	High

The pre-mitigation impact is regarded as **low** which can be reduced to **low-none** after appropriate mitigation measures have been implemented. Mitigation measures proposed in both Table 7.10 above and the EMP (Appendix B) should be applied.

(vii) *Heritage / Archaeological Resources*

No record of any cultural or historical importance or on-site resemblance of any nature could be located as part of this study. No known heritage sites or proclaimed national monuments are located within the footprint of the site or immediate surroundings.

There has been no discovery of any archaeological finds within the immediate area surrounding the site to date. It is however important to be informed and cautious in the event should any potential remains be discovered during the construction activities. If any heritage or cultural significant artefacts are however found during the construction phase, construction must stop, and the National Heritage Council of Namibia immediately notified.

In the event that any archaeological materials, such as human remains, burial sites and other artefacts, are uncovered during earthworks, works in the area are to be stopped immediately, and the chance-find immediately reported to the Environmental Site Manager and the National Monuments Council.

Table 7.11 below presents the assessment outcome.

Table 7.11: Impact assessment pertaining to heritage / archaeological resources

CRITERIA	DESCRIPTION
Risk event	Heritage / Archaeological Resources
Nature of Impact	Negative
Extent	Small
Duration	Permanent
Intensity	Medium
Probability	Improbable
Significance (no mitigation)	Low

CRITERIA	DESCRIPTION
Mitigation	<p>Caution should be exercised during the construction phase if archaeological/heritage remains are discovered during the excavations.</p> <p>The Environmental Site Manager should receive training by a suitably qualified archaeologist with respect to the identification of archaeological/heritage remains and the procedures to follow should such remains be discovered during construction.</p> <p>Any archaeological materials found should be reported to the Environmental Site Manager and the National Monuments Council, and all on-site activities stopped immediately. Details with regards to the procedure to follow is defined in the EMP.</p>
Significance (with mitigation)	Low-none
Confidence level	High

The probability of locating important archaeological/heritage remains during the construction phase of the proposed development is unlikely. The impact rating associated with such an event is therefore considered to be **low** before mitigation and **low-none** after mitigation. Mitigation measures proposed in both Table 7.10 above and the EMP (Appendix B) should be applied.

(viii) *Natural Resources*

The construction phase would require water for compaction of roads, which is currently a source under pressure.

Considering the small scale of the public road (2,500m²) and short construction period (2 weeks), the demand and impact on water holds a **low** significance (see Table 7.12).

Table 7.12 – Natural resources (water)

CRITERIA	DESCRIPTION
Risk event	Natural Resources
Nature of Impact	Negative
Extent	Large
Duration	Short
Intensity	Low
Probability	High Probability
Significance (no mitigation)	Low
Mitigation	There should be no tolerance towards water wastage.

CRITERIA	DESCRIPTION
	Treated wastewater should be obtained and used for the bulk of the construction requirements.
Significance (with mitigation)	Low-none
Confidence level	High

7.2.2 OPERATIONAL PHASE

These impacts are usually more permanent in nature. Different from the construction related impacts, no Management Plan is provided for the operational phase, but rather recommendations are made to existing policies or plans to be applied.

Details with regards to the potential impacts expected during the operational phase are briefly discussed below. Detailed mitigation measures and environmental requirements having direct relevance to the expected operational phase impacts are presented in the tables below.

Table 7.13 below presents the potential impacts expected to occur during the operational phase of the proposed development, while Table 7.14 presents the outcome.

Table 7.13: Key potential impacts expected during the operational phase

IMPACT	CAUSE
Socio-Economic	Noise & disturbance
	Dust

7.2.2.1 Socio-economic Implication

Considering the concerns raised from the side of the surrounding owners (see Chapter 6), the following concerns are assessed and mitigated.

(i) *Noise & Disturbance & Dust*

Roads carry traffic, which can be argued as having a 'noise' and 'disturbance' factor of which the significance is directly related to the order road, i.e. high order collector road or low level internal road.

High order collector roads carry large volumes of different kinds of traffic (i.e. trucks, vehicles), while low level internal roads, such as the road to be created, carry very little traffic at low speed (30k to 40km/h). The road to be created will carry a maximum of 9 vehicles per day (24 hours), which cannot be justified as having a noise and/or disturbance factor.

Should Erven 2167, 2168 and 2169, Henties Bay have been developed at the current zoning (i.e. general residential 1 with a density of 1:100), then Erf 2168 alone would have generated 44 vehicles, which are 2.6 time more than the 9 vehicles as a result of the subdivision

Considering the existing development potential of the three erven, which would generate 124 vehicles and the proposed development, which would have generated 20 vehicles, **the proposed development would thus result in less of a noise and disturbance. The proposed development will thus result in a positive impact as the proposed development will result in less of a noise and disturbance.**

Table 7.14 below presents the assessment outcome.

Table 7.14: Impact assessment pertaining to noise & disturbance & dust

CRITERIA	DESCRIPTION
Risk event	Noise & Disturbance & Dust
Nature of Impact	Positive
Extent	Small
Duration	Permanent
Intensity	Low
Probability	Definite
Significance (no mitigation)	None
Mitigation	No practical mitigation exists
Significance (with mitigation)	None
Confidence level	High

8 CONCLUSIONS AND RECOMMENDATIONS

This chapter of the report presents the assessment conclusion following the scoping phase, as well as the key recommendations and the environmental statement for consideration by the authorities. The conclusion and recommendations as presented in this chapter have been drawn from the assessment outcome, as presented in Chapter 7.

8.1 CONCLUSION

Following the environmental scoping assessment, the following can be concluded:

- From an ecological perspective, the assessment concludes -
 - That the site has been severely disturbed and as a result does not accommodate any fauna and/or flora; and
 - That the site does not accommodate any protected species under the Forestry Ordinance No. 37 of 1952.
- From a social perspective, the assessment concludes –
 - That the proposed development would have less of an impact (i.e. noise, disturbance & dust) in comparison to the current development potential.

Based on the baseline information, as presented in this report, this Scoping Assessment study, after following the above evaluation, concludes that, there is currently no evidence suggesting that any of the potential impacts identified are of such significance that it cannot be mitigated and that the construction of the public roads, as presented in this report, could not be allowed to continue. It is however required that the recommendations as presented below be satisfied with approval from the Environmental Commissioner.

8.2 RECOMMENDATIONS

It is therefore recommended that an Environmental Clearance Certificate be issued for the listed activity forming part of the subdivision of Erven 2167, 2168 and 2169, Extension 6, Henties Bay, subject to the following recommendations:

- All required permits, licenses, and approvals (if any) for the proposed development be obtained.
- All mitigations listed in Tables 7.3 to 7.12 and the Environmental Management Plan (Appendix B) be implemented prior and during construction.

- An Environmental Control Officer should be appointed during the construction phase of the proposed development to make sure all the requirements within the Scoping Report and Environmental Management Plan (Appendix B) are adhered to.
- If road construction material is sourced from nearby quarries it is required that the necessary approval (i.e. environmental clearance certificate) either exists or be obtained by the appointed contractor.
- That the entire property be cleared of any rubbish and removed from the site.
- Continued on-site monitoring and evaluation be conducted during the construction and operational phases to be authorised by the DEA.

8.3 ENVIRONMENTAL IMPACT STATEMENT

Based on the information presented in this scoping report, the environmental assessment practitioner is of the opinion that the immediate and larger environment will not be significantly impacted if the above recommendations as proposed in this report are implemented and monitored, and responsible environmental practises are applied by the proponent, appointed contractors and sub-consultants.

Urban Green cc, the independent environmental assessment practitioner, recommends to the relevant authorities that the application for the listed activity associated with the subdivision of Erven 2167, 2168 and 2169, Extension 6, Henties Bay be approved on condition that the above recommendations (Section 8.2) are met and that continuous monitoring be conducted in accordance with the Environmental Management Act (Act No. 7 of 2007), its EIA Regulations and this scoping report.

9 REFERENCES

Namibia Population and Housing Census. 2011. Namibia Statistics Agency, Windhoek, Namibia.

Draft Environmental Scoping Report