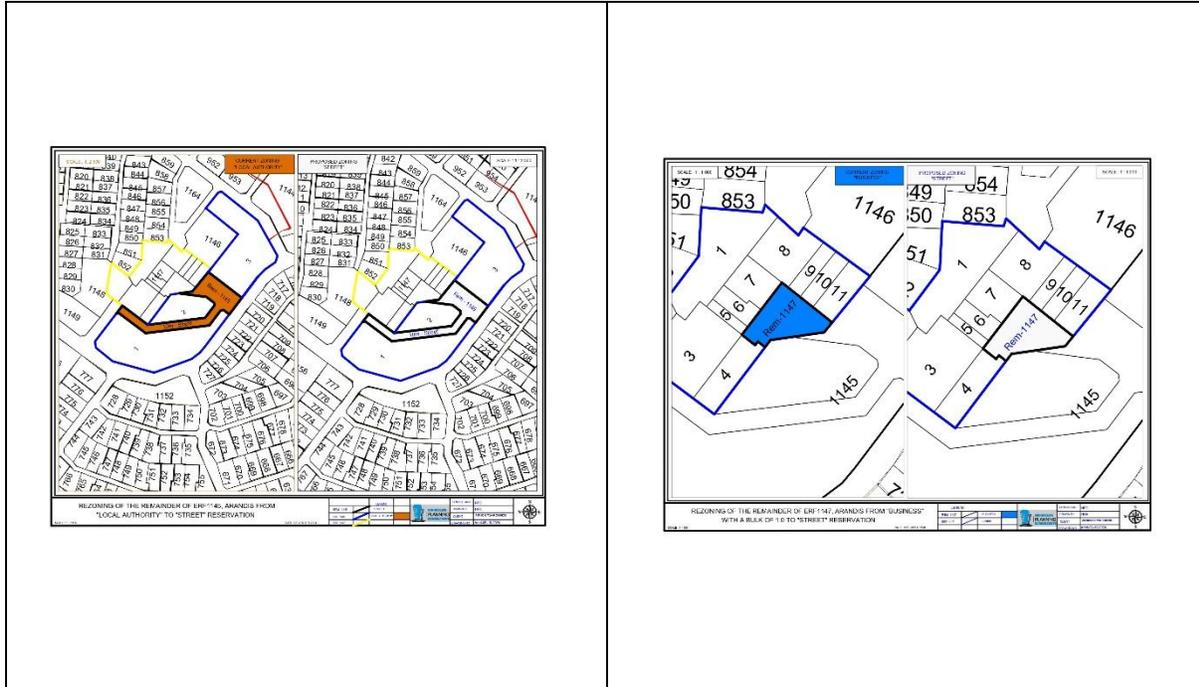


ENVIRONMENTAL IMPACT ASSESSMENT SCOPING REPORT

SUBDIVISION OF ERVEN 1145 AND 1147, ARANDIS, REZONING AND THE SUBSEQUENT CREATION OF STREETS.



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LIST OF ABBREVIATIONS

TERMS	DEFINITION
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
DEA	Department of Environmental Affairs
PPPPs	Projects, Plans, Programmes and Policies
NDC	Namibia Development Consultants
SANS	South African National Standards
I&APs	Interested and Affected Parties
PM	Particulate Matter
NPC	Nghivelwa Planning Consultants
GRN	Government of the Republic of Namibia

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1. INTRODUCTION

1.1 Project Overview

The Arandis Town Council intends to Subdivide Erf 1145, Arandis into 3 Erven and Remainder and subsequently rezone the proposed Remainder of Erf 1145, Arandis from “Local Authority” with a bulk of 1.0 to “Street” reservation. Consequently, the Arandis Town Council further intends to Subdivide Erf 1147, Arandis into 11 Erven and Remainder and subsequently rezone the Remainder of Erf 1147, Arandis from “Business” to “Street” reservation.

Erven 1145 and 1147 are in Arandis town and are currently zoned for “Local Authority” and “Business” respectively. The current occupants of the property have been operating several businesses on the property and are keen on formalizing the land use. The change in land use from local authority and business will result in the creation of a street that is a listed activity and a statutory town planning and environmental management procedure for the subdivision and subsequent rezoning must be carried out.

Nghivelwa Planning Consultants, a Town and Regional Planning and Environmental Management Consultancy firm has been appointed to conduct an Environmental Impact Assessment and Environmental Management Plan (EMP) for the Subdivision of Erf 1145, Arandis into 3 Erven and Remainder, Rezoning of the Remainder of Erf 1145, Arandis from “Local Authority” to “Street” reservation, Subdivision of Erf 1147, Arandis into 11 Erven and Remainder and consequent Rezoning of the Remainder of Erf 1147, Arandis from “Business” with a bulk of 1.0 to “Street” reservation. The Environmental Impact Assessment has been conducted to meet the requirements of the Namibia’s Environmental Management Act (No. 7 of 2007).

An EIA may be defined as: a formal process to predict the environmental consequences of human development activities and to plan appropriate measures to eliminate or reduce adverse effects and to augment positive effects.

Thus, an EIA has three main functions:

- To predict environmental problems,
- To find ways to avoid environmental problems, and
- To enhance positive effects.

1.2 Terms of Reference

The Rezoning of the Remainder of Erf 1145, Arandis from “Local Authority”, and the Remainder Erf 1147, Arandis from “Business” to “Street” reservation is a listed activity that cannot be undertaken without an Environmental Clearance Certificate. Therefore, as part of the

commissioning process an Environmental Impact Assessment (EIA) is required. Thus, it was necessary for the proponent to appoint Nghivelwa Planning Consultants to provide environmental management consultancy services to undertake an environmental impact assessment to comply with the Environmental Management Act, 2007 (Act no. 7 of 2007).

The Terms of Reference (ToR) for the consultants were, but not limited to the following:

- The collection of all possible data on the environmental, social and natural resource components and necessary parameters.
- A description of the location of the proposed project including the physical area that may be affected by the project activities.
- Description of the design of the proposed project.
- Description of the activities that will be undertaken during the operation and decommissioning phases.
- Listing of the materials to be used, products and by products, including waste to be generated by the project and the methods of disposal.
- Identification of the potential environmental impacts of the proposed project and
- The mitigation measures to be taken during and after implementation of the project.
- Accidents during the project cycle.
- Establishment of a plan to ensure the health and safety of the workers and neighboring communities.
- Identification of the economic and socio-cultural impacts of the proposed project.
- Economic and social analysis of the project including project risk and measures to mitigate them.
- Establishment of an action plan for the prevention and management of possible impacts (EMP).
- The consultant will prepare recommendation on the project for its future use.

1.3 Acknowledgement

Nghivelwa Planning Consultant has prepared this EIA Report on behalf of the proponent, Arandis Town Council. The proponent has provided the necessary information and documents and the necessary guidance during the project undertaking and during the preparation of this report. The Consultant (Nghivelwa Planning Consultant) acknowledges the contribution provided by the proponent and support and interest shown by all the identified stakeholders.

1.4 DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

This EIA Report was prepared by the following Environmental Practitioner:

Name of representative of the EAP	Education qualifications	Professional affiliations
Nghivelwashisho Natangwe Ndakunda	MBA-Entrepreneurship, B-Tech Town and Regional Planning	Namibia Council of Town and Regional Planners, Namibia Institute of Town and Regional Planners, EAPAN Member

Table 1: EAP's

2. EIA METHODOLOGY

The objective of the assessment of impacts is to identify and assess all the significant impacts that may arise from the undertaking of an activity and the findings used to inform the competent authority's decision whether the activity should be approved, approved subject to conditions that will reduce the impacts to within acceptable levels or should be rejected. In this sense impacts are defined as the changes in an environmental or social parameter that result from undertaking the proposed activity. The following general methodology was used in this EIA for the proposed rezoning from local authority and business to street reservation and to investigate its potential impacts on the social and natural environment.

The key activities undertaken during the assessment included the following:

2.1 Establishment of the environmental baseline

The study and description of the receiving environment on which the proposed project is to be implemented. Thus, it involved a site visit, physical inspection of the study area's soil, biology, topography, animal species, water resources, climate and the local socio-economic environment.

2.2 Impact analysis

This involves the identification of impacts that are usually associated with the operation or maintenance and decommissioning of the proposed activity and are generally obvious and quantifiable. These impacts were analyzed and evaluated.

2.3 Impacts mitigation

This involves the identification of the impacts and once impacts have been identified and predicted for a particular activity, then appropriate mitigation measures need to be established. Mitigation measures are the modification of certain activity in such a way as to reduce the impacts on the physical- and socio-economic environment. The objectives of mitigation are to:

- Find more environmentally sound ways of doing things.
- Enhance the environmental benefits of a proposed activity.
- Avoid, minimize or remedy negative impacts; and ensure that residual negative impacts are within acceptable levels.

Furthermore, impacts associated with all the stages of the proposed project were identified and mitigated. An Environmental Management Plan has been prepared as framework for mitigation of impacts and environmental monitoring of the project.

2.4 Review of alternatives

This entailed a review of the alternatives to the proposed project. This was aimed at determining better ways of avoiding or minimizing environmental impacts while still realizing the project goals. The review of alternatives provided opportunities for environmental enhancement. There were no alternatives identified for this project as the proponent does not have additional land in Arandis, and businesses are already constructed on the subject properties.

2.5 Public Participation Process (PPP)

This process for the public participation was done by informing the relevant stakeholders and interested and affected parties. Advertisements for the public to participate and raise their concerns on the proposed project were placed in two (2) local newspapers of the New Era and Confidante of the 31st January 2025 and 07th February 2025. The public and interested and affected parties were invited to provide comments on the proposed project and no interested or affected party registered any comments. Due to the small-scale nature of the project and lack of interest, a public meeting about the proposed development and its potential impact on the environment was deemed unnecessary.

3. POLICY AND OTHER RELEVANT LEGISLATION

SUBJECT	INSTRUMENTS AND CONTENT	APPLICATION TO THE PROJECT
The Constitution of the Republic of Namibia	General human rights – eliminates discrimination of any kind	Ensure these principles are enshrined in the documentation of the project

	The right to a safe and healthy environment Affords protection to biodiversity	
Environmental Management Act EMA (No 7 of 2007)	Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27). Details principles which are to guide all EAs.	Ensure that the rezoning is carried out within the parameters of the Act.
Environmental Impact Assessment (EIA) Regulations GN 28-30 (GG 487)	Details requirements for public consultation within a given environmental assessment process (GN 30 S21). Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).	Ensure that the rezoning of land aligns with the EIA regulations.
Forestry Act No 27 of 2004	Provision for the protection of various plant species	Some species that occur in the area are protected under the Forestry Act and a permit is therefore required to remove the species
Hazardous Substances Ordinance 14 of 1974:	Control of substances which may cause injury or ill-health or death of human beings because their toxic, corrosive, irritant, strongly sensitizing or flammable nature	The waste generated on site and at the campsite should be suitably categorised/classified and disposed of properly and in accordance with the Measures outlined in the Ordinance.
The Nature Conservation Ordinance (No. 4 of 1975)	Prohibits disturbance or destruction of protected birds without a permit. Requires a permit for picking (the definition of “picking” includes damage or destroy) protected plants without a permit	Protected plants will have to be identified during the planning phase of the project. In case there is an intention to remove protected species, then permits will be required.
Forestry Act 12 of 2001 Nature Conservation Ordinance 4 of 1975	Prohibits the removal of any vegetation within 100 m from a watercourse (Forestry Act S22(1)). Prohibits the removal of and transport of various protected plant species.	Even though the Directorate of Forestry has no jurisdiction within townlands, these provisions will be used as a guideline for conservation of vegetation.

Convention on Biological Diversity, 1992	Protection of biodiversity of Namibia	Conservation-worthy species not to be removed if not necessary.
Water Resources Management Act 11 of 2013	The Act provides for the management, protection, development, use and conservation of water Resources; to provide for the regulation and monitoring of water services.	Obligation not to pollute surface water bodies
National Heritage Act 27 of 2004	Section 48(1) states that “A person may apply to the [National Heritage] Council [NHC] for a permit to carry out works or activities in relation to a protected place or protected object	Any heritage resources (e.g. human remains etc.) discovered during construction requires a permit from the National Heritage Council for relocation
Labour Act 11 of 2007	Details requirements regarding minimum wage and working conditions (S39-47).	Employment and work relations
Health and Safety Regulations GN 156/1997 (GG 1617	Details various requirements regarding health and safety of labourers.	Protection of human health, avoid township establishment at areas that can impact on human health.
Public Health Act 36 of 1919	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.”	Ensure that all contractors involved during the construction, operation and maintenance of the proposed project comply with the provisions of these legal instrument
Water Resources Management Act 11 of 2013	Prohibits the pollution of underground and surface water bodies (S23(1)). Liability of clean-up costs after closure/ abandonment of an activity (S23(2)).	The protection of ground and surface water resources should be a priority. The main threats will most likely be concrete and hydrocarbon spills during construction and hydrocarbon spills during operation and maintenance.
Urban and Regional Planning Act no 5 of 2018	Details the functions of the Urban and Regional Planning Board including their consideration when assessing an application for the permanent closure	The proposed change in land uses should be informed by environmental factors such as

	of public open spaces and subsequent rezoning (S3)	water supply, soil etc. as laid out in Section 3 of the act.
Local Authorities Act no 23 of 1992	Details the procedures to be followed for the provision of municipal services in Local Authority Areas.	The provision of municipal services should be in line with the use of land.

Table 2: Relevant legislation

4. NEED AND DESIRABILITY OF THE PROPOSED PROJECT

The Arandis Town Council, the owner of Erven 1145 and 1147, Arandis, has been operating multiple businesses on the two properties for the past years. Arandis Town Council recently realized that to yield maximum benefits from these properties, the two erven must be subdivided and subsequently rezoned from local authority and business to street reservations. This realization culminated in the Subdivision of Erf 1145, Arandis into 3 Erven and Remainder, Subdivision of Erf 1145, Arandis into 11 Erven and Remainder, rezoning of the 3 various new erven to be created to their respective land uses and the subsequent creation of streets to offer access to the new erven to be created after the subdivision.

The change in land use from local authority and business to street reservations will help the Town Council to formalize the existing businesses and to register the new properties to be created in the names of the respective businesses currently operating there. Thus, the proposed change in land use will seek to formalize the land use of the properties to the benefit of both the owners, the current employees and the Arandis Town Council.

The change in land use from local authority and business to street reservation is expected to generate further economic activity in the surrounding area that will create additional employment opportunities and change the livelihoods of the local community. The businesses will have minimal impact on the natural environment as they are already constructed and operating from the subject properties.

5. SCOPE OF THE EIA

The objectives of the scope of the EIA were to ascertain key issues of the environmental impacts that are likely to be important during all the phases of the Project. Relevant environmental data has been compiled by making use of primary data which was collected during the site assessment done on the 31st of January 2025 and by using secondary data already available. Potential environmental impacts and associated social impacts were identified and addressed in this report.

The operational phase of the proposed change in land use from local authority and business to street reservation will involve.

- The maintenance of the Erf by proponent.

The Environmental Impact Assessment study report includes an impact assessment and mitigation measures for the phases of the proposed project following:

- The field investigations (site assessment).
- Identifying and involving all stakeholders in the Environmental Impact Assessment process by expressing their views and concerns on the proposed project.
- Identify all potential significant adverse environmental and social impacts of the project and recommend mitigation measures to be well described in the Environmental Monitoring Plan (EMP);
- Coordination with the proponent, regarding the requirements of law of Namibia's Environmental Management Act (No. 7 of 2007) and other relevant policies and administrative framework.
- To define the Terms of Reference for the Environmental Impact Assessment study.
- A review of the policy, and relevant legislation.
- To provide overall assessment information of the social and biophysical environments of the affected areas by the proposed development.

6. DESCRIPTION OF THE PROPOSED ACTIVITY

The proposed activity is for the Subdivision of Erven 1145, Arandis into 3 Erven and Remainder, Subdivision of Erf 1145, Arandis into 11 Erven and Remainder, The Rezoning of proposed Remainder of Erf 1145, Arandis from "Local Authority" to "Street" reservation and the subsequent Rezoning of the Remainder of Erf 1147, Arandis from "Business" to "Street" reservation. The street is already constructed thus there will be no construction activities for this project.

The activity involves the subdivision of land and subsequent formalization of a street that is already constructed. This activity does not include the construction of additional buildings.

It also includes the maintenance of the site during the operational phase such as waste disposal and noise pollution as well as maintenance of the afore-mentioned municipal services. The Erven are already connected to the municipal services of Arandis, and they will obtain access from the adjacent street that is already constructed. Thus, there will be no construction of bulk municipal services for this development.

The existing erven are already connected to the existing bulk services, and the water-borne sewage is connected to the sewerage reticulation system of Arandis, the harmful affluent that will be created will be channeled to the Arandis sewer water storage and treatment plant provided by Arandis Town Council. The land is currently developed and there is no vegetation that is found on the properties. Thus, the proposed commercial development will not have any negative impacts on the natural environment.

6.1 Location and land ownership

Erven 1145 and 1147, Arandis are currently owned by the Arandis Town Council and currently measure $\pm 17\,449\text{m}^2$ and $\pm 6\,920\text{m}^2$ in extent, respectively. They are situated in Arandis Town, Arandis Constituency, Erongo Region as shown in Figure 1 below. There is currently business buildings constructed and operating on the subject properties. The GPS coordinates for the subject properties are Latitude: -22.419094° , Longitude: 14.971560°

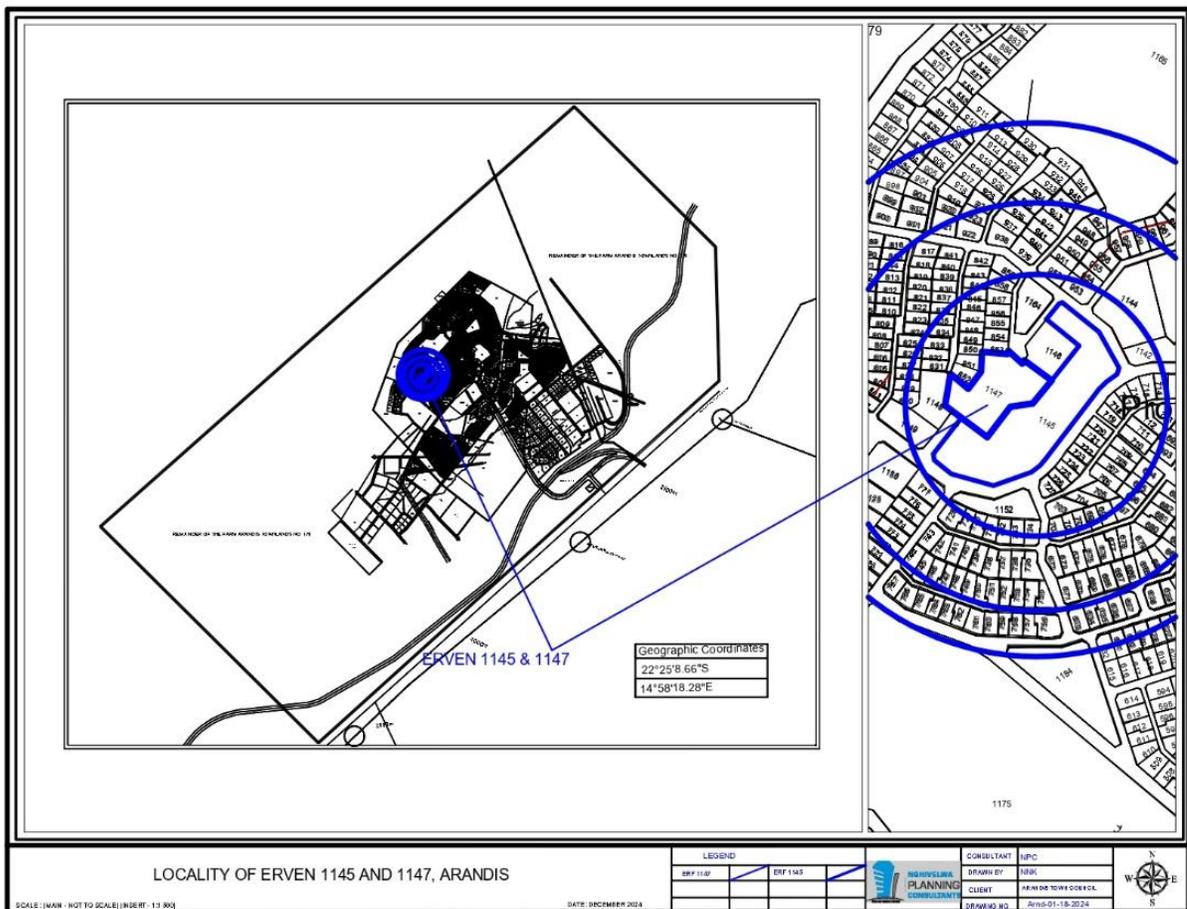


Figure 1: Locality plan of Erven 1145 and 1147, Arandis

6.2 Ownership

Erven 1145 and 1447, Arandis are owned by Arandis Town Council and as the proponent, will be managing the project during both phases.

6.3 Description of the site

- The site is relatively flat as is the rest of Arandis Town.
- The site is situated on gently undulating terrain characteristic of the Arandis area. Natural surface runoff from the property drains in a generally westward direction.
- There was no ground surface water during the site investigation as Arandis receives little rain and the site visit was carried out during the dry season.
- There is minimal erosion in some areas that is caused by seasonal floods.
- No excavations expected and no blasting operations are foreseen as the buildings and the streets are already constructed.

6.5 Description of the proposed project

The proponent desires to formalize the business buildings that are operating on the local authority zoned Erf 1145 and the ones operating on a business zoned 1147, Arandis. For the formalization to be completed a town planning and environmental management exercise for Subdivision of Erf 1145, Arandis into 3 Erven and Remainder, Subdivision of Erf 1147, Arandis into 11 Erven and Remainder and the subsequent creation of streets is necessary.

6.6 Proposed Project Activities

The proposed development entails the Subdivision of Erven 1145 and 1147, Arandis into various erven of which 2 new erven to be created will be rezoned to “Street” reservation. The project does not include the construction of buildings and streets as they are already constructed. The rezoning plans are shown in figure 2 below.

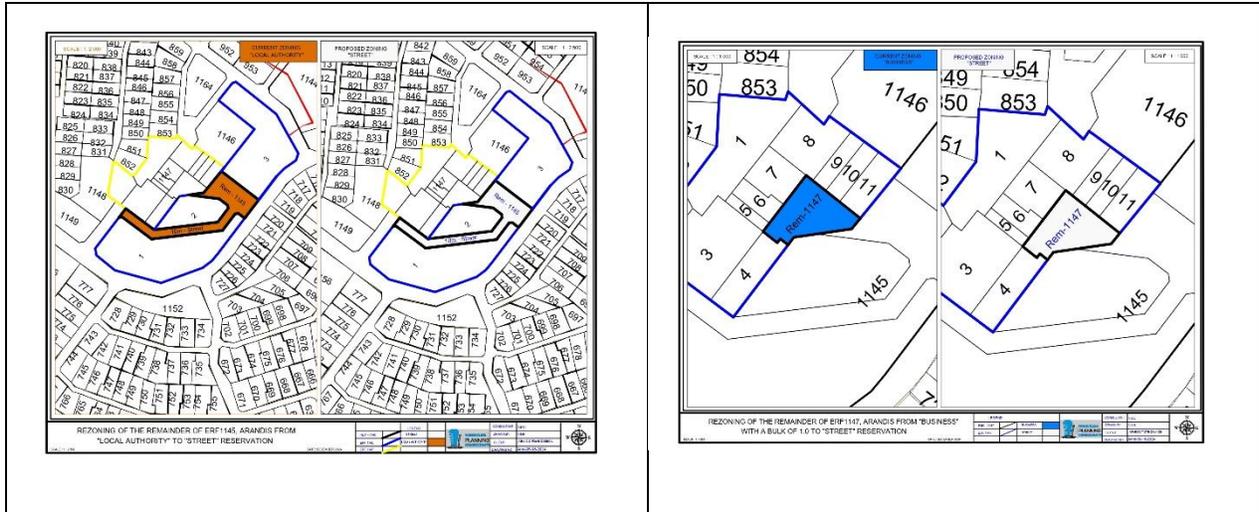


Figure 2: Rezoning of Erven 1145 and 1147, Arandis

6.7 Engineering Services

The proponent is proposing changing the land use of his properties from local authority and business to street reservation and upon the completion of the town planning and environmental management exercise the newly rezoned business erven will accommodate the existing businesses. The proposed erven are already connected to the bulk engineering services as per the standard engineering requirements.

6.7.1 Bulk Infrastructure

The bulk services are already available for this development, and no additional construction of bulk services is expected.

a) Water

The existing bulk water infrastructure is sufficient to accommodate the proposed development.

b) Sewerage

The existing sewer reticulation system of Arandis is sufficient for the proposed development and no additional construction of bulk sewer water reticulation is expected.

c) Electricity

The proposed erven are already connected to the electrical network of Arandis.

d) Storm water

A storm water drainage system has already been constructed, and storm water will be channeled along the streets of Arandis. No additional stormwater drains will be constructed for this project.

e) Waste Produced

The waste to be produced from the properties will be disposed of by the proponent and waste generated by the operation of the businesses will be handled by Arandis Town Council and disposed of at an approved waste disposal site.

f) Roads

No additional road construction will take place because of this development.

6.7.2 Blasting

No blasting is to be carried out as the buildings and streets are already constructed.

6.8 Phases of the project

The project will consist of three (2) phases, namely the operational and possible decommissioning phase.

6.8.1 Activities during the operation and maintenance phase

During this phase, Arandis Town Council and the proponent will be responsible for the following:

- Maintenance of the site, such as waste disposal.
- Controlling the noise pollution in the area.
- Maintenance of the bulk municipal services.
- Maintenance of roads, sewerage and electricity infrastructure.
- Collection of rates and taxes.

6.8.3 Activities at the decommissioning phase

At this stage of the project, it is deemed unnecessary to decommission the project because the owner does not foresee the erven having a different land use other than the commercial one and thus can accommodate the proposed development. Therefore, there will be no need for decommissioning the project.

7. BASELINE DATA

7.1 Climate and Temperatures

Arandis has an arid, hot, and dry climate with very low rainfall, classified as BWh under the Köppen-Geiger system. The region experiences significant temperature fluctuations, with cold nights during the winter months (December to February) and warm temperatures from June to August.

The mean yearly temperature observed in Arandis is recorded to be 20 °C while the annual rainfall is 10 mm. The commencement of summer is observed at the conclusion of June and its culmination takes place in August.

7.2 Geology, Topography and drainage

The geology of the Arandis area is characterized by rocks from the Mokolian Abbabis Metamorphic Complex, which includes highly metamorphosed and deformed gneisses. These rocks are outcropped in domal and anticlinal cores along the Khan River. The area is also known for its Damara Sequence, which is a complex sequence of rocks that includes Cambrian and Mesozoic intrusions. The stratigraphy of the Central Zone of the Damara Orogen has been revised, introducing the Arandis Formation into the nomenclature.

Arandis is situated in the hilly to mountainous terrain of the Erongo Region, approximately 80 kilometers inland from the coastal town of Swakopmund. The town lies within the transitional zone between the Namib Desert and the interior plateau, characterized by rocky outcrops, and gravel plains.

Arandis is located in an arid to semi-arid environment with low annual rainfall. However, when precipitation does occur, it is often in the form of short, intense thunderstorms that can generate rapid surface runoff. The town is situated within the broader catchment area of the Khan River ephemeral river system that only flows after significant rainfall events

7.3 Vegetation

Arandis is situated within the Central Namib Desert, which is characterized by extremely arid conditions, very low and erratic rainfall (typically less than 100mm annually), and the frequent occurrence of coastal fog that provides critical moisture for plant life. The area falls within the transition zone between the hyper-arid coastal belt and the slightly less arid interior.

7.4 Soils

Dominant types include gravelly Regosols and Arenosols on uplands, with low clay content, quartz-rich sands, and minimal organic matter due to limited weathering from aridity. Calcisols with calcium carbonate accumulations appear in drainage lines, while mining areas show disturbed, compacted loams near the Khan River.

Dominant soil types and characteristics

Gravelly soils: These are prevalent in the plains around Arandis. The soil profiles can be eroded, leaving behind a "pavement" of coarser material.

Arenosols soils: Deep, loose quartz sands prevail on plains, with porous texture causing rapid drainage and low fertility; common in eastern extensions amid thornbush savanna.

Leptosols and Calcisols: Shallow, stony Leptosols cap rocky north/west outcrops with negligible rooting depth; Calcisols in south drainage lines accumulate lime layers, aiding sparse riparian growth but prone to salinity.

8. SOCIO-ECONOMIC ENVIRONMENT

8.1 Demographics

According to the population and housing census of 2023, Arandis has an estimated population of approximately 5,726, increasing from a population of 5,214 in 2011. The most common languages spoken are Oshiwambo, Afrikaans, and Khoekhoegowab. In 2001, the population was 3,974, with most people speaking Oshiwambo (38.8%), followed by Afrikaans (20.4%) and Khoekhoegowab (18.8%). The population of Namibia grew by 43.1 percent between 2011 and 2023, increasing from 2.11 million in 2011 to 3.02 million in 2023. This is the largest percentage change in population size.

8.2 Economic activities

Arandis has been called the Uranium Capital of the World as it is located just 15 km outside the world's largest open-pit uranium mine, the Rössing uranium mine. It also serves the Husab and Trekkopje uranium mines. Economic conditions in town have thus always been dependent on the world's market price for uranium. Additionally, the economy includes a growing commercial sector focused on retail and potentially more industrial investment, supported by infrastructure development like housing programs.

8.3 Education Profile

Arandis, a mining town in Namibia, offers a range of educational opportunities. The town has several institutions that cater to different educational needs, including vocational training and primary education. The Namibia Institute for Mining Technology is strategically located in Arandis, due to its proximity to the Uranium mines.

8.4 Employment Opportunities

By the year 2023, Arandis had an unemployment rate of 32% according to the census. Nationally, unemployment increased to 36.9% in 2023, with youth unemployment at 44.4%.

8.5 Incomes

The main sources of income in Arandis are wages and salaries and business/non-farming activities, which account for the largest portion of household income. Other significant income sources include pensions, cash remittances, and a smaller percentage from farming.

8.6 Health Profile

While a specific, recent HIV profile for Arandis is not available, research conducted in the Arandis district in 2017 found a high prevalence of HIV among women, with a study of HIV-positive women on ARVs showing no cervical cancer, though risk factors were discussed. General Namibian data from 2023 shows a national estimated HIV prevalence of 9.7% in adults aged 15-49.

9. ANALYSIS OF ALTERNATIVES

In terms of environmental impact assessment best practice, assessment of potential impacts from a proposed activity must include the assessment of alternatives. Assessment of alternatives is undertaken to identify the option that will minimise harm to the environment and may include site, technology and other alternatives, but must always include the option of not implementing the activity, known as the “no-go” alternative.

9.1 Alternative Site

The proponent has no other option of undertaking the proposed development in a different location other than the chosen site. This is because the land in question is already developed and this exercise is merely to formalize the existing land uses.

Since the proposed portion of land is already earmarked for the development and has offered more advantages than disadvantage for the proposed development, there are no other alternatives to this site, Alternative 1, is the only site that is identified for the formalization of business buildings. Therefore, no alternative site has been identified or considered during this study.

The following reasons justify the use of the proposed site for the development:

- The land is already developed.
- The project is for formalization purposes and businesses are already operating.
- The street is already constructed.

9.2 The “No Project” Alternative

The No-Go Option is the option not to proceed with the activity, implying a continuation of the current status quo. Therefore, the No-go Alternative would mean that the proposed subdivision and rezoning of the erven from local authority and business to street reservations and the formalization of a business buildings will not go ahead.

Should the proposed development not take place, the owners will not be able to formalize their property and thus won't have security of land tenure, it will not stimulate the town's economy and will not employ additional people. This can have long term negative effects on the social stability of the town and the surrounding areas. From the environmental-socio-economic point of view, no project option is the least preferred option due to the following factors:

- The land will not be formalized thus the owner won't have land tenure security.
- The town council will not levy the correct rates and taxes on the property.
- Statutory requirements will not be met to the detriment of the owner, municipality and the public.
- No employment opportunities will be created for the locals.
- Poverty will not be eradicated in terms of job creation.
- The local skills would remain underutilized.

This is therefore not a desirable alternative.

10. PUBLIC PARTICIPATION PROCESS (PPP)

This section of the report provides details of Public Participation Process (PPP) undertaken in the compilation of the EIA scoping report. In terms of Section 26(1)(h) of the Namibian Environmental Assessment Regulations (2012), it is a requirement to provide details of the public participation process conducted in accordance with Section 32 of the Environmental Assessment Regulations.

Furthermore, the Public Participation forms an important component of this EIA. It has been defined by the Ministry of Environment and Tourism that an Environmental Assessment Regulations (2012) of the Environmental Management Act (2007), as a process in which potential interested and affected parties such as service providers, traditional leaders, local authorities, environmental groups, village councils and communities, to comment on the potential environmental impacts associated with the proposed project are given an opportunity to comment on, or raise issues relevant to the proposed project and its benefits to the nation and its economy.

Apart from these legal requirements, Consultations with the public and other relevant stakeholders to ensure that their inputs are considered during the decision-making process was carried out as per the EIA regulations.

10.1 Aims of the Public Participation Process (PPP)

The aims of the Public Participation Process are but not limited to:

- Informing Interested and Affected Parties (I&APs) of the proposed project.
- Identifying issues, comments and concerns as raised by I&APs.
- Promoting transparency and an understanding of the project and its consequences.
- Serving as a structure for liaison and communication with I&APs; and
- Providing local knowledge and input in identifying potential environmental (biophysical and social) impacts and “hotspots” associated with the proposed development.

10.2 Compilation of stakeholder database

The first step in the Public Participation Process (PPP) is to identify key stakeholders. A stakeholder database was compiled and the target groups for this project were invited to comment on the proposed development, the following were invited to Comment:

- Arandis Town Council (as the approving authority for town planning projects and service provider for bulk services).
- General public

Please note that some of the interested and Affected Parties are also consulted during the town planning process of the subdivision and rezoning of the proposed erven.

10.3 Background Information Document

This document provides a short summary of the project and the EIA process. Therefore, a background information document (BID) was prepared and was ready to be distributed to Interested & Affected Parties. After all stakeholder and I&Ap’s were informed none of them requested for the Background Information Document (BID). See a copy of the BID attached.

10.4 Notification of I&Ap's

The requirements for the notification of potentially interested and affected parties of this application are set out in detail in section 32(2)(b) of the EA regulation. These requirements have been addressed and include.

- Forwarding letters to government authorities and other identified relevant stakeholders.
- Fixing a notice at a place conspicuous to the public in English.
- Placing advertisements twice in at least two local newspapers.

10.5 Advertisement

The advertisement of the public participation and submission of comments for the proposed project were placed in two national newspapers circulating in Arandis, the New Era and Confidente Newspapers dated 31st January 2025 and 07th February 2025. Proof of advertisements are attached.

10.6 Notice Board

An A3 size notice detailing information about the project and the EIA process was at the town planning notice Board of Arandis Town Council on the from the 31st of January 2025 until the comments period lapsed on the 28th of February 2025.

10.7 Public Meeting

In compliance with the EIA Regulations (2012), public (I&AP) and all stakeholders were notified as a requirement for EIA process. However, due to a lack of interest from the public, the small-scale nature of the project and the minimal impacts the project is expected to have on the public, a public meeting was not held for this development.

10.8 Issues raised by interested and affected parties

The identified key stakeholder in this project is the Arandis Town Council as one of the competent authorities in the town planning process of this project. Thus, consultations with the town council goes beyond the EIA process and are in favour of the project.

11. ENVIRONMENTAL ASSESSMENT METHODOLOGY

An appraisal of the type of effects the proposed Subdivision of Erf 1145, Arandis into 3 Erven and Remainder, Rezoning of the Remainder of Erf 1145, Arandis from “Local Authority” to “Street” reservation, Subdivision of Erf 1147, Arandis into 11 Erven and Remainder and consequent Rezoning of the Remainder of Erf 1147, Arandis from “Business” with a bulk of 1.0 to “Street”

reservation would have on the affected environment; rate as either positive (beneficial on the environment), neutral (no impact on the environment), or negative (adverse impact on at a cost to the environment).

Rating	Description
1	Negligible / non-harmful / minimal deterioration (0 – 20%)
2	Minor / potentially harmful / measurable deterioration (20 – 40%)
3	Moderate / harmful / moderate deterioration (40 – 60%)
4	Significant / very harmful / substantial deterioration (60 – 80%)
5	Irreversible / permanent / death (80 – 100%)

Table 3: Assessment and rating severity

Rating	Description
1	Less than 1 month / quickly reversible
2	Less than 1 year / quickly reversible
3	More than 1 year / reversible over time
4	More than 10 years/ reversible over time/ life of project or facility
5	Beyond life of project or facility/ permanent

Table 4: Assessment and rating duration

Rating	Description
1	Within immediate area of the activity
2	Surrounding area within project boundary
3	Beyond project boundary
4	Regional/ Provincial
5	National/ International

Table 5: Assessment and rating extent

Consequence is calculated as the average of the sum of the ratings of severity, duration and extent of the environmental impact.

Determination of Consequence (C)	$(\text{Severity} + \text{Duration} + \text{Extent}) / 3$
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Table 6: Determination of consequence

Rating	Description
1	Less than once a year
2	Once in a year
3	Quarterly
4	Weekly
5	Daily

Table 7: Assessment and rating of frequency

Rating	Description
1	Almost impossible
2	Unlikely
3	Probable
4	Highly likely
5	Definite

Table 8: Assessment and rating of probability

Likelihood

Likelihood considers the frequency of the activity together with the probability of the environmental impact associated with that activity occurring.

Determination of Likelihood (L) =	$(\text{Frequency} + \text{Probability}) / 2$
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Table 9: Determination of likelihood

Environmental Significance

Environmental significance is the product of the consequence and likelihood values.

Rating	Description
L (1 - 4.9)	Low environmental significance
LM (5 - 9.9)	Low to medium environmental significance
M (10 - 14.99)	Medium environmental significance
MH (15 - 19.9)	Medium to high environmental significance
H (20 - 25)	High environmental significance. Likely to be a fatal flaw

Table 10: Determination of environmental significance

11.1 Impacts Associated with Operational Phase

Stormwater usually runs off the area and flows into the Khan River situated in the vicinity of Arandis Town without any kind of treatment. This can pollute the water bodies like creeks, streams and rivers and have adverse effects on their chemical as well as biological nature. From this, any plans must include storm water drainage to accommodate the storm water during the rainy season.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	4	5	3	4	2	5	3.5	Negative	7.5 (LM)
<p>Mitigation measures:</p> <p>Storm water drains are already constructed along the Erf boundaries and along the adjacent street to connect to the towns storm water networks, natural water courses, excess storm water to be collected for consumption and recreational use.</p> <p>Storm water will be collected through network of storm drains from gardens, parking areas, paved and unpaved areas, and roadways. The storm water drainage system should have the capacity to prevent flooding of the site and surrounding areas.</p> <p>All buildings to be constructed above the 50-year flood line to avoid flooding of properties.</p>									
Mitigated	1	1	2	1.33	1	2	1.5	Negative	2.83 (L)

Preserving Cultural Heritage and Supporting Local Identity

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	1	1	1	2	5	5	5	Positive	7 (LM)
<p>Mitigation measures: No mitigation required as this is a positive impact.</p> <p>As prospective customers visit the small businesses and show interest in the unique products sold, they support the cultural preservation of local communities. By engaging with local artisans and learning about cultural sites, customers promote respect and visibility for cultural assets that may otherwise fade.</p> <p>Cultural heritage can be preserved by showcasing the town’s mining history, highlighting local sporting talent developed at the boxing and fitness academies, and providing insight into the cultural diversity of Arandis. These experiences not only foster a deeper understanding for visitors but also strengthen pride among local people.</p>									
Mitigated	1	2	1	1.33	5	3	4	Positive	5.33 (LM)

Protecting the Environment Through Sustainable Tourism

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	1	1	1	2	5	5	5	Positive	7 (LM)
Mitigation measures: No mitigation required as this is a positive impact. With the rise of sustainable tourism and eco-tourism, travelers are becoming more conscious of their environmental impact. Responsible tourism encourages the protection of natural landscapes, national parks, and natural resources, which form the backbone of many tourist destinations. The existing businesses must promote eco-friendly practices while embracing environmental protection. These sustainable business practices will ensure that the community benefits from the natural environment sustainably.									
Mitigated	1	2	1	1.33	5	3	4	Positive	5.33 (LM)

Contribution to the economy - The project will contribute to the economy of Arandis Town.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	1	1	1	2	5	5	5	Positive	7 (LM)
Mitigation measures: No mitigation required as this is a positive impact. This project will contribute to the economy of Arandis town by offering essential services to the inhabitants of Arandis. The project will improve job creation opportunities for the locals as the businesses will hire employees for their operations.									
Mitigated	1	2	1	1.33	5	3	4	Positive	5.33 (LM)

Improved aesthetic look of the area- The development is essential to improve the aesthetics of the area while turning downtown Arandis into a modern city that is attractive for the residents and visitors;

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	2	2	2	2	1	1	1	Positive	3 (L)
<p>Mitigation measures: No mitigation required because it's a positive impact. However, the proponent should create awareness among the residents about energy conservation and other resources as well as to implement measures to prevent or minimize any adverse effects on the environment. This project should provide a quality of life that can be expected in an urban area in relation to the utilities, convenience, amenities and security. This project will provide economic opportunities to the previously disadvantaged youths from the middle to low-income segments of the town's population.</p>									
Mitigated	1	5	4	3.33	3	5	4	Positive	7.33 (LM)

Increased employment opportunities- the formalization of the existing small businesses can increase the opportunities of employment for locals.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	2	3	5	3.33	3	3	3	Positive	6.33 (LM)
<p>Mitigation measures: The principles of gender equality, maximising local employment should be implemented in the provision of jobs during the ongoing operation of these businesses. Priority should be given to local people when recruiting, therefore unskilled labourers from the local community should be employed. Jobs for additional workers will be created as the small businesses are expected to grow as they gain access to capital markets. Equity, transparency, should be considered when hiring and recruiting and that the public be included in the recruitment process.</p>									

Mitigated	1	4	4	3	2	5	4	Positive	6.5 (LM)
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Community Growth and Public Improvements

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	2	2	2	2	1	1	1	Positive	3 (L)
Mitigation measures: No mitigation required because it's a positive impact. When businesses are formalized and gain access to capital markets, they support broader infrastructure and service development. Increased business can encourage investment in business infrastructure, transportation networks, and public services that benefits both residents and business owners.									
Mitigated	1	5	4	3.33	3	5	4	Positive	7.33 (LM)

Traffic - Potential impact due to the increase in traffic because of the new business that will be constructed.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	5	5	3	4.33	5	3	4	Positive	8.33 (LM)
Mitigation measures: Sidewalks for pedestrians should be provided along the new streets. Appropriate road signs and markings should be provided in the adjacent streets. Signs should be provided at intersections particularly at higher order intersections. Speed bumps should be installed to control the speed of traffic. Traffic circles to be utilized at high intensity intersections.									
Mitigated	2	1	1	1.33	1	2	1.5	Positive	2.83 (L)

Waste management- the businesses will require a more formalized form of waste management and Arandis Town Council should be responsible for this.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	5	3	3	3.66	5	5	5	Negative	8.66 (LM)
Mitigation measures: During the operations phase, the Arandis Town Council be responsible for waste management. Arandis Town Council to incorporate the new development into their formal waste collection strategy and that the waste is to be collected regularly and to be disposed of at an authorized waste disposal site. Illegal dumping of waste in any form is prohibited.									
Mitigated	1	1	1	1	1	2	1.5	Negative	2.5 (L)

Land use -The proposed development will result in a change in land use from local authority and business to street reservations.

	Severity	Duration	Extent	Consequence	Frequency	Probability	Likelihood	Status	Confidence/ Significance
Unmitigated	1	5	4	3.33	1	5	3	Positive	6.33 (LM)
Mitigation measures: The change in land use will contribute to the efficient use of land in Arandis by formalizing existing disorganized buildings into a highly productive business area.									
Mitigated	1	2	1	1.33	5	3	4	Positive	5.32 (LM)

11.5 Impacts Associated with Decommissioning Phase

At this point, it is difficult to visualise and assess the decommissioning phase, although the procedures for decommissioning phase should be the same as for the construction phase. However, there will be possible pollution during the decommissioning phase of the project. Furthermore, during the decommissioning phase, an Environmental Impact Assessment (EIA) will be required, and the disposal of decommissioned equipment and hazardous contaminated materials should be disposed following the disposal of hazardous material legislation.

12. CONCLUSIONS

The Arandis Town Council intends to Subdivide Erf 1145, Arandis into 3 Erven and Remainder and subsequently rezone the proposed Remainder of Erf 1145, Arandis from “Local Authority” with a bulk of 1.0 to “Street” reservation. Consequently, the Arandis Town Council further intends to Subdivide Erf 1147, Arandis into 11 Erven and Remainder and subsequently rezone the Remainder of Erf 1147, Arandis from “Business” to “Street” reservation.

Erven 1145 and 1147 are in Arandis town and are currently zoned for “Local Authority” and “Business” respectively. The current occupants of the property have been operating several businesses on the property and are keen on formalizing the land use. The change in land use from local authority and business will result in the creation of a street that is a listed activity and a statutory town planning and environmental management procedure for the subdivision and subsequent rezoning must be carried out.

Nghivelwa Planning Consultants, a Town and Regional Planning and Environmental Management Consultancy firm has been appointed to conduct an Environmental Impact Assessment and Environmental Management Plan (EMP) for the Subdivision Erf 1145, Arandis into 3 Erven and Remainder, Subdivision of Erf 1147, Arandis into 11 Even and Remainder, Rezoning of the various new erven to be created to their respective land uses and the subsequent creation of streets to offer access to the new erven to be created after the subdivision. The Environmental Impact Assessment has been conducted to meet the requirements of the Namibia’s Environmental Management Act (No. 7 of 2007).

We further conclude that the proposed development has more positive than negative impacts to the natural environment and will provide much needed economic development through increased tourism and employment creation for Arandis residents. The development will complement the efforts of the Namibia Tourism Authority and help with the tourism strategies.

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