Environmental Assessment Scoping Report for

APP-006805

Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740). Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1.0, Rezoning of the proposed subdivided Erf B from Private Open Space to Street

DECEMBER 2025

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Title	**Environmental Scoping Report for the:** Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740). Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1.0, Rezoning of the proposed subdivided Erf B from Private Open Space to Street		
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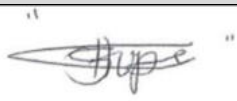
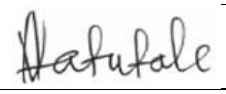
Authors	Hope Mulonda		December 2025
Reviewer	Victoria P Hatutale		December 2025

Executive Summary

Introduction

Grootfontein Municipality, hereinafter referred to as the proponent intends to undertake the following activities:

- **Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740).**
- **Subsequent rezoning of the proposed subdivided Erf A from 'Private Open Space' to 'General Business' (Business II) with a bulk of 1.**
- **Rezoning of the proposed subdivided Erf B From 'Private Open Space' to 'Street'**

The development aforementioned triggers listed activities in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

Based on the above information, the proponent appointed Kamau Town Planning and Development Specialists to undertake an independent Environmental Assessment (EA) so as to obtain an Environmental Clearance Certificate (ECC) for the above activities. The competent authority identifies is the Ministry of Environment and Tourism: Department of Environmental Affairs and Forestry.

Project Description

The proponent intends to subdivide Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740). Thereafter there is a proposed rezoning of the subdivided Erf A from 'Private Open Space' to 'General Business' (Business II) with a bulk of 1.0 and the rezoning of the subdivided Erf B from 'Private Open Space' to 'Street' in accordance with the Grootfontein Zoning Scheme and the Urban and Regional Planning Act 5 of 2018. This subdivision and rezoning are necessary to align to the proposed land use with the regulations and bylaws of the Grootfontein Municipality. The erf is currently zoned private open space, the western area of the erf has a stadium on it (Omulunga Stadium), and the eastern area is vacant.

Grootfontein, like many other local authorities across Namibia, is experiencing a high rate of urbanisation. As the population continues to grow, developments such as the proposed shopping centre on Erf 740 will help alleviate pressure on existing facilities, many of which were designed to serve a smaller population at the time of their construction.

The proposed shopping centre will generate both temporary and permanent employment opportunities across various skill levels. It will also provide business owners with an opportunity to operate in a formal commercial environment by renting retail and office spaces within the development.

The proposed development will benefit not only the residents of Grootfontein but also the Grootfontein Municipality, through property tax revenue collected from the new owner of Erf A, as well as the payment of betterment and endowment fees associated

with the rezoning and subdivision, respectively. Furthermore, the construction of the traffic circle will make a positive contribution to the town's transportation network, representing a meaningful enhancement to Grootfontein's overall infrastructure.

Public Participation

Communication with Interested and Affected parties (I&APs) concerning the development proposal was established through the following avenues:

- A Background Information Document (BID) containing the descriptive information about the proposed activities was compiled and sent out to all identified and registered I&APs via email on **27th November 2024**
- Written notice to the owners and occupiers of land adjacent to the site was sent via registered mail on **28 November 2024,** via email on **29 November 2024** and via hand delivery on **02 December 2024**.
- Notices were placed in the New Era and Confidente dated **22nd and 29th November 2024,** briefly explaining the activity and its locality, equally inviting members of the public to register as I&APs and
- A notice was fixed at the project site as well as the notice board of the Grootfontein Municipality.

Public consultation was carried out as per the Environmental Management Act's EIA Regulations. After the initial notification, the I&APs were given two weeks to submit their comments on the project (until **20 December 2024)**. The comment period remained open until the final scoping report was submitted to MET.

The Draft Scoping Report was circulated from the **05 March 2025 to 19 March 2024** so that the public could review and comment on it. No comments were received during the above comment period.

Conclusions and Recommendations

None of the negative planning and design, construction or operational phase impacts were deemed to have a high significant impact on the environment. The impacts were assessed to a Medium to Low (negative) significance, without mitigation measures. With the implementation of the recommended mitigation measures in Chapter 7 as well as in the EMP, the significance of the construction phase impacts is likely to be reduced to a Low (negative). The social impact was assessed to have Medium (positive) impact associated with possible job opportunities during construction and operation.

It is recommended that this project be authorised because should the development not proceed the subject erven will remain undeveloped and underutilised. This would result in no additional erven being developed. None of the positive or negative impacts from the proposed development would be realised.

The "no go" alternative was thus deemed to have a High (negative) impact, as all the benefits resulting from the development would not be realised.

The significance of negative impacts can be reduced with effective and appropriate mitigation provided in this report and the EMP. If authorised, the implementation of the EMP should be included as a condition of approval.

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List of Acronyms

BID	Background Information Document
DEA	Department of Environmental Affairs
DESR	Draft Environmental Scoping Report
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
I&APs	Interested and Affected Parties
Kamau TPDS	Kamau Town Planning and Development Specialist
MET	Ministry of Environment and Tourism
PPP	Public Participation Process

1. Introduction

1.1 Project Background

Grootfontein Municipality, hereinafter referred to as the proponent intends to undertake the following activities:

- **Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740)**
- **Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1.0**
- **Rezoning of the proposed subdivided Erf B from Private Open Space to Street**

The development aforementioned triggers listed activities in terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012).

In terms of the Environmental Management Act (No. 7 of 2007) and Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), the following listed activities in **Table 1** were triggered by the proposed project:

Table 1: List of triggered activities which apply to the proposed project

Activity description and No(s):	**Description of relevant activity**	**The portion of the development as per the project description that relates to the applicable listed activity**
Activity 5.1 (d) Land use and development activities	The rezoning of land from use for nature conservation or zoned open space to any other land use.	The proposed development involves rezoning of land from Open Space to other land uses.
Activity 10.1 (b) Infrastructure	The construction of public roads.	The proposed project includes the construction of a public road
Activity 10.2 (a) Infrastructure	The route determination of roads and design of associated physical infrastructure where it is a public road.	The proposed project includes the construction of a public road

The above activities will be discussed in more detail in Chapter 4. The proponent appointed Kamau Town Planning and Development Specialists to undertake an independent Environmental Assessment (EA) in order to obtain an Environmental Clearance Certificate (ECC) for the above activities. The competent authority is the Ministry of Environment and Tourism: Department of Environmental Affairs (MET: DEAF).

The process was undertaken as per the terms of the gazetted Namibian Government Notice No. 30 of the Environmental Impact Assessment Regulations (herein referred

to as EIA Regulations) and the Environmental Management Act (No. 7 of 2007) (herein referred to as EMA). The EIA intends to investigate any potential significant bio-physical and socio- economic impacts associated with the proposed subdivision and rezoning. Additionally, the EIA also provided opportunity for the public and key stakeholders to furnish any comments, thereby participating in the process.

1.2. Project Location

Erf 740 is situated in Grootfontein, Omulunga Extension 2, at the intersection of Bahnhof Street and Ehangano Street. According to the Erf Diagram (General Plan Extract), the erf covers an area of 56, 392m^2

Figure 1: Locality of Erf 740, Grootfontein

1.3 Terms of Reference and Scope of Project

The scope of this project is limited to conducting an environmental impact assessment and applying for an Environmental Clearance Certificate for the following as indicated in section 1.1 above:

- **Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740)**
- **Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1.0**
- **Rezoning of the proposed subdivided Erf B from Private Open Space to Street**

1.4 Assumptions and Limitations

In undertaking this investigation and compiling the Environmental Scoping Report, the following assumptions and limitations apply:

- Assumes the information provided by the proponent is accurate and discloses all information available.
- The limitation that no alternative except for the preferred layout plans and the 'no-go' option was considered during this assessment. The unique character and appeal of Grootfontein were however taken into consideration with the design perspective. Various layout alternatives were initially considered by the proponent, also taking terrain and environmental constraints into account, thus the current design plans being the most feasible result.

1.5 Content of Environmental Assessment Report

Section 8 of the gazetted EIA Regulations requires specific content to be addressed in a Scoping / Environmental Assessment Report. **Table 2** below is an extract from the EMA and highlights the required contents of a Scoping / Environmental Assessment Report whilst assisting the reader to find the relevant section in the report.

Table 2: Contents of the Scoping / Environmental Assessment Report

Section	Description	Section of FESR
8 (a)	The curriculum vitae of the EAPs who prepared the report	Attached as a supporting document
8 (b)	A description of the proposed activity	Chapter 4
8 (c)	A description of the site on which the activity is to be undertaken and the location of the activity on the site	Chapter 3
8 (d)	A description of the environment that may be affected by the proposed activity and the manner in which the geographical, physical, biological, social, economic and cultural aspects of the environment may be affected by the proposed listed activity	Chapter 3
8 (e)	An identification of laws and guidelines that have been considered in the preparation of the scoping report	Chapter 2
8 (f)	Details of the public consultation process conducted in terms of regulation 7 (1) in connection with the application, including:	Chapter 5
	(i) the steps that were taken to notify potentially interested and affected parties of the proposed application	
	(ii) proof that notice boards, advertisements and notices notifying potentially interested and affected parties of the proposed application have been displayed, placed or given;	Attached as a supporting Document

Section	Description	Section of FESR
	(iii) a list of all persons, organisations and organs of state that were registered in terms of regulation 22 as interested and affected parties in relation to the application;	Attached as supporting Document
	(iv) a summary of the issues raised by interested and affected parties, the date of receipt of and the response of the EAP to those issues;	Attached as a supporting document
8 (g)	A description of the need and desirability of the proposed listed activity and any identified alternatives to the proposed activity that are feasible and reasonable, including the advantages and disadvantages that the proposed activity or alternatives have on the environment and on the community that may be affected by the activity;	Chapter 4
8 (h)	A description and assessment of the significance of any significant effects, including cumulative effects, that may occur as a result of the undertaking of the activity or identified alternatives or as a result of any construction, erection or decommissioning associated with the undertaking of the proposed listed activity;	Chapter 7
8 (i)	terms of reference for the detailed assessment;	NB – Assessment of impacts are included in this EA Report
8 (j)	An environmental management plan	Attached as supporting Document

2. Legal Framework

2.1. Administrative, Legal and Policy Requirements

There are multiple legal instruments that regulate and have a bearing on good environmental management in Namibia. Below is a summary of the legal instruments considered to be relevant to this development and the environmental assessment process.

Table 3: Legislation applicable to the proposed development

Legislation	Relevant Provisions	Relevance to Project
The Constitution of the Republic of Namibia as Amended	Article 91 (c) provides for duty to guard against "the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia."	Sustainable development should be at the forefront of this development.

Legislation	Relevant Provisions	Relevance to Project
	Article 95(l) deals with the "maintenance of ecosystems, essential ecological processes and biological diversity" and sustainable use of the country's natural resources.	
Environmental Management Act No. 7 of 2007 (EMA)	Section 2 outlines the objective of the Act and the means to achieve that. Section 3 details the principle of Environmental Management	The development should be informed by the EMA.
EIA Regulations GN 28, 29, and 30 of EMA (2012)	GN 29 Identifies and lists certain activities that cannot be undertaken without an environmental clearance certificate. GN 30 provides the regulations governing the environmental assessment (EA) process.	The following listed activities are triggered by the proposed development: **Activity 5.1 (d) Land use and development activities** **Activity 10.1 (b) Infrastructure** **Activity 10.2 (a) Infrastructure**
Convention on Biological Diversity (1992)	Article 1 lists the conservation of biological diversity amongst the objectives of the convention.	The project should consider the impact it will have on the biodiversity of the area.
Draft Procedures and Guidelines for conducting EIAs and compiling EMPs (2008)	Part 1, Stage 8 of the guidelines states that if a proposal is likely to affect people, certain guidelines should be considered by the proponent in the scoping process.	The EA process should incorporate the aspects outlined in the guidelines.
Namibia Vision 2030	Vision 2030 states that the solitude, silence and natural beauty that many areas in Namibia provide are becoming sought after commodities and must be regarded as valuable natural assets.	Care should be taken that the development does not lead to the degradation of the natural beauty of the area.
Water Act No. 54 of 1956	Section 23(1) deals with the prohibition of pollution of underground and surface water bodies.	The pollution of water resources should be avoided during construction and operation of the development.
The Ministry of Environment and	MET has recently developed a policy on HIV and AIDS. In	The proponent and its contractor have to

Legislation	Relevant Provisions	Relevance to Project
Tourism (MET) Policy on HIV & AIDS	addition, it has also initiated a programme aimed at mainstreaming HIV and gender issues into environmental impact assessments.	adhere to the guidelines provided to manage the aspects of HIV/AIDS. Experience with construction projects has shown that a significant risk is created when migrant construction workers interact with local communities.
Township and Division of Land Ordinance 11 of 1963	The Townships and Division of Land Ordinance regulates subdivisions of portions of land falling within a Local Authority area	In terms of Section 19 such applications are to be submitted to NAMPAB and Townships Board respectively.
Urban and Regional Planning Act 5 of 2018	The Act provides to consolidate the laws relating to urban and regional planning; to provide for a legal framework for spatial planning in Namibia; to provide for principles and standards of spatial planning; to establish the urban and regional planning board; to decentralise certain matters relating to spatial planning; to provide for the preparation, approval and review of the national spatial development framework, regional structure plans and urban structure plans; to provide for the preparation, approval, review and amendment of zoning schemes; to provide for the establishment of townships; to provide for the alteration of boundaries of approved townships, to provide for the disestablishment of approved townships; to provide for the change of name of approved townships; to provide for the subdivision and consolidation of land; to provide for the alteration, suspension and deletion of conditions relating to land; and to provide for incidental matters.	The rezoning is to be done in accordance with the act.

Legislation	Relevant Provisions	Relevance to Project
Local Authorities Act No. 23 of 1992	The Local Authorities Act prescribes the manner in which a town or municipality should be managed by the Town or Municipal Council.	The development must comply with provisions of the Local Authorities Act.
Labour Act no. 11 of 2007	Chapter 2 details the fundamental rights and protections. Chapter 3 deals with the basic conditions of employment.	Given the employment opportunities presented by the development, compliance with the labour law is essential.
National Heritage Act No. 27 of 2004	The Act is aimed at protecting, conserving and registering places and objects of heritage significance.	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.
Roads Ordinance 17 of 1972	Section 3.1 deals with width of proclaimed roads and road reserve boundaries • Section 27.1 is concerned with the control of traffic on urban trunk and main roads • Section 36.1 regulates rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads • Section 37.1 deals with Infringements and obstructions on and interference with proclaimed roads.	Adhere to all applicable provisions of the Roads Ordinance.
Public and Environmental Health Act of 2015	This Act (GG 5740) provides a framework for a structured uniform public and environmental health system in Namibia. It covers notification, prevention and control of diseases and sexually transmitted infections; maternal, ante-natal and neo-natal care; water and food supplies; infant nutrition; waste management; health nuisances; public and environmental health planning and reporting. It repeals the	Contractors and users of the proposed development are to comply with these legal requirements.

Legislation	Relevant Provisions	Relevance to Project
	Public Health Act 36 of 1919 (SA GG 979).	
Nature Conservation Ordinance no. 4 of 1975	Chapter 6 provides for legislation regarding the protection of indigenous plants	Indigenous and protected plants must be managed within the legal confines.
Water Quality Guidelines for Drinking Water and Wastewater Treatment	Details specific quantities in terms of water quality determinants, which wastewater should be treated to before being discharged into the environment	These guidelines are to be applied when dealing with water and waste treatment
Environmental Assessment Policy of Namibia (1995)	The Policy seeks to ensure that the environmental consequences of development projects and policies are considered, understood and incorporated into the planning process, and that the term ENVIRONMENT is broadly interpreted to include biophysical, social, economic, cultural, historical and political components.	This EIA considers this term of Environment.
Water Resources Management Act No. 11 of 2013	Part 12 deals with the control and protection of groundwater Part 13 deals with water pollution control	The pollution of water resources should be avoided during construction and operation of the development. Should water need to be abstracted, a water abstraction permit will be required from the Ministry of Water, Agriculture and Forestry.
Forest Act 12 of 2001 and Forest Regulations of 2015	To provide for the establishment of a Forestry Council and the appointment of certain officials; to consolidate the laws relating to the management and use of forests and forest produce; to provide for the protection of the environment and the control and management of forest fires; to repeal the Preservation of Bees and Honey Proclamation, 1923 (Proclamation No. 1of 1923), Preservation of Trees	Protected tree and plant species as per the Forest Act No 12 of 2001 and Forest Regulations of 2015 may not be removed without a permit from the Ministry of Agriculture, Water and Forestry.

Legislation	Relevant Provisions	Relevance to Project
	and Forests Ordinance, 1952 (Ordinance No. 37 of 1952) and the Forest Act, 1968 (Act No. 72 of 1968); and to deal with incidental matters.	
Atmospheric Pollution Prevention Ordinance No 45 of 1965	Part II - control of noxious or offensive gases, Part III - atmospheric pollution by smoke, Part IV - dust control, and Part V - air pollution by fumes emitted by vehicles.	The development should consider the provisions outlined in the act. The proponent should apply for an Air Emissions permit from the Ministry of Health and Social Services (if needed).
Hazardous Substance Ordinance 14 of 1974	To provide for the control of substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances; to provide for the division of such substances into groups in relation to the degree of danger; to provide for the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of such substances; and to provide for matters connected therewith.	The handling, usage and storage of hazardous substances on site should be carefully controlled according to this Ordinance.
Soil Conservation Act No 76 of 1969	Act to consolidate and amend the law relating to the combating and prevention of soil erosion, the conservation, improvement and manner of use of the soil and vegetation and the protection of the water sources	The proposed activity should ensure that soil erosion and soil pollution is avoided during construction and operation.

The EIA process was undertaken in accordance with the EIA Regulations. A Flow Diagram as depicted in the figure below provides an outline of the EIA process:

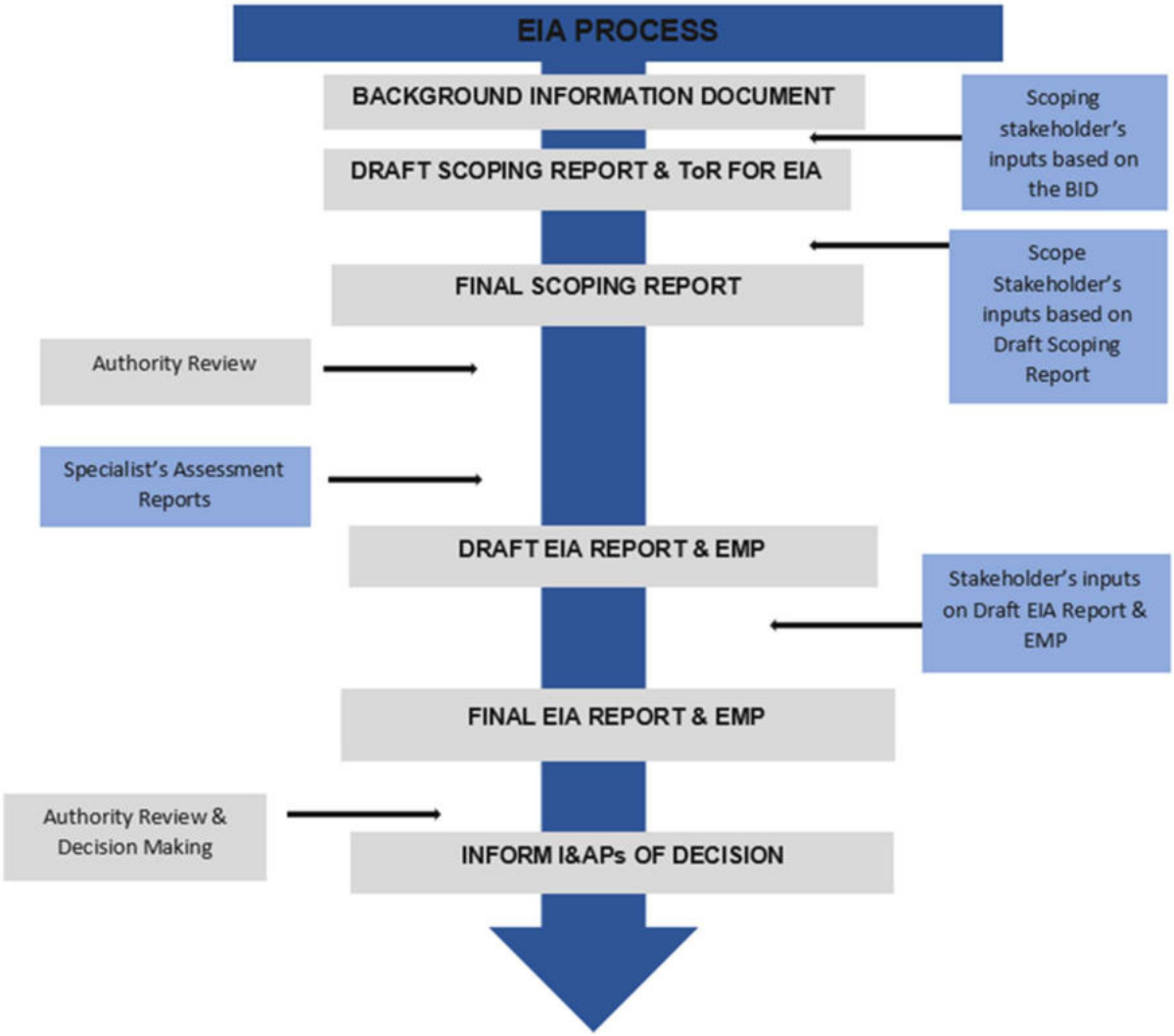

Figure 2: EIA flow Diagram

3. Environmental Baseline Description

3.1 Social Environment

3.1.1. Socio- Economic Context

Grootfontein, located 460 kilometres away from Windhoek, the capital city of Namibia, and measuring 61.64 km^2 was proclaimed a town in 1907 and a municipality sometime after the Local Authorities of 1992 was passed, it located in Otjozondjupa Region. The statistics shown in the table below are derived from the Namibia 2023 Population and Housing Census (Main Report) and 2023 Population and Housing Census Labour Force Report.

Table 4: Statistics of the Grootfontein Constituency and Otjozondjupa Region (Namibia Statistics Agency, 2023)

OTJOZONDJUPA REGION	
ATTRIBUTE	**INDICATOR**
Population	220,811
Females	107,531
Males	113,280
Population under 5 years	13.9%

Population aged 5 -14 years	22.0%
Population aged 15- 34 years	34.9%
Population aged 35-59 years	23.5%
Population aged above 60 years and above	5.7%
Female: Male ratio	100:105
Literacy rate of 15 years old and above	83.0%
People above 15 years who have never attended school	14.9
People above 15 years who are currently attending school	15.1
People above 15 years who have left school	68.2
People aged 15 years and above who belong to the labour force	76 583
Population employed	52,652
Main Language	Otjiherero
GROOTFONTEIN (URBAN)	
ATTRIBUTE	**INDICATOR**
Population	26 839
Population aged 60 years and above	6.8%
Females	14 281
Males	12 558

3.1.2 Archaeological and Heritage Context

The urban landscape of Grootfontein has some colonial historical background such as outline below:

The Hoba Meteorite is situated 19 kilometers from Grootfontein and was declared a National Monument in 1955. It is known as the largest meteorite on earth weighing at 60 tonnes and is thus often viewed by Tourists visiting the area. The Baobab Tree known as 'Tree 1063' is located 60 km north of Grootfontein and was declared a National Monument in 1951. The tree is known to be used historically for medicinal purposes. The Gaub Cave is located in the middle of the Grootfontein-Tsumeb-Otavi triangle and was declared a National Monument in 1967. The cave hosts many interesting geological features inside including petrified waterfalls, organ pipes, crystal growths and rock curtains.

No known heritage sites are located within the proposed development area. If any heritage or culturally significant artifacts are found during the construction, construction must stop, and the National Heritage Council of Namibia immediately notified.

3.2. Bio- Physical Environment

3.2.1. Climate

The climate of the subject area can be described as semi-arid. Average annual temperatures are usually between 19-20°C, with average maximum temperatures between 32°C and 34°C and average minimum temperatures between 4°C and 6°C (Mendelsohn, Jarvis, Roberts, et al., 2002).

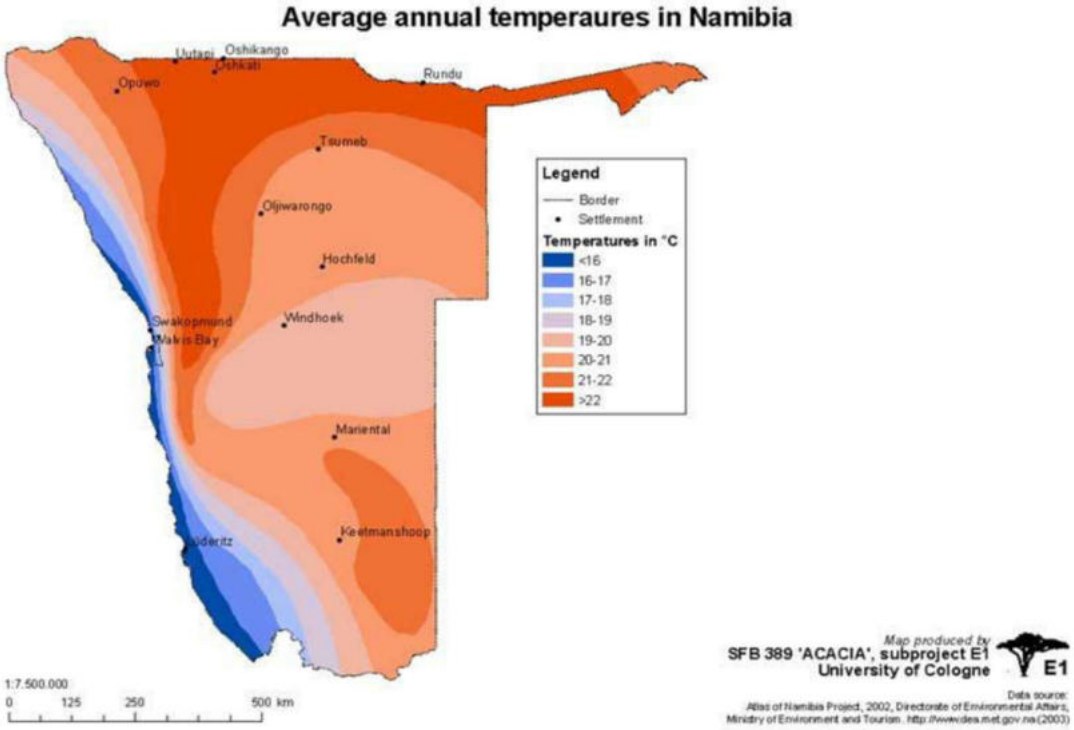

Figure 3: Annual average temperature (http://www.unikoeln.de/sfb389/e/e1/download/atlas_namibia/e1_download_climate_e.htm#temperature_annual)

The subject area generally experiences more rainfall than the south and west of the country with an average rainfall of 400 to 450 mm as indicated in the figure below.

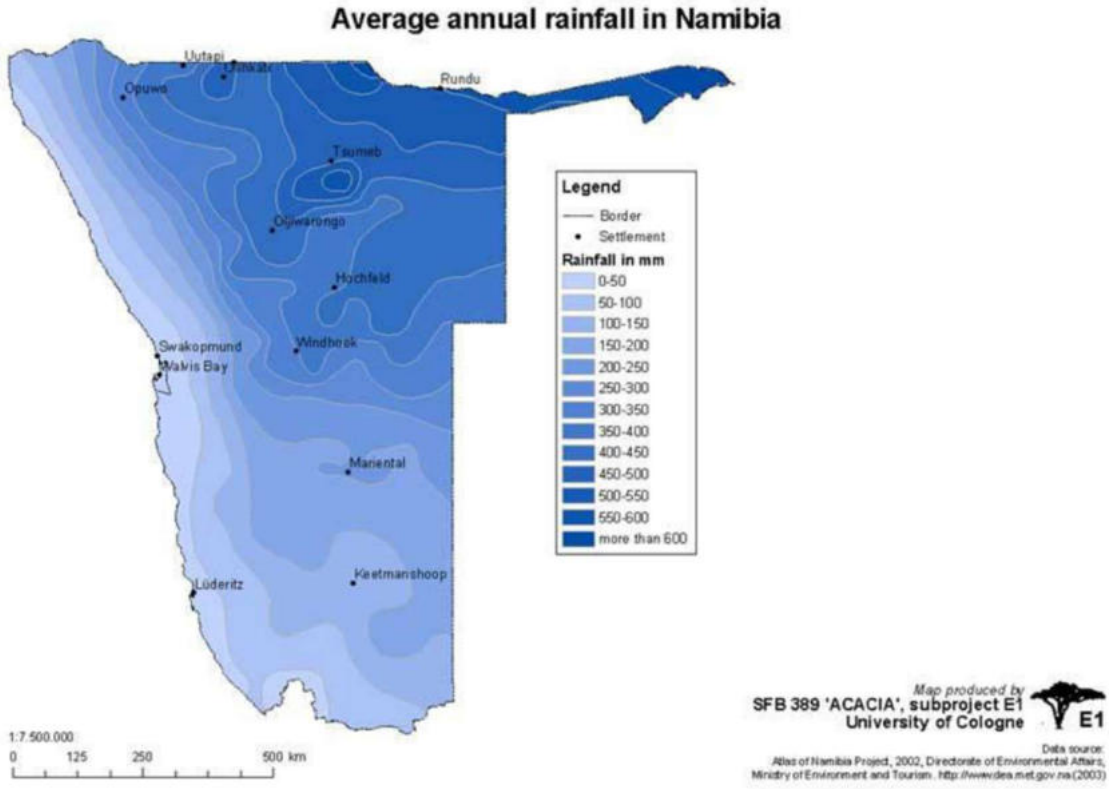

Figure 4: Average annual Rainfall (http://www.unikoeln.de/sfb389/e/e1/download/atlas_namibia/pics/climate/rainfall-annual.jpg)

3.2.2. Topography, Geology and Soils

Grootfontein falls within the Kalahari and Namib sands. The geology is characterized by the Oldest rock geological division and the Damara Supergroup and Gariep Complex. The types of rock found within the Oldest Rock group is mostly complex whereas in the Damara Supergroup and Gariep complex the dominant rocks are schists.

The Otjozondjupa Region forms part of the Kalahari Group Geological Divisions depicted in pale yellow in the figure below. The Kalahari Sequence forms a blanket of unconsolidated to semi-consolidated sand covering most of the area. Specialists divide the Kalahari layers here into three main units. The uppermost consists mostly of unconsolidated windblown sand and sand deposited under fluvial conditions. The middle part is predominantly fluvial sand with minor aeolian deposits. The basal layer is as yet poorly understood and consists of conglomeratic, red clayey sand with carbonate cement. The thickness of the Kalahari layers is lowest (less than 50m) along the Botswana border and increases towards the middle reaches of the Omatako-Omuramba and further to the north-west (Ministry of Agriculture Water and Rural Development, 2011)

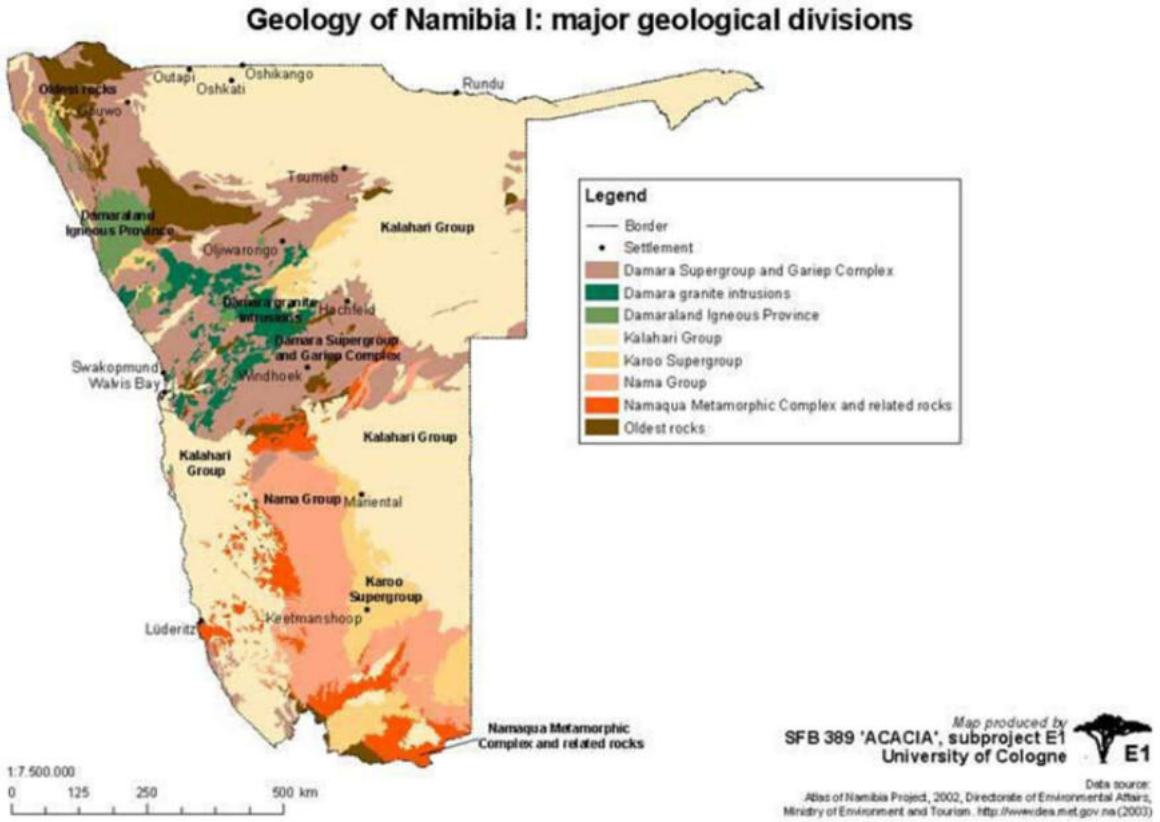

Figure 5Geology of Namibia (http://www.unikoeln.de/sfb389/e/e1/download/atlas_namibia/pics/physical/geology.jpg)

3.2.3 Hydrology and Hydrogeology

In terms of groundwater, the area falls within the Okavango-Epukiro groundwater basin depicted in the figure below. The hydrogeological Okavango-Epukiro Basin lies at the margin of the much larger Kalahari Basin, which extends far across the

Namibian border. The bedrock that underlies this huge sand-filled basin consists of various rock types (Ministry of Agriculture Water and Rural Development, 2011).

Groundwater within the area is hosted in two distinct aquifer systems, Kalahari aquifers and fractured bedrock aquifers. These two aquifer types are treated separately here as they have different characteristics. Kalahari aquifers hold water in intergranular pore spaces, whereas water in fractured aquifers is held in cracks and fractures in otherwise impermeable strata. Kalahari aquifers are common in the northeastern Otjozondjupa and Kavango regions (Ministry of Agriculture Water and Rural Development, 2011).

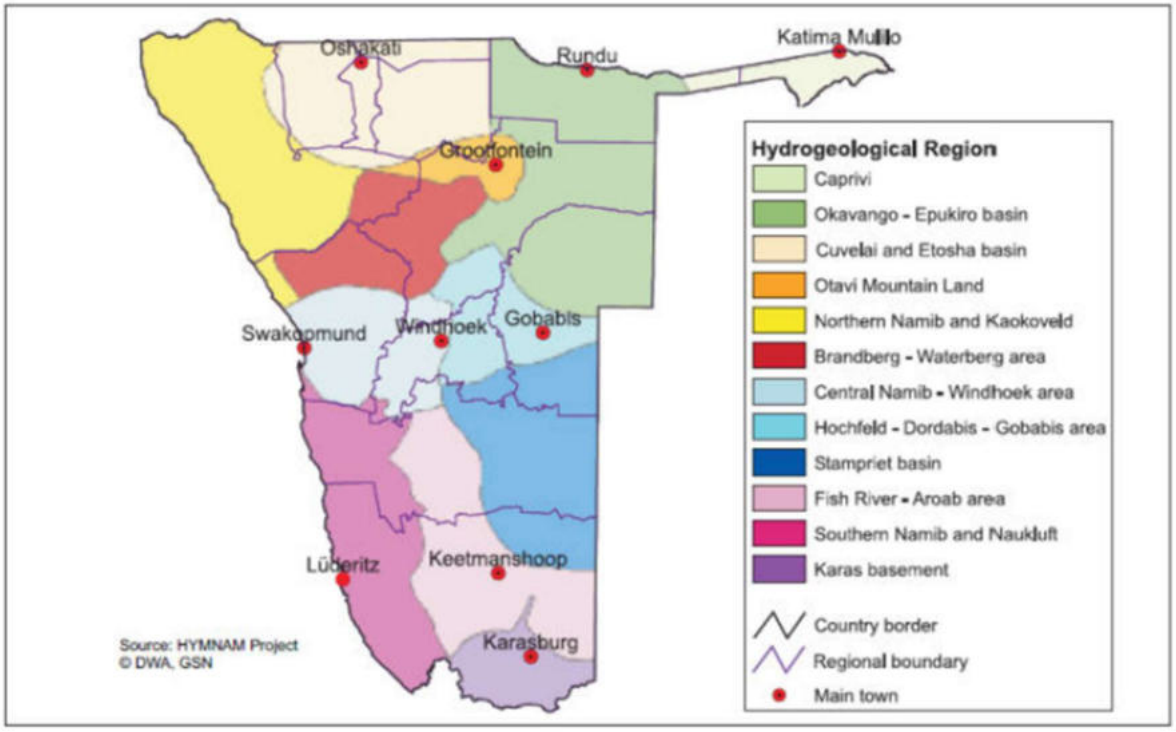

Figure 6: Groundwater basins and hydrogeological regions in Namibia

3.3 Terrestrial Ecology

3.1.1 Flora and Fauna

The good rainfalls in the Otjozondjupa region result in a rich biodiversity, especially regarding the flora (Ministry of Agriculture Water and Rural Development, 2011). More than 500 different plant species are found within the region. Trees commonly found in the area is Shepherd's Tress (Boscianal bitrunca), Burkea (Burkea Africana), Black thorn (Acacia Mellifera), Camel Thorn (Acacia erioloba), and Silver-Leaf Terminalia (Terminalia sericea) (Mendelsohn & el Obeid, 2005).

The local occurring fauna that are expected or known to occur at the site includes domestic animals and small ground burrowing animals, reptiles, and local bird's species.

4. Project Description

4.1. Project Components

As outlined in Section 1.1, the project being proposed involves the following:

- **Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740)**
- **Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1.0**
- **Rezoning of the proposed subdivided Erf B from Private Open Space to Street**

These components will be described in further detail below, in terms of their design, layout and footprint

4.2 Alternatives

As pointed out in Section 1 above various layout alternatives were initially considered by the proponent, ultimately resulting in the final layouts. Alternatives are defined as: "different means of meeting the general purpose and requirements of the activity" (Environmental Management Act (Act 7 of 2007) of Namibia and its regulations (2012)). This chapter will highlight the different ways in which the project can be undertaken and identify the alternative that will be the most practical but least damaging to the environment..

4.2.1 No- Go Alternative

The no-go alternative represents the baseline scenario against which the subdivision and proposed rezonings is assessed. Under this alternative, Erf 740 would retain its Private Open Space zoning, and the site would not be subdivided and rezoned for General Business and street purposes. Consequently, the land might not be used at its highest best use and will not contribute to urban planning objectives by transforming underutilised or vacant land into productive, planned developments that support the orderly growth of the area, and it hinder the development of the road network which would benefit the community. Additionally, the community would not experience economic, social and infrastructural for both the immediate community and the broader municipality. As a result, the no-go alternative is not considered the preferred option.

4.3. The Proposed Development

The concept of future urban planning is focused on the development needs of the town, growing in line with strategic growth objectives identified by the town of Grootfontein. The proposed development is aimed at fulfilling the future development needs to meet the socio-economic objectives to grow the town sustainably. The concept aims at creating cities that are liveable, viable and promote social equity. It aims at the development of cities that are compact with mixed land uses, conveniently located in close proximity to one another, thereby reducing travel time and promoting walkable urban environment.

The Grootfontein Municipality thus intends to maximise the development potential of the property, the owner of Erf 740, Omulunga Extension 2, Grootfontein, plans to subdivide it into Erf A, Erf B, and the remainder of Erf 740. The owner also intends to permanently close the private open space on Erfs A and B. Additionally, the owner seeks to rezone the proposed subdivided Erf A from Private Open Space to General Business (Business II) with a bulk of 1, and to rezone the proposed subdivided Erf B from Private Open Space to Street. The remainder of Erf 740 will retain its zoning as Private Open Space.

Proposed Subdivision

Erf 740 will be subdivided into Erf A, Erf B, and the Remainder, totalling 3 erven. The new erven sizes are indicated in the table below. The proposed sizes for the erven, especially for Erf A, are determined by the proposed development and its intended uses.

Table 5: The proposed sizes of the subdivided erven

SUBDIVISION OF ERF 740 OMULUNGA EXTENSION 2, GROOTFONTEIN			
Erf No.	**Size m²**	**Current Zoning**	**Proposed Zoning**
Erf A	9200m²	Private Open Space	General Business (Business II)
Erf B	495m²	Private Open Space	Street
RE/740	46 697m²	Private Open Space	Private Open Space
Total	56 392m²		

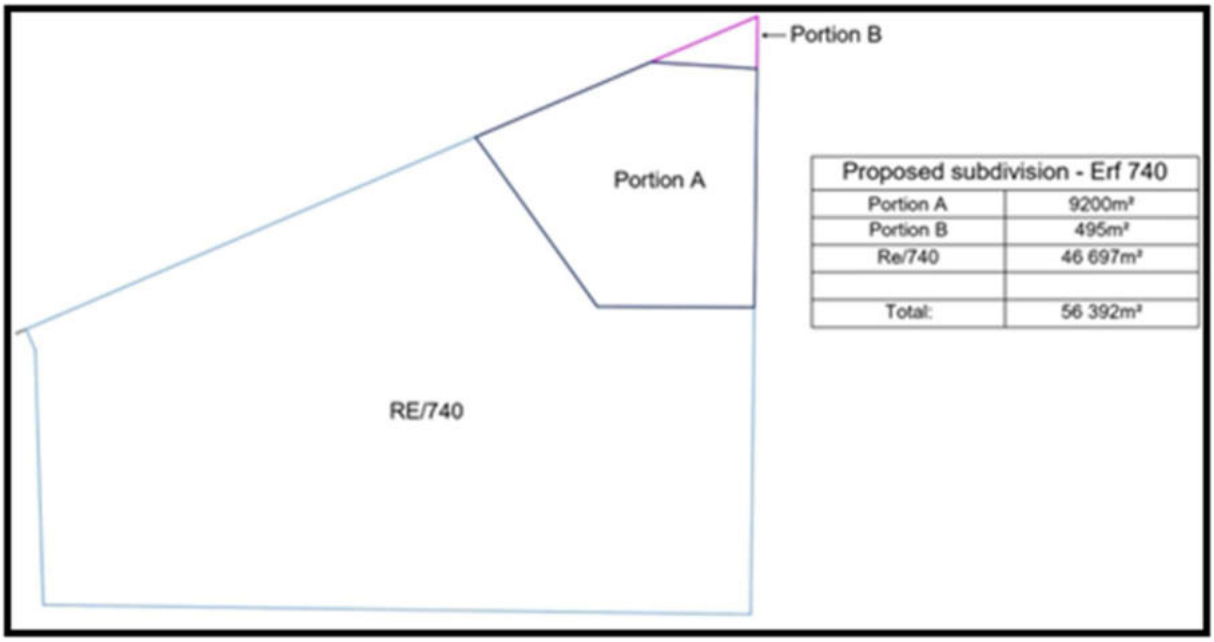

Figure 7: Proposed Subdivision on Erf 740

Proposed Rezoning

The proposed subdivided Erf A will be rezoned from Private Open Space to General Business (Business II) with a bulk of 1. The proposed bulk of 1 for Erf A is to

accommodate the development proposal for a shopping centre on the rezoned Erf A. The shopping centre will comprise a variety of shops listed as primary uses in the proposed General Business zone (Business II).

Erf B will be rezoned to Street. The proposed zoning for Erf B includes constructing a traffic circle to improve traffic flow and enhance accessibility to the proposed shopping centre.

Closure of a Private Open Space

The Municipality of Grootfontein intends on permanently closing the private open space on the proposed subdivided Erf A and B which will be rezoned Street and Business respectively. As per the Environmental Management Act, *'Use for nature conservation or zoned open space to any other land use'* requires a detailed assessment of the environmental, social, and cultural consequences, alongside strong public consultation and stakeholder engagement. If handled carefully, mitigation measures can be implemented to minimize negative effects.

The subdivision, permanent closure of a private open space, rezoning to business, and creation of a new street may not be undertaken without an environmental clearance certificate. Therefore, an Environmental Impact Assessment (EIA) process is required to obtain the necessary authorization for the activities to be carried out.

4.3.1. Engineering Services

Erf 740 is fully serviced with municipal water, sewer, and electricity infrastructure. Given the scale of the proposed development, any necessary infrastructure upgrades will be carried out by the owner of Erf 740 in accordance with the Municipality's regulations. Since the subdivision and rezoning is intended to align with the proposed land use, no additional demand on engineering services is anticipated.

4.3.2. Access Provision

An increase in the traffic is expected due to the nature of the development on Erf A, but a new traffic circle will be constructed on Erf B, along with upgraded entrance and exit points, as part of the development agreement with the Municipality of Grootfontein

5. Public Participation Process

5.1 Public Participation Requirements

In terms of Section 21 of the EIA Regulations a call for open consultation with all I&APs at defined stages of the EIA process is required. This entails participatory consultation with members of the public by providing an opportunity to comment on the proposed project. Public Participation has thus incorporated the requirements of Namibia's legislation, but also takes account of international guidelines, including Southern African Development Community (SADC) guidelines and the Namibian EIA Regulations. Public participation in this project has been undertaken to meet the specific requirements in accordance with the international best practice. Please see the table below for the activities undertaken as part of the public participation process.

The I&APs were given time to comment from **27 November 2024 to 20 December 2024**.

Table 6: Table of Public Participation Activities

ACTIVITY	REMARKS
Placement of site notice / posters in Grootfontein	Attached as supporting Document
Placing advertisements in two newspapers namely the Confidente and the New Era (22nd and 29th November 2024)	Attached as supporting Document
Written notice to the owners and occupiers of land adjacent to the site was sent via registered mail on 28 November 2024, via email on 29 November 2024 via hand delivery on 02 December 2024	Attached as supporting Document

5.1.1. Environmental Assessment Phase 2

The second phase of the Public Participation Process (PPP) involved lodging the Draft Environmental Scoping Report (DESR) for review by all registered and potential Interested and Affected Parties (I&APs). Registered and potential I&APs were informed of the availability of the DESR for public comment via email and/or letter. An Executive Summary of the DESR is included in the correspondence. I&APs are invited to submit comments or raise any issues or concerns they may have regarding the proposed project within the specified commenting period.

6. Assessment Methodology

This chapter explains the approach used to assess the potential impacts of the proposed subdivision and rezoning, both during and after implementation—on the biophysical and socio-economic environment. Where relevant, it also considers possible alternatives.

The scoping process has identified potential project impacts during its planning and operation phase and examined each of these issues. In assessing the impact of the proposed development, four rating scales were considered. Each issue identified was evaluated in terms of the most important parameter applicable to environmental management. These include the extent, intensity, probability, and significance of the possible impact on the environment. The rating scales used are as follows.

Table 7: Impact Assessment Criteria

Criteria	Description			
Extent	**National (4)** The whole country	**Regional (3)** Otjozondjupa region and neighbouring regions	**Local (2)** Within a radius of 2km of the proposed site	**Site (1)** Within the proposed site
Duration	**Permanent (4)** Mitigation either by man or	**Long-term (3)** The impact will continue/last for the	**Medium-term (2)**	**Short-term (1)**

	natural process will not occur in such a way or in such a time span that the impact can be considered transient	entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter.	The impact will last for the period of the construction phase, where after it will be entirely negated	The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
Intensity	**Very High (4)** Natural, cultural, and social functions and processes are altered to extent that they permanently cease	**High (3)** Natural, cultural, and social functions and processes are altered to extent that they temporarily cease	**Moderate (2)** Affected environment is altered, but natural, cultural, and social functions and processes continue albeit in a modified way	**Low (1)** Impact affects the environment in such a way that natural, cultural, and social functions and processes are not affected
Probability	**Definite (4)** Impact will certainly occur	**Highly Probable (3)** Most likely that the impact will occur	**Possible (2)** The impact may occur	**Improbable (1)** Likelihood of the impact materialising is very low
Significance	Determined through a synthesis of impact characteristics. Significance is also an indication of the importance of the impact in terms of both physical extent and time scale and therefore indicates the level of mitigation required. The total number of points scored for each impact indicates the level of significance of the impact.			

*NOTE: For each identified impact, the **extent** (spatial scale), **intensity** (severity or degree), **duration** (how long the impact may last), and **probability** (likelihood of the impact occurring) are considered. These factors are assessed to determine the overall **significance** of the impact, first without any mitigation in place, and then again assuming the best possible mitigation measures are implemented. The final decision on which alternatives and mitigation options to apply rests with the project proponent, while approval lies with the relevant environmental authority.

The **significance** of each impact is influenced not only by its extent, intensity, duration, and probability, but also by the context, specifically the nature of the environment or community that may be affected.

6.1. Mitigation Measures

Subdivision of Erf 740, Omulunga Extension 2, Grootfontein into Erf A, Erf B and the remainder of Erf 740 (RE/740). Subsequent rezoning of the proposed subdivided Erf A from Private Open Space to General Business (Business I) with a bulk of 1.0. Rezoning of the proposed subdivided Erf B from Private Open Space to Street - a mitigation hierarchy is applied to guide the management of potential environmental and socio-economic impacts. This hierarchy includes actions to **avoid**, **minimise**, **restore**, **compensate**, **offset**, and where possible, **enhance** the surrounding environment.

Avoidance is most effective during the early stages of planning and involves steps such as steering clear of environmentally sensitive areas and ensuring that the rezoning does not result in unnecessary disruption to adjacent land uses or community assets.

Minimisation comes into play where avoidance is not fully possible. In this case, it includes managing operational activities of the existing office building to reduce noise, traffic disruptions, or service strain. Design and layout considerations should also aim to maintain harmony with the surrounding urban fabric.

Restoration focuses on maintaining or improving the site's physical condition and urban aesthetics during and after implementation. This could involve landscaping or greening efforts to align with existing public open spaces nearby.

Compensation applies in cases where residual impacts may remain despite efforts to avoid or minimise them. Measures may include supporting local amenities or services to balance any additional load placed on infrastructure due to increased commercial activity.

Offsetting refers to creating equivalent benefits elsewhere, should any unavoidable and permanent impacts occur, although in this case, significant negative impacts are not anticipated.

7. Assessment Of Potential Impacts and Possible Mitigation Measures

7.1. Introduction

This Chapter describes the potential impacts on the biophysical and socio-economic environments, which may occur due to the proposed activities described in Chapter 4. These include potential impacts, which may arise during the operation of the proposed development (i.e. long-term impacts) as well as the potential construction related

impacts (i.e. short to medium term). The assessment of potential impacts will help to inform and confirm the selection of the preferred layouts to be submitted to MET: DEAF for consideration. In turn, MET: DEAF's decision on the environmental acceptability of the proposed project and the setting of conditions of authorisation (should the project be authorised) will be informed by this chapter, amongst other information, contained in this EA Report.

The baseline and potential impacts that could result from the proposed development are described and assessed with potential mitigation measures recommended. Finally, comment is provided on the potential cumulative impacts which could result should this development, and others like it in the area, be approved.

7.1 Planning and Design Phase Impacts

During the planning and design phase consideration should be given on aspects such as impacts of existing municipal infrastructure and biodiversity.

7.1.1 Existing Service Infrastructure Impacts

The subject area is expected to be connected to the existing municipal reticulation services of the town. The area is located in close proximity to the existing services and thus connections are not expected to be difficult. Increased installation of these services will place an additional load on the existing reticulation services of the town. It will thus have to be investigated by an engineer whether the existing services would be sufficient for the additional number of portions to the increased demand which is expected.

7.1.2 Flora and Fauna (Biodiversity)

There are some trees located on the subject erf. The trees located on the subject site should be accommodated in the proposed use for the erf. Trees protected under the Forestry Act 12 of 2001 should be protected within the development and may not be removed without a permit from the local Department of Forestry.

It is anticipated that the proposed development area and associated infrastructure (e.g. water, sewage, access route, etc.) would have localised negative implications on the environment and associated fauna and flora should the proposed mitigation measures as outlined in the EMP be enforced.

7.2 Construction Phase Impacts on the Biophysical Environment

The construction phase impacts are those impacts on the biophysical and socio-economic environment that would occur during the construction phase. These impacts are inherently temporary in duration but may have longer lasting effects.

7.2.1 Flora and Fauna Impacts (Biodiversity)

Trees protected under the Forestry Act 12 of 2001 should be protected especially during site clearance for the proposed development. The trees located on the subject site should be accommodated in the proposed use for the erf as far as possible. Trees

to be protected should be marked with danger tape or paint to ensure that they are not removed during the construction activities.

It is anticipated that the proposed development area and associated infrastructure (e.g. water, sewage, access route, etc.) would have localised negative implications on the environment and associated fauna and flora should the proposed mitigation measures as outlined in the EMP be enforced.

7.2.2 Surface and Ground Water Impacts

Surface and groundwater impacts may be encountered during the construction and operation phase, especially if development takes place within the rainy season. The risk of contaminating such water sources can be increased by accidental spillage of oils and fuels and any other equipment used during construction. This risk is minimised by the fact that the construction phase will be a short-term activity.

7.2.3 Soil Erosion Impacts

Given the characteristics of the proposed site, soil erosion is likely to be encountered especially if construction will take place during the rainy season, the removal of vegetation will render the soil vulnerable to erosion as they also serve the purpose of keeping the soils compacted

7.3 Construction Phase Impacts on the Socio-Economic Environment

7.3.1 Heritage impacts

No archaeological and heritage resources are expected to be found on the site. The project management should however be made aware of the provisions of the National Heritage Act regarding the prompt reporting of archaeological finds.

7.3.2 Health, Safety and Security Impacts

Working conditions on site need to ensure that the health and safety of construction workers are ensured at all times. The use of local labour during construction is strongly encouraged so as to reduce the need to migrant workforce. Health and Safety requirements need to comply with the Labour Act No. 11 of 2007, local and international health and safety legislation and standards during construction.

7.3.3 Traffic Impacts

Traffic is expected to increase slightly during the construction phase of the project in areas where construction will take place. A number of trucks and other heavy machinery will be required to deliver, handle and position construction materials as well as to remove spoil material. Not only will the increase in traffic result in associated noise impacts, but it will also impact on the roads in the area.

7.3.4 Noise Impacts

Construction may result in associated noise impacts. These noise impacts will mainly be associated with construction machinery and construction vehicles. The impact is however limited mainly to the construction period only.

7.3.5 Dust and Emission Impacts

Excavation and stockpiles during the construction phase could result in dust impacts, if not managed correctly. Dust could impact negatively on the health of the nearby community if mitigation measures are not implemented. Dust impacts are primarily associated with the construction phase.

7.3.6 Municipal Services

The construction phase will result in additional people on-site, who will require provision of the following services:

- Potable water for domestic (ablution and drinking) and construction purposes.
- Temporary toilets during the construction phase.
- Solid waste management (domestic and construction waste).

These services if not managed well are likely to create an opportunity for water wastage; litter; solid and human waste pollution.

7.3.7 Storage and Utilisation of Hazardous Substances

Hazardous substances are regarded by the Hazardous Substance Ordinance (No. 14 of 1974) as those substances which may cause injury or ill-health to or death of human beings by reason of their toxic, corrosive, irritant, strongly sensitizing or flammable nature or the generation of pressure thereby in certain circumstances. During the construction period, the use and storage of these types of hazardous substances, such as shutter oil, curing compounds, types of solvents, primers and adhesives and diesel, on-site could have negative impacts on the surrounding environment if these substances spill and enter the environment.

7.4 Operational Phase Impacts

The operational phase impacts are those impacts on the biophysical and socio-economic environment that would occur during the operational phase of the proposed project and are inherently long-term in duration.

7.4.1 Visual Impacts

The subject site is currently mostly undeveloped as such there may thus be a change in visual characteristics of the site once it becomes developed particularly for those areas which are currently undeveloped. The extent of this disturbance will depend on how highly the interested and affected parties valued the initial aesthetic quality of the site. The change in sense of place is not expected to be significant as the proposed land use for the subject erven is in line with the surrounding land uses of the area.

7.4.2 Noise Impacts

The operational activities may result in associated noise impacts, depending on the exact type of activities taking place on the properties. However due to the nature of

the land uses proposed, which is for shopping centre, for the subject erven it is not expected that the noise levels will be significant if managed well.

7.4.3 Emission Impacts

The air quality in the area is considered to be fairly good. Additional emissions are not expected due to the land uses that are intended for the site.

7.4.4 Social Impacts

A small number of residents from Grootfontein could benefit from employment during construction.

7.5 Cumulative Impacts

The cumulative impact of the proposed developments in regard to the degradation of the project area is very difficult to rate. If all proposed mitigation measures are however in place to minimise the overall impacts, then the cumulative impact can be expected to be rated as **Medium-Low (negative)** for the proposed developments.

7.6 Environmental Management Plan

An Environmental Management Plan (EMP) is attached as a supporting document of this report. The purpose of the EMP is to outline the type and range of mitigation measures that should be implemented during the construction and decommissioning phases of the project to ensure that negative impacts associated with the development are avoided or mitigated.

7.7 Summary of Potential Impacts

A summary of all the potential impacts from the proposed project assessed above is included in Table 8. The Tables 9 – 11 provide a summary of the mitigation measures proposed for the impacts. While some difference in magnitude of the potential impacts would result from the proposed alternatives this difference was not considered to be significant for any of the potential impacts. As such, the table below applies to all proposed alternatives.

Description of potential impact	Project alternative	No mitigation / mitigation	Extent	Magnitude	Duration	Significance	Probability	Confidence	Reversibility	Cumulative impact
PLANNING AND DESIGN PHASE										
1. Existing Service Infrastructure	Grootfontein	No mitigation	Local	Medium -Low	Short term	Medium	Probable	Certain	Reversible	Medium (- ve)
		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
2. Biodiversity (Fauna and Flora)	Grootfontein	No mitigation	Local	Medium	Short term	Medium	Probable	Certain	Reversible	Medium Low (- ve)
		Mitigation	Local	Low	Short term	Medium -Low	Probable	Certain	Reversible	Medium Low (- ve)
	No Go	No mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
CONSTRUCTION PHASE										
3. Biodiversity (Fauna and Flora)	Grootfontein	No Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very	Short term	Very Low	Probable	Certain	Reversible	Very Low (- ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
4. Surface and ground water	Grootfontein	No Mitigation	Local	Medium	Short term	Medium	Probable	Certain	Reversible	Medium (-ve)
		Mitigation	Local	Low	Short term	Medium - low	Probable	Certain	Reversible	Medium - Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
5. Soil Erosion	Grootfontein	No Mitigation	Local	Medium	Short term	Medium – low	Probable	Certain	Reversible	Medium – low (-ve)
		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
6. Heritage	Grootfontein	No Mitigation	Local	Very low	Short term	Very low	Probable	Certain	Reversible	Very low(-ve)
		Mitigation	Local	Negligible	Short term	Negligible	Probable	Certain	Reversible	Negligible (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
7. Health, safe, safety and security	Grootfontein	No Mitigation	Local	Medium Low	Short term	Medium-Low	Probable	Certain	Reversible	Medium-Low (-ve)
		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
8. Traffic Impacts	Grootfontein	No Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very low	Short term	Very Low	Probable	Certain	Reversible	Very low
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
9. Noise Impacts	Grootfontein	No Mitigation	Local	Medium Low	Short term	Medium-Low	Probable	Certain	Reversible	Medium-Low (-ve)
		Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
10. Emission Impacts	Grootfontein	No Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very Low	Short term	Very Low	Probable	Certain	Reversible	Very Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral

		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
11. Municipal Services	Grootfontein	No Mitigation	Local	Low	Short term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very Low	Short term	Very Low	Probable	Certain	Reversible	Very Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
12. Waste	Grootfontein	No Mitigation	Local	Low	Short term	Medium	Probable	Certain	Reversible	Medium (-ve)
		Mitigation	Local	Very Low	Short term	Very Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
13. Hazardous Substances	Grootfontein	No Mitigation	Local	Medium	Short term	Medium	Probable	Certain	Reversible	Medium (-ve)
		Mitigation	Local	Low	Short term	Very Low	Probable	Certain	Reversible	Low (-ve)
	No Go	No Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Short term	Neutral	Probable	Certain	Reversible	Neutral

OPERATIONAL PHASE										
14. Impacts on the surrounding area	Grootfontein	No mitigation	Local	Low	Medium term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Very low	Medium term	Very Low	Probable	Certain	Reversible	Very Low (-ve)
	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
15. Visual impacts	Grootfontein	No mitigation	Local	Medium	Medium term	Medium	Probable	Certain	Reversible	Medium- low(-ve)
		Mitigation	Local	Medium- low	Medium term	Medium- low	Probable	Certain	Reversible	Low (-ve)
	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
16. Traffic Impacts	Grootfontein	No mitigation	Local	Medium	Medium term	Low	Probable	Certain	Reversible	Low (-ve)
		Mitigation	Local	Low	Medium term	Very Low	Probable	Certain	Reversible	Very Low (-ve)
	No go	No mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Medium term	Neutral	Probable	Certain	Reversible	Neutral
17. Social Impact	Grootfontein	No mitigation	Local	Medium	Long term	Medium (+)	Probable	Certain	Reversible	High (+)
		Mitigation	Local	Low	Long term	Neutral	Probable	Certain	Reversible	Neutral
	No go	No mitigation	Local	Neutral	Long term	Neutral	Probable	Certain	Reversible	Neutral
		Mitigation	Local	Neutral	Long term	Neutral	Probable	Certain	Reversible	Neutral

Table 8: Summary of the significance of the potential impacts (Planning and Design as well as the Construction Phase)

Table 9: Summary of the significance of the potential impacts (Operational Phase)

Table 10: Summary of the mitigation measures

CONSTRUCTION IMPACTS	
Impact	**Mitigation Measures**
Flora and Fauna	• Adapt the proposed developments to the local environment – e.g., small adjustments to the site layout could avoid potential features such as water bodies and vegetation.

	• Prevent the destruction of protected and endemic plant species. • Prevent contractors from collecting wood, veld food, etc. during the construction phase. • Recommend the planting of local indigenous species of flora as part of the landscaping as these species would require less maintenance than exotic species. • Protected trees and plants are not to be removed without a valid permit from the Ministry of Agriculture, Water and Forestry. • Prevent the introduction of potentially invasive alien ornamental plant species such as; Lantana, Opuntia, Prosopis, Tecoma, etc.; as part of the landscaping as these species could infest the area further over time.
Surface and Ground Water Impacts	• No dumping of waste products of any kind in or in close proximity to surface water bodies. • Heavy construction vehicles should be kept out of any surface water bodies and the movement of construction vehicles should be limited where possible to the existing roads and tracks. • Ensure that oil/ fuel spillages from construction vehicles and machinery are minimised and that where these occur, that they are appropriately dealt with. • Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles. • Contaminated runoff from the construction sites should be prevented from entering the surface and ground water bodies. • All materials on the construction site should be properly stored. Disposal of waste from the sites should be properly managed and taken to the designated landfill site. • Construction workers should be given ablution facilities at the construction sites that are located at least 30 m away from any surface water and regularly serviced. • Washing of personnel or any equipment should not be allowed on site. Should it be necessary to wash construction equipment these should be done at an area properly suited and prepared to receive and contain polluted waters.
Soil Erosion	• It is recommended that construction takes place outside of the rainy season in order to limit potential flooding and the runoff of loose soil causing further erosion. • Appropriate erosion control structures must be put in place where soil may be prone to erosion. • Checks must be carried out at regular intervals to identify areas where erosion is occurring. • Appropriate remedial actions are to be undertaken wherever erosion is evident.
Heritage	• The project management should be made aware of the provisions of the National Heritage Act regarding the prompt reporting of archaeological finds.

	• In the event of such finds, construction must stop, and the project management or contractors should notify the National Heritage Council of Namibia immediately.
Health, Safety and Security	• Construction personnel should not overnight at the site, except the security personnel. • Ensure that all construction personnel are properly trained depending on the nature of their work. • Provide for a first aid kit and a properly trained person to apply first aid when necessary. • Restrict unauthorised access to the site and implement access control measures. • Staff and visitors to the site must be fully aware of all health and safety measures and emergency procedures. • The contractor must comply with all applicable occupational health and safety requirements. • The workforce should be provided with all necessary Personal Protective Equipment where appropriate.
Traffic	• Limit and control the number of access points to the site. • Ensure that road junctions have good sightlines. • Construction vehicles' need to be in a road worthy condition and maintained throughout the construction phase. • Transport the materials in the least number of trips as possible. • Adhere to the speed limit. • Implement traffic control measures where necessary.
Noise	• No amplified music should be allowed on site. • Inform immediate neighbours of construction activities to commence prior to commencing and provide for continuous communication between the neighbours and contractor. • Limit construction times to acceptable daylight hours. • Install technology such as silencers on construction machinery. • Do not allow the use of horns as a general communication tool but use it only where necessary as a safety measure.
Dust and Emission	• It is recommended that dust suppressants such as Dustex be applied to all the construction clearing activities to ensure at least 50% control efficiency on all the unpaved roads and reduce water usage. • Construction vehicles to only use designated roads. • During high wind conditions the contractor must make the decision to cease works until the wind has calmed down. • Cover any stockpiles with plastic to minimise windblown dust. • Provide workers with dust masks where necessary.
Waste	• It is recommended that waste from the temporary toilets be disposed of at an approved Wastewater Treatment Works. • A sufficient number of waste bins should be placed around the site for the soft refuse. • Solid waste will be collected and disposed of at an appropriate local land fill or an alternative approved site, in consultation with the local authority.

Hazardous Substances	• Storage of the hazardous substances in a bunded area, with a volume of 120 % of the largest single storage container or 25 % of the total storage containers whichever is greater. • A sufficient number of skip containers for the heavy waste and rubble should be provided for around the site. • Refuel vehicles in designated areas that have a protective surface covering and utilise drip trays for stationary plant.
OPERATIONAL PHASE IMPACTS	
Impact	**Mitigation Measures**
Visual and Sense of Place	• It is recommended that more 'green' technologies be implemented within the architectural designs and building materials of the development where possible in order to minimise the visual prominence of such a development within the more natural surrounding landscape. • Visual pollutants can further be prevented through mitigations (i.e. keep existing trees, introduce tall indigenous trees; keep structures unpainted and minimizing large advertising billboards). • Natural colours and building materials such as wood and stone should be incorporated as well as the use of indigenous vegetation in order to
Social Impacts	• No specific mitigation measures are required, except for the fact that the local community be consulted in terms of possible job creation opportunities and must be given first priority if unspecialised job vacancies are available.

8. Conclusion

This chapter provides a summary of the findings of the Environmental Scoping Report (ESR) for the proposed development, and outlines the recommended path forward.

8.1 Construction Phase Impacts

Based on the impact assessment findings in Chapter 7 and corresponding mitigation measures outlined in the Environmental Management Plan (EMP), none of the construction phase impacts were assessed as having a high significance on the environment. Without mitigation, impacts were primarily rated as Medium to Low (Negative), particularly in relation to dust emissions, temporary vegetation loss, noise, and surface runoff. However, with the implementation of the proposed mitigation strategies, the significance of these impacts can be reduced to Low (Negative).

8.2 Operational Phase

Similarly, operational phase impacts, such as those related to increased traffic volumes, visual transformation, and long-term service demand, were assessed as Medium (Negative) without mitigation. With appropriate controls during design, infrastructure installation, and ongoing maintenance, these effects can be reduced to Low (Negative). The inclusion of urban agriculture, open spaces, and accessible public services further supports long-term environmental sustainability.

8.3 Level of Confidence in Assessment

Given the data available at this stage of the project planning cycle, the Environmental Assessment Practitioner (EAP) is confident that the ESR provides sufficient information for MET: DEAF to make an informed decision on the environmental acceptability of the proposed development. While it is acknowledged that some project details may evolve during the detailed design and construction phases, these are unlikely to materially alter the conclusions of this assessment. Should major design changes occur, an amendment to the Environmental Clearance Certificate (ECC) will be submitted in accordance with the Environmental Management Act (No. 7 of 2007) and its regulations.

8.4 Mitigation Measures

If all recommended mitigation measures are implemented as detailed in Chapter 7 and the EMP, the overall significance of both construction and operational phase impacts is expected to remain within Medium–Low (Negative) thresholds. It is essential that an Environmental Control Officer (ECO) be appointed to monitor construction activities and ensure that mitigation measures are effectively implemented. These measures, along with any additional conditions issued by MET: DEAF, should be legally binding under the Environmental Authorisation.

8.5 Recommendation for Environmental Authorisation

In accordance with Regulation 15(j) of the EIA Regulations (GN No. 30 of 2012), it is the EAP's considered opinion that the proposed development should be authorised, subject to the implementation of the mitigation measures outlined in this ESR and the EMP. The "no-go" alternative would result in the site remaining underutilised, which is not desirable given Windhoek's urgent demand for low-income housing. Failure to proceed would therefore represent a High (Negative) impact in socio-economic terms, as the anticipated housing, infrastructure, and employment benefits would not materialise.

8.6 Way Forward

This Environmental Scoping Report is herewith submitted to MET: DEAF for review and decision-making. Should MET: DEAF approve the application, or request additional inputs, all registered Interested and Affected Parties (I&APs) will be notified accordingly and kept informed throughout the remainder of the process.

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