MS. LIZELLE GRASSOW

SCOPING (INLUDING IMPACT ASSESSMENT) REPORT

The Proposed Rezoning of Erf 237 Martin Neib Avenue Okahandja, from “Single Residential” with a Density of 1:900 To “General Business” with a Bulk of 1:2 for a Hotel Pension of more than 10 Leasable Rooms

Okahandja, Otjozondjupa Region

SEPTEMBER 2025

DOCUMENT CONTROL	
I.N.K PROJECT NO	JN78
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DATE OF REPORT COMPILATION	SEPTEMBER 2025
CURRENT REVISION	FINAL

CONSULTANT'S EXPERTISE

I.N.K Enviro Consultants cc is the independent firm of environmental consultants that has been appointed by Ms. Lizelle Grassow to conduct the EIA process.

Immanuel N. Katali, the Environmental Assessment Practitioner holds a B. Arts (Honours) Geography, Environmental Studies and Sociology and has over seven years of relevant experience in conducting/managing Environmental and Social Impact Assessments (ESIAs), and Environmental Compliance/Monitoring Audits in Namibia. Immanuel is certified as an Environmental Assessment Practitioner under the Environmental Assessment Professionals Association of Namibia (EAPAN).

DECLARATION OF INDEPENDENCE AND DISCLAIMER

I.N.K Enviro Consultants cc herewith declare that this report represents an independent assessment of the proposed subdivision activities, on the request of Ms. Lizelle Grassow.

The Environmental Consultant has prepared this report based on an agreed scope of work and acts in all professional manner as an Independent Environmental Consultant to Ms. Lizelle Grassow and exercises all reasonable skill and care in the provision of its environmental professional services in a manner consistent with the level of expertise exercised by members of the environmental profession.

The information, statements and commentary contained in this report have been prepared by I.N.K Enviro Consultants cc from information provided by Ms. Lizelle Grassow and the Public Participation Process. I.N.K Enviro Consultants cc does not express an opinion as to the accuracy or completeness of the information provided, the assumptions made by the party that provided the information or any conclusions reached. I.N.K Enviro Consultants cc has based this report on information received or obtained, on the basis that such information is accurate and, where it is represented to I.N.K Enviro Consultants cc as such, complete.

I.N.K Enviro Consultants cc is not responsible and will not be held liable to any other person or organization for any loss or damage suffered by any other person or organization arising from matters dealt with or conclusions expressed in this report.

This report is the sole property of Ms. Lizelle Grassow and must not be altered or added to without the prior written consent of Ms. Lizelle Grassow.

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1.1 Introduction to the Proposed Project

Ms. Lizelle Grassow intends to apply for an Environmental Clearance Certificate (ECC) for the the Proposed Rezoning of Erf 237 Martin Neib Avenue Okahandja, from “Single Residential” with a Density of 1:900 To “General Business” with a Bulk of 1:2 for a Hotel Pension of more than 10 Leasable Rooms.

The aim is to subdivide and consolidate as per the following:

- Subdivision of Martin Neib avenue Okahandja into Portion 1 and remainder.
- Permanent closure of portion 1 of Martin Neib Avenue as Street.
- Consolidation of portion 1 (1695 m^2) of Martin Neib Avenue with Erf 237 (2532 m^2) Okahandja into Erf X (4227 m^2).

For Ms. Lizelle Grassow to develop on the proposed land, certain land registration procedures and processes are required with the Okahandja Municipality and the Ministry of Urban and Rural Development (MURD), which has the role to coordinate and spearhead the decentralization process, to promote development, establish an effective, decentralized regional and local government system, housing and physical planning. This line ministry has certain requirements i.e. ECC for the subdivision prior to approval.

Prior to the commencement of the project, an environmental clearance is required based on an approved Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP). This report describes the Environmental Impact Assessment (EIA) process being followed and provides an overview of the affected environment. It includes an assessment of the environmental impacts that the proposed activities are likely to have and sets out the consultants’ recommendations. The proposed management and mitigation measures related to the proposed activities are documented in an Environmental Management Plan (EMP).

This EIA process is conducted on the request of the Ministry of Urban and Rural Development (MURD), as one of the requirements, prior to the decision-making of the subdivision plans for the proposed Project.

I.N.K Enviro Consultants cc (hereinafter referred to as I.N.K), an independent firm of environmental consultants, has been appointed to undertake the Environmental Impact

Assessment process for this project. For more details on the EIA process that was followed, please refer to Section 1.4.

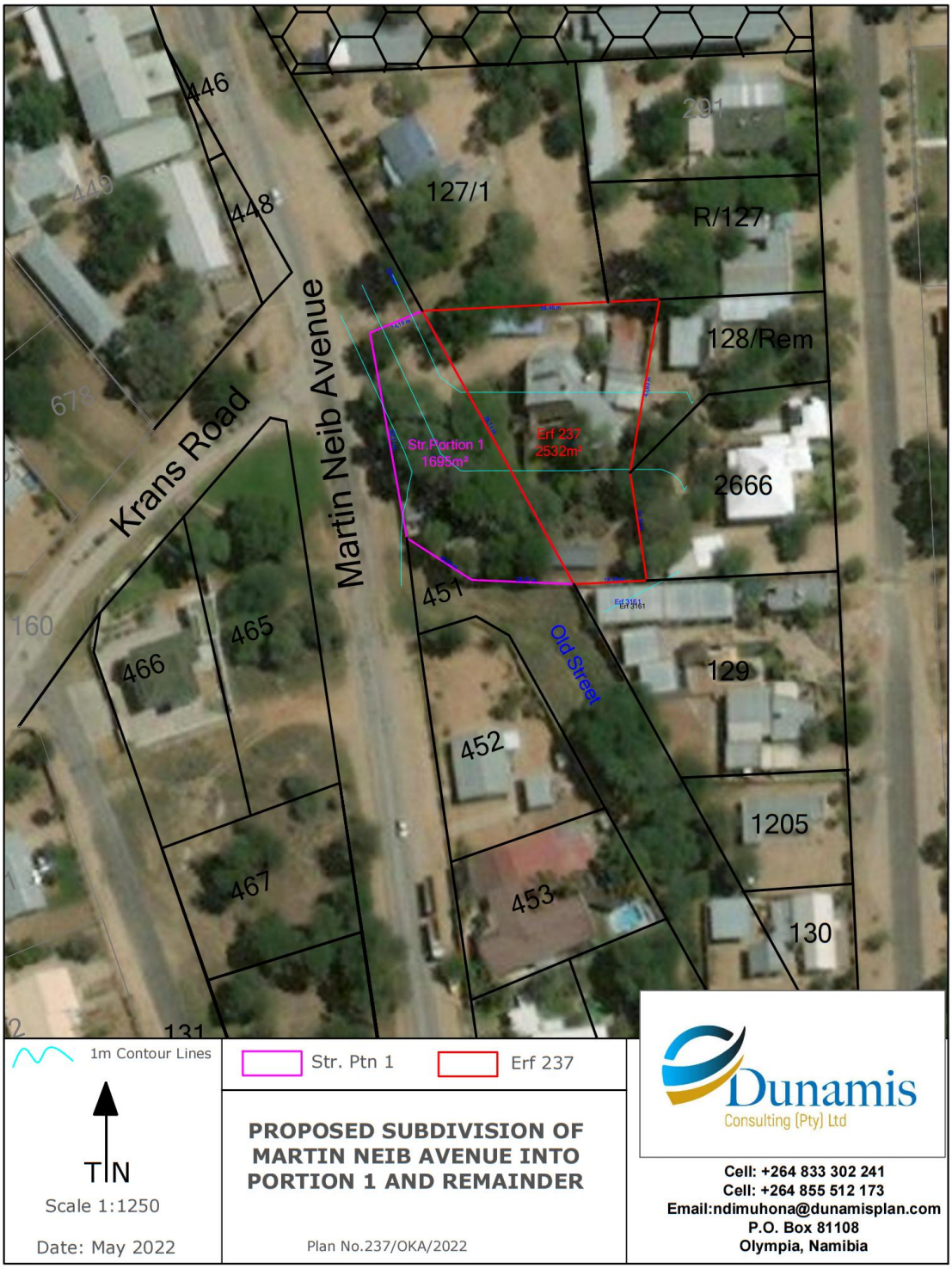


Figure 1: Proposed Subdivision Plan

1.2 Project Motivation (Need and Desirability)

The Namibian government identified housing as a priority area in 1990 and considers housing as both an enabler of economic growth and a tool for reducing poverty by creating sustainable communities.

The high rate of growth in the number of urban households is due largely to people moving to towns and cities from rural areas in search of better services and jobs, and by internal reproduction and household formation within the urban areas. This strongly suggests that solving the urban housing question is of key importance to a growing number of citizens and is central to addressing the overall problem of landlessness. The challenge facing the project proponent is its contribution towards achieving these goals while at the same time preventing and/or mitigating potential negative social and environmental impacts.

Proposed Rezoning of Erf 237 Martin Neib Avenue Okahandja, from “Single Residential” with a Density of 1:900 To “General Business” with a Bulk of 1:2 for a Hotel Pension of more than 10 Leasable Rooms in an area that is predominantly characterized by urban housing. The Okahandja Municipality is receiving a keen interest from investors with the present demand for land delivery for housing and commercial development purposes. The purpose of the application is to enhance a speedy land delivery of the Okahandja Municipality by creating additional residential Erven to assist in the alleviation of the increasing demand for residential properties in the town which gives maximum opportunities to private land ownership.

The overall project has the potential to create significant socio-economic benefits through employment creation and economic contributions.

1.3 Introduction to the Environmental and Social Impact Assessment Process

Environmental Impact Assessments are regulated by the Ministry of Environment, Forestry and Tourism (MEFT) in terms of the Environmental Management Act, 7 of 2007. This Act was gazetted on 27 December 2007 (Government Gazette No. 3966) and enacted on 6 January 2012. The Environmental and Social Impact Assessment Regulations: Environmental Management Act, 2007 (Government Gazette No. 4878) were promulgated on 6 January 2012.

1.3.1 EIA Process

The EIA process that has been followed is summarized in the table below:

Table 1: EIA Process

ESIA OBJECTIVES	CORRESPONDING ACTIVITIES
Project initiation, Screening Phase	
◆ Understanding of the environmental and social baseline relating to the proposed Project. ◆ Notify the decision-making authority of the proposed Project. ◆ Initiate the Environmental Impact Assessment process. ◆ Site visits and identify environmental issues. ◆ Identify key stakeholders and early identification of other I&APs.	◆ Project Inception and initiation meetings to discuss the Project and EIA process requirements. ◆ Draft EIA Schedule. ◆ Initiate baseline studies. ◆ Submit Application for authorisations and a Background Information Document (BID) to the authorities. ◆ Register the Project and Applications for environmental clearances with MEFT (DEA) on its online portal. ◆ Early identification of environmental aspects and potential impacts associated with the proposed Project.
Scoping Phase	
◆ Notify other regulatory authorities and I&APs of the proposed Project (via newspaper advertisements, BID, emails, site notices and telephone calls). ◆ Conduct Key Stakeholder and Public meetings. ◆ Carry out specialist investigations and establish baseline environmental conditions. ◆ Determine the terms of reference for additional assessment work. ◆ Compile Scoping Report and Issues and Response Report (IRR) ◆ Distribute the Scoping Report for review and comment by relevant authorities and I&APs. ◆ Assessment of potential issues, consider comments received and compile the EIA final report.	◆ Develop Public Participatory Process (PPP) Programme. ◆ Develop I&AP database. ◆ Prepare BID and distribute to I&APs. ◆ Notify government authorities and IAPs of the Project and ESIA process (telephone calls, e-mails, BID newspaper advertisements and site notices). ◆ IAP registration and comments. ◆ Meetings with authorities and IAPs. ◆ Investigations by appointed specialists. ◆ Compilation of Scoping Report and EMPs. ◆ Distribute Scoping Report and EMP to all I&APs for review and comments. ◆ Assess potential issues, obtain comments and update the Scoping Report and EMP.

Within this framework, the required components of the EIA report are discussed in more detail as part of the EIA Methodology in Section 8.

EIAs are influenced by national legislation and a range of guidelines. The legislation applicable to this project and the EIA process is discussed further in Section 3 below.

2 SCOPING METHODOLOGY

2.1 Information Collection

Therefore, I.N.K used various information sources to identify and assess the issues associated with the proposed project as per the following:

- Site visit by I.N.K.
- Consultation with Ms. Lizelle Grassow Project Technical Team.
- Consultation with MEFT via online application system.
- Consultation with I&APs.
- Atlas of Namibia.
- Google Earth.
- Internet sources.

2.2 Scoping

The main purpose of scoping is to indicate which environmental aspects relating to the proposed project might have an impact on the environment, to assess them and provide management and mitigation measures to avoid or minimise these impacts.

Table 2 outlines the Scoping requirements as set out in Section 8 of the Environmental and Social Impact Assessment Regulations that were promulgated in January 2012 in terms of the Environmental Management Act, 7 of 2007.

Table 2: Scoping requirements stipulated in the EIA regulations.

Requirements for a Scoping Report in terms of the February 2012 regulations	Reference in report
(a) the curriculum vitae of the EAP who prepared the report;	Appendix A
(b) a description of the proposed activity;	Section 4
(c) a description of the site on which the activity is to be undertaken and the location of the activity on the site;	Section 4
(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;	Sections 6
(e) an identification of laws and guidelines that have been considered in the	Section 3

preparation of the Scoping Report;	
(f) details of the public consultation process conducted in terms of regulation 7(1) in connection with the application, including - (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; (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; and (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;	Sections 2.3, 2.4, 2.5 and Appendix B
(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;	Sections 1.2
(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;	Sections 7 and 8
(i) terms of reference for the detailed assessment; and	Section 7 & 8
(j) a management plan, which includes - (i) information on any proposed management, mitigation, protection or remedial measures to be undertaken to address the effects on the environment that have been identified including objectives in respect of the rehabilitation of the environment and closure. (ii) as far as is reasonably practicable, measures to rehabilitate the environment affected by the undertaking of the activity or specified activity to its natural or predetermined state or to a land use which conforms to the generally accepted principle of sustainable development; and (iii) a description of the manner in which the applicant intends to modify, remedy, control or stop any action, activity or process that causes pollution or environmental degradation and remedy the cause of pollution or degradation and migration of pollutants.	Separate document

2.3 Public Participation Process

The public participation process for the proposed project is conducted to ensure that all persons and/or organisations that may be affected by, or interested in the proposed project, were

informed of the project and could register their views and concerns. By consulting with relevant authorities and I&APs, the range of environmental issues to be considered in this Report has been given specific context and focus.

Included below is a summary of the I&APs consulted, the process that was followed and the issues that were identified.

2.4 The Proposed Project I&APs

The table below provides a broad list of persons, group of persons or organisations that were informed about the project and were requested to register as I&APs should they be interested and/or affected.

Table 3: Ms. Lizelle Grassow's Project Stakeholders

IAP Grouping	Organisation
Government Ministries	◆ Ministry of Environment, Forestry and Tourism (MEFT) ◆ Ministry of Urban and Rural Development (MURD)
Local Authorities	◆ Okahandja Municipality
Nearest Communities	◆ Martin Neib Avenue Residents
Media	Newspaper adverts placed on 14 and 21 August 2024, in the following newspapers: ◆ Die Republikein. ◆ The Namibian Sun. ◆ Algemeinne Zeitung.
Other interested and affected parties	Any other people with an interest in the proposed project or who may be affected by the proposed project.

2.5 Steps in the Consultation Process

Table 4 sets out the steps that were followed as part of the consultation process:

Table 4: Consultation Process with I&APs and Authorities

TASK	DESCRIPTION
Notification - regulatory authorities and IAPs	
Notification to	I.N.K submitted the Application Form (online system) as a form of project registration and

TASK	DESCRIPTION
Notification - regulatory authorities and IAPs	
MEFT	notification to MEFT.
I&AP identification	A stakeholder database was developed for the proposed project and ESIA process. Additional I&APs will be updated during the ESIA process as required.
Distribution of background information document (BID), flyers and stakeholders meeting invitation letters	BIDs were made available to all I&APs on the project's stakeholder database. Copies of the BID were available on request to I.N.K. Stakeholder meeting invitation were given out to the residents of Martin Neib Street. The purpose of the BID was to inform I&APs and authorities about the proposed project, the ESIA process, possible environmental impacts and means of providing input into the ESIA process. Attached to the BID was a registration and response form, which provided I&APs with an opportunity to submit their names, contact details and comments on the project.
Scoping Meetings	Several consultations were made with I&APs. This included meetings and telephonic discussions. The due date to register as an I&AP and submit comments was from 13 August 2024 to 13 September 2024.
Comments and Responses	Minutes and Issues and Response of the meetings were recorded.
MEFT review of ESIA Report and ESMP	A copy of the final Scoping Report, including authority and I&AP review comments, will be submitted to MEFT on completion of the public review process via the online application system.

2.6 General Assumptions and Limitations

The key assumptions and limitations of this ESIA Report are detailed below.

- It is assumed that the information provided by Ms. Lizelle Grassow, relating to the project activities is accurate and that the project will be implemented and operated as described.

3 IDENTIFICATION OF APPLICABLE ENVIRONMENTAL AND SOCIAL GUIDELINES

3.1 Introduction

The Republic of Namibia has five tiers of law and several policies relevant to environmental assessment and protection, which includes:

- The Constitution
- Statutory law
- Common law
- Customary law
- International law

Key policies currently in force include:

- The EIA Policy (1995).
- Namibia's Environmental Assessment Policy for Sustainable Development and Environmental Conservation (1994).

As the main source of legislation, the Constitution of the Republic of Namibia (1990) makes provision for the creation and enforcement of applicable legislation. In this context and in accordance with its constitution, Namibia has passed numerous laws intended to protect the natural environment and mitigate against adverse environmental impacts.

3.2 Legislation Applicable to the Proposed Project

3.2.1 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." Article 95(l) deals with the "maintenance of ecosystems, essential ecological processes and biological diversity" and sustainable use of the country's natural resources.

3.2.2 Environmental Management Act No. 7 of 2007 (EMA) and 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.

3.2.3 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.

3.2.4 Urban and Regional Planning Act no. 5 of 2018

This Act 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.

3.3 Relevant Namibian Policies

Namibia’s policies provide the framework to the applicable legislation. Whilst policies do not often carry the same legal recognition as official statutes, policies are used in providing support to legal interpretation or guidance for civil servants and other stakeholders in the implementation of government objectives.

3.3.1 The Namibia Vision 2030

The principles that underpin Vision 2030, a policy framework for Namibia’s long-term national development, comprise the following:

- Good governance.
- Partnership.
- Capacity enhancement.
- Comparative advantage.
- Sustainable development.
- Economic growth.
- National sovereignty and human integrity.
- Environment.
- Peace and security.

Vision 2030 states that natural environments are disappearing quickly. Consequently, 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. Vision 2030 emphasises the importance of promoting healthy living which includes that the majority of Namibians are provided with safe drinking water. The importance of developing wealth, livelihood, and the

economy is also emphasized by Vision 2030. This includes infrastructure provision like transport, communication, water, and electricity.

3.3.2 The Harambee Prosperity Plan II

The Harambee Prosperity Plan II (HPPII) (covering the period 2021 - 2025) builds on the solid foundation of the inaugural HPP 2016 - 2020. It continues to prioritize the implementation of targeted policy programme in order to enhance service delivery, contribute to economic recovery and engender inclusive growth. HPPII aims to increase local electricity generation capacity from 624 MW (2020) to 879 MW by 2025.

3.3.3 Applicable Listed Activities

The EIA Regulations promulgated in terms of the Environmental Management Act, identify certain activities which could have a substantially detrimental effect on the environment. These listed activities require environmental clearance from MEFT prior to commencing. The following listed activities (Table 5) identified in the regulations apply to the proposed project:

Table 5: Listed activities triggered by the proposed Project.

Listed activity
Rezoning from Single Residential To General Business
5.1 The “The rezoning of land from - (a) Residential use to industrial or commercial use”

4 Project description

4.1 Construction Activities

Construction activities will take place during the establishment and preparation of the sites. Therefore, it is expected that construction will involve the following activities:

- Appoint subcontractors, labours, etc.
- Clearing and grubbing and other earth moving activities.
- Stockpiling topsoil and sub-soil.
- Foundation excavations.
- Setting up contractor’s laydown areas.
- Digging of foundations and trenches.
- Delivery of materials – storage and handling of material such as sand, rock, cement, etc.
- General building/construction activities including, amongst others: mixing of concrete; operation of construction vehicles and machinery; civil; painting; etc.

4.1.1 Site Preparations for Infrastructure

Site preparation includes the demarcation of the footprint of the proposed development and the laydown area to be located ±15 m for each of the proposed project component and infrastructure site, for the storage and partial assembly of the project material or equipment to be installed or constructed.

4.1.2 Waste Management during construction activities

Relatively large quantities of waste is anticipated to be generated during the construction phase. Waste shall be transported to the nearest waste disposal site.

4.1.3 Transport routes/Access

The site is located along existing roads and tracks within the townland.

4.1.4 Storage of Equipment and Tools

Equipment and tools used daily will be stored in a temporary storage facility on site.

4.1.5 Rehabilitation of temporary construction sites and laydown area

The removal of all temporary construction equipment will be undertaken at the end of construction activities. This will be done as per the Environmental Management Plan recommendations.

4.1.6 Topsoil Management

Digging and drilling will be used during the land servicing activities.

4.1.7 Sanitation during Construction

Chemical toilets with associated septic tanks (preferred) or toilets connect to French Drain systems will be used. The septic tanks will be emptied on a regular basis and the effluent disposed of at a licensed facility off-site.

5 PROJECT ALTERNATIVES

5.1 The “no project” option

With reference to section 1.3, The high rate of growth in the number of urban households is due largely to people moving to towns and cities from rural areas in search of better services and jobs, and by internal reproduction and household formation within the urban areas. This strongly suggests that solving the urban housing question is of key importance to a growing number of citizens and is central to addressing the overall problem of landlessness.

The no-go alternative is the baseline against which all alternatives are assessed. The no-go alternative would essentially entail maintaining the current situation, whereby the land will remain zoned as Public Open Space and the construction of the proposed houses will not take place.

The proponent will have to ensure that the identified mitigation measures and commitments to address the potential impacts will appropriately be implemented and adhered to.

Without the implementation and adherence of the air pollution commitments in the EMP, the project will be a “fatal flaw”.

6 DESCRIPTION OF THE CURRENT ENVIRONMENT

This section was compiled utilising the following sources of information:

- Information shared by Ms. Lizelle Grassow.
- Visual observations during a site visit by I.N.K.
- Google Earth.
- Atlas of Namibia.
- Internet sources.

6.1 Climate

The Atlas of Namibia (Mendelsohn et al., 2002) shows the study area to have an annual average temperature of between 18 and 20°C, with an average maximum of 30 to 32°C during the hottest month and an average minimum of 4 to 6°C during the coldest month, with an average of 10 to 20 frost days per year.

6.1.1 Rainfall

Okahandja experiences significant seasonal variation in monthly rainfall. The rainy period of the year lasts for 6.0 months, from November to May, with a sliding 31-day rainfall of at least 0.5 inches.

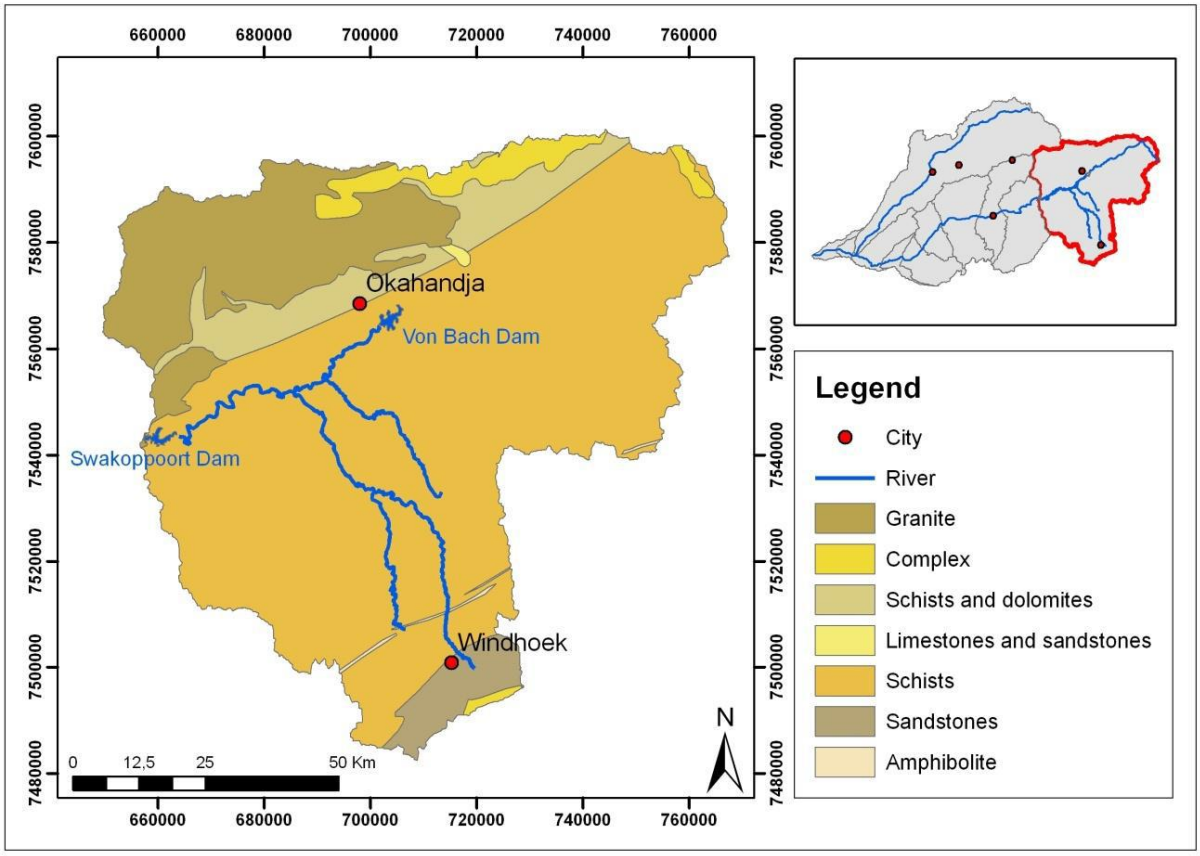
6.2 Soils

The dominant soil type in Okahandja is a mixture of Lithic Leptosols, Eutric Regosols and Chromic Cambisols. Lithic means ‘very thin and shallow soils’ and Leptosols means ‘soils which typically form in actively eroding land scapes, especially in hilly or undulating areas. The soils are course textured and characterised by their limited depth caused by the presence of a continuous hard rock highly calcareous’. Eutric means ‘fertile soils with high base saturation’ and Regosol are ‘soils with medium to fine textured of actively eroding land scapes’. Chromic means ‘soils with bright colours’ and Cambisols means soils that were formed quite recently in geological time, mainly from medium and fine textured parent material deposited during sporadic flooding (W. Midzi, 2008).

6.3 Geology

The project area is located within the Kuiseb Formation of the south-central zone of the Damara Supergroup. Generally, the rocks of the Swakop Group can be classified as metamorphosed continental shelf deposits. Metamorphism occurred during the Pan African collision of the Congo and Kalahari cratons roughly 750 to 550 Ma. The rock types include moderate to high temperature, low pressure metamorphic rocks such as schist, marble and gneiss together with glaciogenic tillite and diamictite. The metasedimentary rocks are characterised by a general NE-SW elongation and NE-SE trending faults.

The general geology of the upper Swakop River catchment is shown in Figure below.



6.4 Visual

The area is potentially not sensitive to change in general, due to the nature of the town development and existing infrastructure.

6.5 Biodiversity

6.5.1 Flora

The project area is situated in the Namib Karoo and Western Highlands Savannah Biomes. In the Namib Karoo Biome, tree cover is 2 to 10%, tree height is 2 to 5m, shrub height is 0.5 to 1m, grass cover is 0.1 to 1% and grass height is >1.5m. The dominant vegetation in this biome according to the ranking is acacia montis-ustii, acacia robynasiana, cyohostemma currorii, strcutia africana, and calicorema capitiatia and orthanthyera albiadia (Mendelson, 2002). The above mentioned vegetation hosted in the Namib Karoo Biomes are of medium values.

In the Western Highlands Savannah Biomes, tree cover is 2 to 10%, tree height is 2 to 5m, shrub cover is 2 to 10%, and grass height is >0.1m. The dominant vegetation type in this biome according to the ranking is acacia reficiens, euphorbia geuerichiana, colophospermum mopane, maerua schinzii, and ademolobius garipensis (Mendelson, 2002).

6.5.2 Fauna

The project area only consists of household pets i.e. dogs and cats and various kinds of bird species are visible in the area.

6.6 Noise

Existing noise sources within and around the project site include:

- natural sounds from wind, animals, and birds.
- vehicle movement on the adjacent street road.

The immediate surroundings of the project site have inhabitants of Martin Neib Street. The sensitivity of noise receptors usually increases at night when conditions are quiet, and ambient noise levels are at their lowest. However, no construction activities are anticipated at night time.

6.7 Hydrogeology

6.7.1 Surface Water

The region belongs to the very flat hydro geological Cuvelai Basin dipping from some 1150 m above sea level (asl) in the north east to 1080m asl in the Etosha Pan.The proposed site is surrounded by existing water flooding plain which flows during the rainy season which extends from October to April with the highest amount falling between December and March. Because of

the high average evaporation rates, it is estimated that a considerable amount of rainfall (80 per cent) evaporates shortly after precipitation (MWAF, 2006).

6.7.2 Groundwater

The general geology in the area consists of mica schist, minor quartzite, graphic schist and marble of the Kuiseb Formation – Namibian Age (Nk)

Groundwater flow is expected to take place through primary porosity in the topsoil cover, while it is expected to flow along fractures, faults (secondary porosity) and other geological structures present within the underlying formations (hard rock formations).

The seasonal/ephemeral Okakango River flows through Okahandja where it joins the Otjiruze River just south of the town. These are all subsidiaries of the Swakop River. The town of Okahandja currently derives its water from Namwater vi pipelines rom Von Bach Dam, situated about 5 km southeast of the town.

6.8 Traffic

From initial site observations, the current traffic numbers in Martin Neib Street appears to be low. However, the construction activities are not anticipated to interrupt traffic flow.

6.9 Air Quality

From visual observations, the main source of air quality impacts in the project will come from the community activities in the surrounding area. It is expected that fugitive dust may be present during dry, windy conditions.

6.10 Socio-Economic

6.10.1 Population Density

To profit from the better infrastructure and the labour opportunities, more and more people are moving to Okahandja town.

6.10.2 Land-use

The proposed Project is located in a residential area comprising of urban housing. The aim is for the consolidation of portion 1 (1695 m^2) of Martin Neib Avenue with Erf 237 (2532 m^2) Okahandja into Erf X (4227 m^2).

6.10.3 Urban Infrastructure

Basic urban services that are in Okahandja are water, sewer, tarred streets, and power reticulation. These services are mainly constructed in all townships. The Town has good infrastructure and services (road networks, telecommunications, postal services, schools, hospitals, safety and security services and basic urban services (i.e. water, sewer and electrical reticulation. Okahandja is linked to the national transport node infrastructure, the B1 road. Okahandja is also connected to the capital city (Windhoek) and other growth centres mainly Karibib and Otjiwarongo. The telephonic and mobile communication infrastructures are well established.

6.11 Heritage

No visible archaeological artefacts or heritage sites were noted in the proposed project development area by I.N.K during the site visit and neither did the Okahandja Municipality and residents raise any such concerns.

7 IDENTIFICATION OF ENVIRONMENTAL ASPECTS AND POTENTIAL IMPACTS

The scoping phase which included a consultation process with key stakeholders that included government authorities and I&APs allowed the opportunity to raise the issues associated with the project development.

The relevance of the potential impacts (“screening”) is also presented in the tables below to determine aspects to be assessed in further detail (Section 8 of this report).

Table 6: Environmental Aspects and Potential Impacts

ACTIVITY / FACILITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	RELEVANCE (SCREENING) OF POTENTIAL IMPACT	Ref
Construction Phase	Soil stripping (earthmoving equipment)	Potential impact on biodiversity (physical impacts and general disturbance) • Loss of habitat • Loss of biodiversity	The area is largely disturbed by the town development and human settlements and movements of people surrounding the proposed site. The related management and mitigation measures are stipulated in the EMP.	**R01**
		Potential impact on archaeological sites • Destruction and loss of archaeological sites	It is unlikely that any heritage artefacts can be found on site, due to the fact that the site has already been disturbed to a certain extent. The related management and mitigation measures are stipulated in the EMP.	**R02**
	Oil and diesel spillages from vehicles and other equipment	Impact on surface water and groundwater water quality.	The proposed accommodation construction activities may pose the risk of contamination of soil, mainly through accidental spills of oil and diesel etc. Due to the nature of the project, there is a low risk of big hydrocarbon spillages. The related management and mitigation measures are stipulated in the EMP.	**R03**

ACTIVITY / FACILITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	RELEVANCE (SCREENING) OF POTENTIAL IMPACT	Ref
	Dust	Impact on 3rd party health and safety	The immediate surroundings of the project site has communities inhabited in the area, therefore impact of air pollution on communities is identified. Refer to Section 8 for the assessment of the potential impacts on Air Quality. The related management and mitigation measures are stipulated in the EMP.	**R04**
	Traffic	Injury to people and animals and 3rd party health and safety impacts	With reference to section 6.3, the current traffic numbers on the main road appears to be high. However, the construction activities is not anticipated to interrupt traffic flow. The related management and mitigation measures are stipulated in the EMP.	**R05**
	Noise	Increase in disturbing noise levels (nuisance impact to third parties)	Existing noise sources within and around the project site include, natural sounds from wind, animals, and birds;vehicle movement on the adjacent street road; The immediate surroundings of the project site have inhabitants of Martin Neib Street. The sensitivity of noise receptors usually increases at night when conditions are quiet, and ambient noise levels are at their lowest. However, no construction activities are	**R06**

ACTIVITY / FACILITY	ASPECT	POTENTIAL ENVIRONMENTAL IMPACT	RELEVANCE (SCREENING) OF POTENTIAL IMPACT	Ref
			anticipated at night time. The related management and mitigation measures are stipulated in the EMP.	
	Waste disposal Sewerage management	Emissions to land, impact on biodiversity, environmental degradation and nuisance impacts and contamination of surface water and groundwater	Relatively large quantities of waste is anticipated to be generated during the construction phase. Waste shall be transported to the nearest waste disposal site. The related management and mitigation measures are stipulated in the EMP.	**R07**
	Visual Impacts and sense of place	Changes in visual conditions	The area is potentially not sensitive to change in general, due to the nature of the town development and existing infrastructure. The related management and mitigation measures are stipulated in the EMP.	**R08**

8 ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

8.1 Assessment Approach and Methodology

The assessment largely adopted a desktop approach, where qualitative information on the environment was collected during a site visit and a beach survey conducted on 01 December 2023.

Impacts are considered in a cumulative manner where possible such that the impacts of the proposed Project are seen in the context of the baseline conditions described in Section 6. Information that has been included in Section 6 will not be repeated in this Section.

Both the criteria used to assess the impacts and the Method of determining the frequency/severity of the impacts is outlined.

Table 9. This Method complies with the EIA Regulations: EMA, 2007 (Government Gazette No. 4878) EIA regulations. Both mitigated and unmitigated scenarios are considered for each impact in the ESIA results.

Table 7: Frequency/Severity Rating

Likelihood/ Frequency	Definition	Probability	Rating	Consequence/ Severity				
				Insignificant	**Minor**	**Moderate**	**Major**	**Critical**
				Very minor or no impact.	Minor impact that can be contained	Impact may have moderate effects	Serious impact/effect	Permanent Impact/effect
				1	**2**	**3**	**4**	**5**
Very high	Almost certain Extremely likely	>90%	**5**	Low	**Medium**	High	Extreme	Extreme
				5	10	15	20	25
High	Very likely Will probably occur	60-90%	**4**	Low	**Medium**	**Medium**	High	Extreme
				4	**8**	12	16	20
Medium	Likely to happen	40-59%	**3**	**Low**	**Low**	**Medium**	**Medium**	High
				3	**6**	**9**	12	15
Low	Possible but unlikely	10-39%	**2**	**Low**	**Low**	**Low**	Medium	**Medium**
				2	**4**	**6**	8	**10**
Very low	Conceivable but extremely unlikely	<10%	**1**	**Low**	**Low**	**Low**	**Low**	**Low**
				1	**2**	**3**	**2**	**2**

Table 8: Assessment of Potential Impacts

No	Potential Impact	Frequency	Severity	Without Mitigation	Control/ Mitigation	Frequency	Severity	With Mitigation
1	Potential Impact on Flora	2	1	2	◆ Any additional excavations made in the area should be backfilled.	1	1	1
2	Potential Impact on Fauna	2	1	2	◆ Only use the designated site access roads provided shall be used as practical as possible and avoid creating new tracks or access roads unnecessary;	1	1	6
3	Potential Impacts of waste generation	3	4	12	◆ Workers should be sensitized to dispose of waste responsibly and not to litter. ◆ All domestic and general operations waste produced daily should be contained until such that time it will be transported to the approved designated waste facilities. ◆ If applicable, hazardous waste should be properly handled, stored and disposed of at the nearest authorized waste sites. ◆ No waste should be buried or burned on-site or anywhere else throughout the project lifecycle. .	2	2	6
4	Potential Impacts on: ◆ Archaelogical sites	2	1	2	◆ If any archaeological material or human burials are uncovered during development activities, then work in the immediate area should be halted, the find would need to be reported to the heritage authorities and may require inspection by an archaeologist.	1	1	6
5	Potential Impacts on Groundwater and Surface Water	2	3	◆ 6	◆ A no-go buffer area of at least 15 m should be allocated to any water bodies in the area. ◆ No dumping of waste products of any kind in or near any surface water bodies. ◆ Contaminated runoff from the various operational activities should be prevented from entering any surface or ◆ ground water bodies. ◆ Ensure that surface water accumulating on-site are channeled and captured through a proper storm water ◆ management system to be treated in an appropriate manner before disposal into the environment. ◆ Disposal of waste from the various activities should be properly managed. ◆ Areas where hydrocarbons will be utilized, the surface should be covered with a plastic impermeable plastic liner to prevent the spillage on the soils and eventual infiltration into the ground. ◆ Project machines and equipment should be equipped with drip trays to contain possible oil spills when operated during construction works.	2	2	4

No	Potential Impact	Frequency	Severity	Without Mitigation	Control/ Mitigation	Frequency	Severity	With Mitigation
					◆ All hydrocarbon substances and other potential pollutants associated with the project activities should be contained in designated containers on site and later disposed of at nearby approved waste sites in accordance with the discharge standards. This is to ensure that these hazardous substances do not infiltrate into the ground and affect the groundwater quality. ◆ In cases of accidental fuel or oil spills on the soils from site vehicles, machinery and equipment, the polluted soil should be removed immediately and put in a designate waste type container for later disposal as per the preceding bullet point. The removed polluted soil should either be completely disposed of or cleaned and returned to where it was taken from on site or can be replaced with a cleaner soil. This is to ensure that the pollutants contained int the soil does not infiltrate into the site soils and eventually reach to groundwater. ◆ Spill control preventive measures should be in place on site to management soil contamination, thus preventing and or minimizing the contamination from reaching groundwater bodies. The impact would be more on groundwater (aquifers) since the construction works will be done in the dry months, thus there would be no rain to trigger (polluted) runoff to surface water bodies.			
6	Noise and Air Quality	3	4	12	◆ Do not allow commercial activities that generate excessive noise levels. ◆ Continuous monitoring of noise levels should be conducted to make sure the noise levels does not exceed ◆ acceptable limits. ◆ No activity having a potential noise impact should be allowed after 18:00 hours if possible.	3	2	6

9 CONCLUSIONS AND RECOMMENDATIONS

It was concluded from the assessment by I.N.K that the development of the project could potentially have minimal or insignificant impacts on the environment.

Mitigation measures have been identified and recommended by I.N.K to promote the positive impacts of the project, as well as to avoid / minimise the negative impacts to acceptable levels. An EMP was further developed which identifies potential impacts of the project during the construction phase. The EMP is a legally binding document, which the proponent and contractors onsite must adhere to.

I.N.K concludes that should the management actions and mitigation measures provided in the EIA and EMP report be implemented, the project would have an acceptably low significant impact on the surrounding biophysical and social environment.