

ENVIRONMENTAL MANAGEMENT PLAN:

FOR THE ALIGNMENT AND CONSTRUCTION OF PUBLIC ROADS AND THE
CONSTRUCTION OF INFRASTRUCTURE AS A RESULT OF TOWNSHIP
ESTABLISHMENT WITHIN OSHAKATI WITHIN THE OSHANA REGIONS

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PROPONENT:

OSHAKATI TOWN COUNCIL
P/BAG 5530
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SCOPING REPORT PREPARED BY

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GENERAL LOCATION DESCRIPTION OF THE DEVELOPMENT AREA:

DESCRIPTOR:	LOCATION SPECIFICS:
NATURE OF ACTIVITIES:	For the construction of public roads, infrastructure and activities in watercourses within flood lines through township establishments.
REGION:	Oshana Region
LOCAL AUTHORITY:	Oshakati Town Council
FALL WITHIN:	Within the Remainder of Farm Oshakati Town and Townlands No. 880
NEAREST TOWNS / CITY:	Oshakati
SIZE OF PTN	337,368 Sqm
LAND USE:	Undetermined
STRUCTURES:	Yes
HISTORICAL RESOURCES:	No
CEMETERY:	No
FLOODLINES:	Yes
ENVIRONMENTAL SIGNIFICANT AREA:	<ul style="list-style-type: none"> ➤ Water areas ➤ Large Trees ➤ Existing Community
LATITUDE:	-17°78'38.51" S
LONGITUDE:	15°71'35.01" E
RELEVANT LISTED ACTIVITIES:	<p>The Environmental Management Act (Act 7 of 2007),</p> <p>Section 8: Water Resource Developments;</p> <p style="padding-left: 40px;">8.8. Construction and other activities in watercourses within flood lines;</p> <p style="padding-left: 40px;">8.9. Construction and other activities within a catchment area;</p> <p>Section 10: Infrastructure:</p> <p style="padding-left: 40px;">10.1. The construction of-</p> <p style="padding-left: 80px;">(b) public roads;</p> <p style="padding-left: 40px;">10.2. Route determination of roads and design of associate physical infrastructure where-</p> <p style="padding-left: 80px;">(a) public roads.</p>

ABBREVIATION:	DESCRIPTION:
Av	AVENUE
BID	BACKGROUND INFORMATION DOCUMENT
CSIR	COUNCIL FOR SCIENTIFIC AND INDUSTRIAL RESEARCH
ER	EMPLOYERS REPRESENTATIVE
EA	ENVIRONMENTAL ASSESSMENT
EC	ENVIRONMENTAL COMMISSIONER
ECO	ENVIRONMENTAL CONTROL OFFICER
EMP	ENVIRONMENTAL MANAGEMENT PLAN
HIV	HUMAN IMMUNODEFICIENCY VIRUS
i.e.	ID EST. / IN OTHER WORDS
I&APs	INTERESTED AND AFFECTED PARTIES
NHC	NAMIBIAN HEALTH CARE
TRRP	TREE REMOVAL AND REPLACEMENT PLAN
TB	TUBERCULOSIS
URPB	URBAN AND REGIONAL PLANNING BOARD
WMP	WASTE MANAGEMENT PLAN
UNIT SYMBOL:	UNIT DESCRIPTION:
0°	DEGREES CELSIUS
E	EAST
ha	HECTARES
Km	KILOMETRE
m	METER
mm	MILLIMETRE
S	SOUTH
m²	SQUARE METERS
%	PERCENTAGE

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1 INTRODUCTION

Oneshila, situated in Oshakati, the regional capital of Namibia's Oshana Region, has historically been an informal settlement until 2019. Oshakati is recognized as a prominent commercial centre in the northern regions of Namibia. In 2019, the Oshakati Town Council formalized Oneshila's status, transitioning it from an informal settlement to a formally recognized community within Oshakati's urban framework.

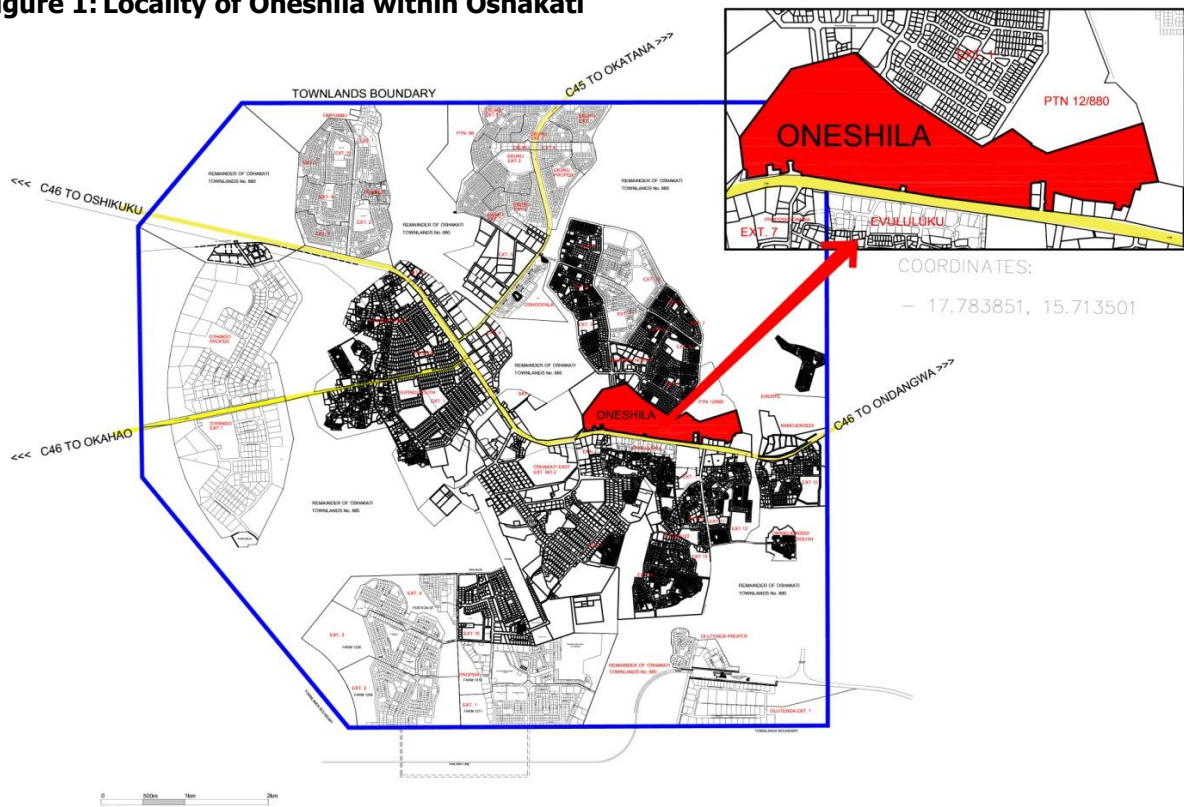
The implementation of the approved Oneshila Proper layout revealed discrepancies with existing developments on the ground, posing challenges for the Oshakati Town Council. To address this, the council proactively engaged Urban Dynamics Africa to realign the layout with existing structures, mitigating adverse impacts on households.

Through collaboration between Urban Dynamics Africa and the Oshakati Town Council, a strategic decision was made to de-establish the existing township and cancel General Plan A/520 for Oneshila Proper. This decision aimed to accurately define individual plots, align with existing structures, avoid the construction of intersecting roads, prevent land disputes, and alleviate financial burdens on the council. The overarching objective is to foster a well-coordinated land use approach respecting the current urban layout.

1.1 SITES DETAIL

The proposed development is situated on Erf 1373, Oshakati Extension 2, within the Remainder of Farm Oshakati Townlands No. 880 in the Oshana Region. The erf lies north of the C64 road to Ondangwa, at coordinates $-17^{\circ}78'38.51''$ S, $15^{\circ}71'35.01''$ E.

Figure 1: Locality of Oneshila within Oshakati



The Oshakati Town Council is the registered owner of the erf. The proposed development site's zoning is currently "Undetermined," covering an approximate area of 68.2 hectares.

1.2 LAYOUT DETAIL

1.2.1 ONESHILA PROPER

The proposed layout for Portion A, known as Oneshila Proper, involves a zoning change from "Undetermined" to include Single Residential, Institutional, Civic, Business, and Public Open Space uses. It notably integrates the existing power line into the Public Open Space area. The shapes and sizes of erven are detailed in Figure 2 and Table 1.

Figure 2: Proposed Proper layout and zoning plan

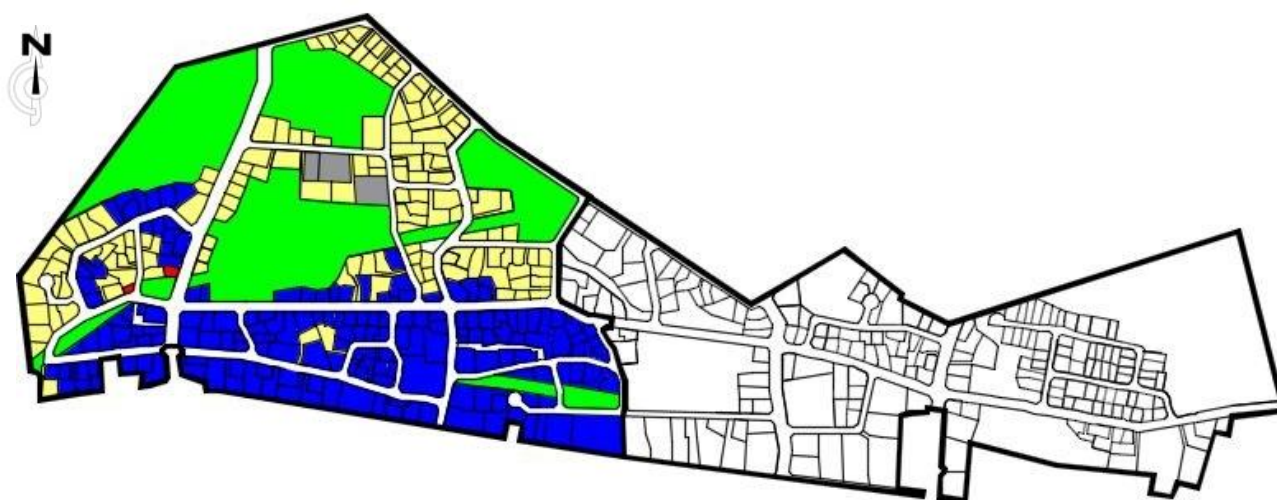


Table 1: Proper erf sizes and zonings

PORTION A (ONESHILA PROPER)			
LAND USE	TOTAL AREA (Sq m)	NUMBER OF ERVEN	%
Single Residential	85 272	137	22
Business	113 151	175	29
Institutional	6 714	4	2
Access Parking Space	1 932	2	0
Civic	437	2	0
Public Open Space	115 921	10	30
Street	68 312		17
	391 739	330	100

1.2.2 ONESHILA EXTENSION 1

The proposed layout for the Remainder of Erf 1373 Oshakati Extension 2, known as Oneshila Extension 1, involves a zoning change from "Undetermined" to include Single Residential, Civic, Business, and Public Open Space uses. Similar to Oneshila Proper, it integrates the existing power line into the Public Open Space area. The shapes and sizes of erven are detailed in Figure 4 and Table 2.

Figure 3: Proposed Extension 1 layout and zoning plan

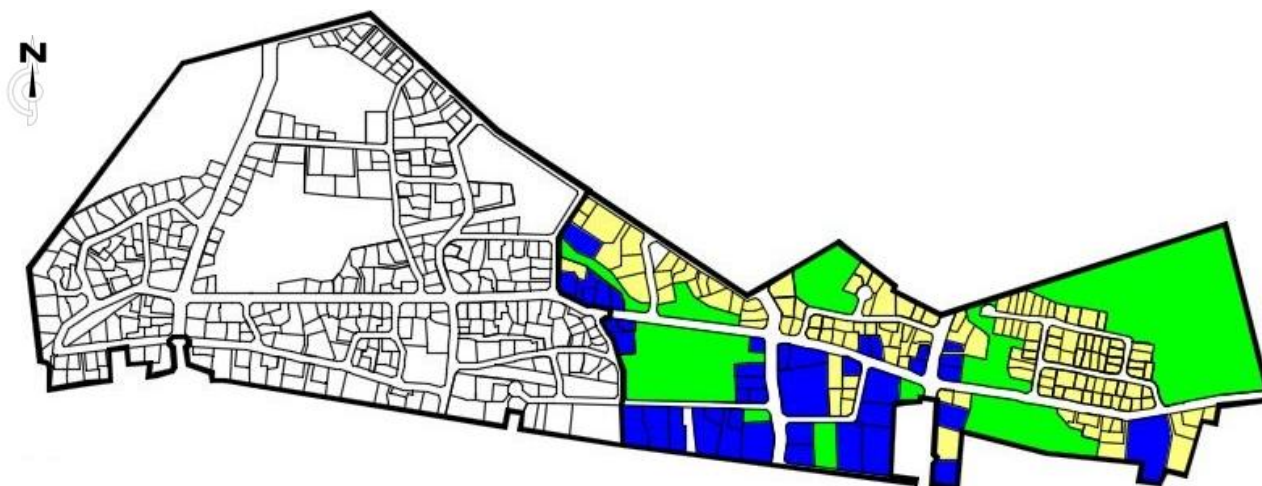


Table 2: Extension 1 erf sizes and zonings

REMAINDER OF ERF 1373 (ONESHILA EXTENSION 1)			
LAND USE	TOTAL AREA (Sq m)	NUMBER OF ERVEN	%
Single Residential	77 040	138	26
Business	61 278	42	21
Civic	1 857	2	1
Public Open Space	108 129	10	37
Street	42 778		15
	291 082	192	100

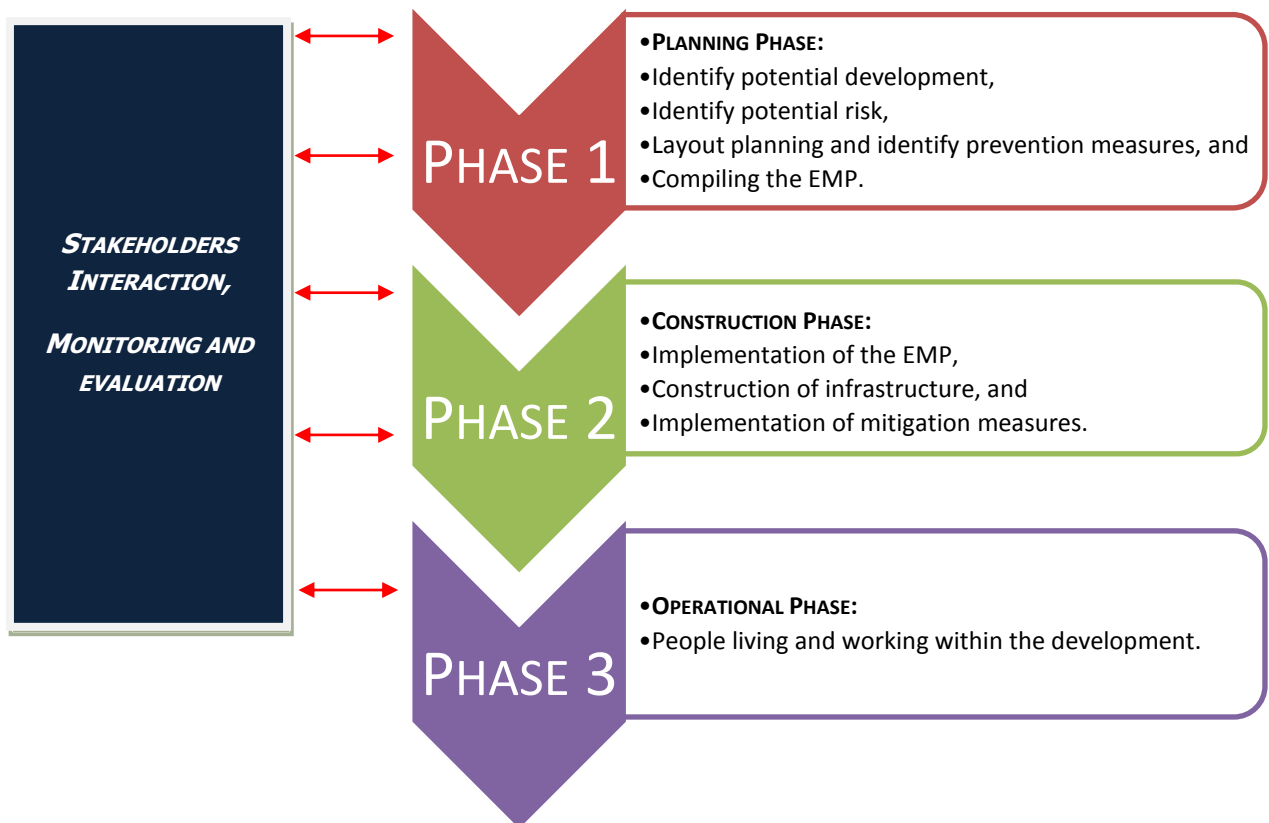
1.3 ENVIRONMENTAL MANAGEMENT PLAN (EMP)

An EMP is a critical component of the Environmental Assessment (EA) process. It synthesizes all recommended mitigation and monitoring measures across various project life cycle stages, with clearly defined follow-up actions and responsibilities assigned to specific stakeholders. This EMP aligns with the Namibian Environmental Management Act (No. 7 of 2007) and its Environmental Impact Assessment Regulations (2012). The plan outlines mitigation and monitoring measures for the construction and operation phases of the development.

1.3.1 PROJECT PHASES

- ❖ Construction
- ❖ Operation

Table 3: Project Phases



1.3.2 RESPONSIBILITIES

Implementation of the EMP involves the Oshakati Town Council as the Developer, the development administrator post-construction, and the Oshakati Town Council. Given the project's scale, certain functions related to managing all aspects of the development process may be outsourced. The following roles and responsibilities apply to each stakeholder:

Employer's Representative (ER):

The Developer appoints the ER to manage contracts for work and services during the construction phase. Any competent employee or third-party organization with the necessary experience may fill this role. The ER assists the Environmental Control Officer (ECO) where necessary and is responsible for:

- ❖ Ensuring the Contractor obtains necessary legal authorizations and permits.
- ❖ Assisting the Contractor in finding environmentally responsible solutions to problems with input from the ECO.
- ❖ Issuing warnings and orders for the removal of non-compliant individuals or equipment.
- ❖ Imposing fines for transgressions of site rules and penalties for EMP contraventions.
- ❖ Providing input into the ECO's ongoing internal review of the EMP, with monthly reports to the Developer.

Environmental Control Officer (ECO):

The ECO, a competent person appointed by the ER, is the on-site representative responsible for monitoring and reviewing on-site environmental management and EMP implementation by the Contractor(s). The ECO ensures:

- ❖ Necessary legal authorizations are obtained.
- ❖ Open and direct communication between stakeholders concerning the EMP and related matters.
- ❖ Monthly site inspections for EMP compliance.
- ❖ Monitoring and verification of EMP implementation to minimize environmental impacts.
- ❖ Appropriate action is taken for EMP specification non-compliance.
- ❖ Assistance to the Contractor in finding environmentally responsible solutions.

- ❖ Training of construction personnel on EMP measures and continuous awareness promotion.
- ❖ Verification of environmental, health, and safety training for all personnel.
- ❖ Recommendations for fines and penalties for non-compliance.
- ❖ Monthly review of the EMP, with additions or changes recommended.

Contractor:

The Contractor is responsible for implementing, on-site monitoring, and evaluating the EMP. To ensure sound environmental management, relevant EMP sections are incorporated into all contracts of outsourced work, legally binding all appointed contractors. The Contractor must maintain records of all environmental training sessions for inspection and reporting by the ER and ECO.

2 RELEVANT LEGISLATION AND PERMIT REQUIREMENTS

The following table provides the legislative framework within which the EMP should be viewed:

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
	The Constitution of the Republic of Namibia First Amendment Act 34 of 1998	<ul style="list-style-type: none"> Article 16 (1) guarantees all persons the right to acquire, own and dispose of property as an individual or in association with others. Article 95 (i) The state shall actively promote and maintain the welfare of the people by adopting, inter-alia, policies aimed at managing the ecosystems, essential ecological processes and biological diversity of Namibia and utilisation of living natural resources on a sustainable basis for the benefit of all. 	<p>The project makes provision for freehold title ownership.</p> <p>The project should protect the ecological integrity of the area's ecosystems and social environment.</p>
Environmental	Environmental Management Act 7 of 2007	<ul style="list-style-type: none"> Section 27 requires that projects with significant environmental impacts are subject to an environmental assessment process. Section 2(b-c)) requires adequate public participation during the environmental assessment process for interested and affected parties to voice their opinions about a project. Section 10(1), construction of (b) public roads and Section 10.2 route determination of roads and design of associate physical infrastructure (a) public road whereby the Minister of Environment, Forestry and Tourism or in a manner prescribed by the Minister. - Details principles which are to guide all EIAs 	This Act and its regulations should inform and guide this EIA process to ensure that Environmental Clearance is obtained.
	EIA Regulations GN 57/2007 (GG 3812)	<ul style="list-style-type: none"> Section 21 details the requirement for public consultation within a given environmental assessment process. Prescribes the procedures to be followed for authorisation of the project (i.e. Environmental clearance certificate). 	

Forestry	Forestry Act 12 of 2001	<ul style="list-style-type: none"> Section 22(1) states that tree species and any vegetation within 100m of a Watercourse may not be removed without a permit. Provision for the protection of various plant species. 	<p>Plant species protected under Annexure A of the Regulations should be protected through planning the layout and construction of services.</p> <p>A Tree Management Plan should be compiled on the site to identify protected species before construction comments.</p>
	Forest Regulations GN 170/ 2015 (GG 5801)	<ul style="list-style-type: none"> Section 13.2 states that no protected species should be removed unless special permission is granted. The plant or species declared protected species are listed in Annexure A of the Regulations. 	<p>Permits should be obtained from the Ministry of Environment, Forestry, and Tourism (Department of Forestry) to remove any protected species that are unable to be protected.</p>
Water	Water Act No. 54 of 1956	<ul style="list-style-type: none"> Section 23(1) deals with the prohibition of pollution of underground and surface water bodies. 	<p>Necessary steps should be in place to prevent the pollution of water resources during the construction phase of the project.</p>
Health and Safety	Labour Act 11 of 2007	<ul style="list-style-type: none"> Chapter 2 details the fundamental rights and protections of employees Chapter 3 deals with the basic conditions of employment. 	<p>Employment opportunities presented by the development and compliance with labour law are essential.</p>
	Public and Environmental Health Act of 2015 (GG 5740)	<ul style="list-style-type: none"> This Act provides a framework for Namibia's structured, uniform public and environmental health system. 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. 	<p>Development contractors must comply with these legal requirements of the Act. by preventing activities that can impact the health and safety of the public and employees.</p>

Atmospheric Pollution	Atmospheric Pollution Prevention Ordinance No 45 of 1965	<ul style="list-style-type: none"> • 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).
Archaeology	National Heritage Act 27 of 2004	<ul style="list-style-type: none"> • Section 48(1) states that “ A person may apply to the (Heritage) Council for a permit to carry out works or activities concerning a protected place protected object” 	When archaeological material (e.g., graves) is discovered, the National Heritage Council should be informed immediately.
	Burial Place Ordinance 27 of 1966	<ul style="list-style-type: none"> • The Ordinance prohibits the desecration or disturbance of graves and regulates matters relating to the removal or disposal of dead bodies. 	The Ordinance regulates the exhumation of graves.
Soil	Soil Conservation Act 76 of 1969	<ul style="list-style-type: none"> • The Act regulates combating and preventing soil erosion, the conservation, improvement and manner of use of the soil and vegetation and the protection of the water sources. 	Measures should be in place to ensure that soil erosion and pollution are avoided during the construction and operational phases.
Land Use	The Urban and Regional Planning Act 7 of 2018	<ul style="list-style-type: none"> • The Act regulates the establishment of townships, amendment of layout, subdivisions and consolidation, and land rezoning. 	The proposed township and layout should be approved by the Ministry of Urban and Rural Development in accordance with the Act.
	Okakarara Zoning Scheme	<ul style="list-style-type: none"> • The Okakarara Zoning Scheme provides for various land use and activities allowed within the Okakarara Town Council’s jurisdiction. 	The development should be in accordance with the Okakarara Zoning Scheme.

<p>Services and Infrastructure</p>	<p>Road Ordinance 17 of 1979</p>	<ul style="list-style-type: none"> • Section 3(1) the width of proclaimed roads and roads receive boundaries. • Section 27(1) the control of traffic during construction activities on the trunk and main roads. • Section 37(1) infringement and obstructions on and interference with proclaimed roads • Section 38 distances from proclaimed roads at which fences are erected. 	<p>the proponent should ensure that the construction of public roads and infrastructure through township development and the operational phase do not affect major nearby roads.</p>
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PLANNING AND DESIGN PHASE**Table 4: Management Requirements for the Planning and Design Phase**

ASPECT	MANAGEMENT REQUIREMENTS
Natural Building Material	All building materials (sand and gravel) must only be sourced from a local registered borrow pit. Road building material (G4, G5, etc.) must be sourced in collaboration from approved borrow pits within the townlands. If suitable material can only be sourced from untouched land to create a new borrow pit, then that is legally subject to an EIA by the Oshakati Town Council.
EMP Implementation	Relevant sections of this EMP should be included in the tender documents for all construction so that tenderers can implement the EMP.
Financial Provisions	<ul style="list-style-type: none"> • Financial provision for the facilitation of an induction programme for senior, temporary construction personnel and subcontractors and associated personnel should be included as a cost item within tenders concerning the construction and/or operation and maintenance of the proposed development. • Financial provision for a Tree Management Plan compilation should be included as a cost item within construction tender documents.
Recruitment	<ul style="list-style-type: none"> • Provisions designed to maximise the use of local labour should be included within tenders concerning the construction of bulk and reticulation services. • A provision stating that all unskilled labour should be sourced locally should be included in tenders concerning the construction of all development services. • Specific recruitment procedures ensuring local firms enjoy preference during tender adjudication should be included in tenders concerning the construction of the development's bulk services. • Provisions promoting gender equality pertaining to recruitment should be included in tenders concerning the construction of the township services. • Women should be given preference for specific jobs (e.g. those jobs that require relatively less physical strength).

3 CONSTRUCTION MITIGATION DETAIL

Table 5 offers a comprehensive overview of the major environmental management themes related to both generic and site-specific construction mitigation details. This table serves as a convenient reference for the subsequent mitigation details presented for each theme, streamlining the implementation of the construction component of this EMP.

Table 5: Generic and Site-Specific Environmental Management Actions:

THEME:	OBJECTIVE:	MITIGATION DETAIL:	
		GENERIC:	SITE-SPECIFIC:
WASTE MANAGEMENT:	Minimise and avoid all waste pollution associated with construction.	PLAN COMPONENT 1	YES
HEALTH AND SAFETY MANAGEMENT:	Focusing on the well-being of the labourers and the community near the construction.	PLAN COMPONENT 2	YES
NOISE AND DUST MANAGEMENT:	Minimise and avoid all noise and dust associated with construction.	PLAN COMPONENT 3	YES
TRAFFIC MANAGEMENT:	Minimise and avoid traffic impacts.	PLAN COMPONENT 4	YES
ENVIRONMENTAL TRAINING AND AWARENESS:	Awareness creation regarding the provisions of the EMP as well as the importance of safeguarding environmental resources.	PLAN COMPONENT 5	YES
ENVIRONMENTAL CONSERVATION:	Minimise the effect of the activity and protect the social environment in which it is happening.	PLAN COMPONENT 6	YES
EMPLOYMENT /RECRUITMENT	Ensure the protection of workers' rights and safety in Namibia.	PLAN COMPONENT 7	YES
STAKEHOLDER COMMUNICATION:	Provide a platform for stakeholders to raise grievances and receive feedback and hence, minimise negative conflict.	PLAN COMPONENT 8	YES
SOCIO-ECONOMIC AND MISCELLANEOUS:	Protecting cultural and general wellbeing of the affected.	PLAN COMPONENT 9	NA

3.1 PLAN COMPONENT 1: WASTE MANAGEMENT

At the Oneshila project site, there is a critical need for efficient waste management, which must be diligently executed on a daily basis. Solid waste is expected to be the primary source of waste at the construction site. Consequently, a comprehensive Waste Management Plan (WMP) must be established, encompassing strategies for handling and disposing of both general waste and hazardous waste on-site, as detailed below:

3.1.1 CONSTRUCTION WASTE MANAGEMENT:

General Waste:

- Maintain continuous cleanliness and orderliness at the construction site. Ensure that all general construction waste is promptly cleaned up and contained daily.
- Prohibit the burial or burning of any waste material.
- Strictly forbid dumping waste into any watercourse within or around the project area.
- Provide an adequate number of clearly marked waste containers (bins) for hazardous and general waste on-site.
- Educate construction workers on responsible waste disposal practices and discourage littering.

Hazardous Waste:

- Equip all heavy construction vehicles and large fuel-powered equipment with drip trays.
- Drip trays should accompany vehicles suspected of oil leakage wherever they go on-site.
- Daily cleaning of drip trays is mandatory, with any spillage handled, stored, and disposed of as hazardous waste.
- Treat spilled wet concrete as waste and dispose of it properly by the end of each workday.
- Classify unbound dry cement and cement-infused water from mixers as hazardous waste due to their high alkalinity content. Dispose of them in appropriately labelled hazardous waste containers.
- Maintain a hazardous waste spill clean-up kit on-site, replenishing its stock as needed.

The kit should include:

- Medium-sized shovels
- Strong plastic bags
- Drip trays
- Dust masks

- Heavy-duty gloves
 - Biodegradable hand wash (degreasing) agent.
- Establish a secure storage area for all hazardous substances or chemicals. This storage area must feature an impermeable surface and comply with bonding requirements until use and disposal.

Responsibility: The Contractor, Environmental Compliance Officer (ECO), and Environmental Regulator (ER) are jointly responsible for implementing and monitoring the EMP and the WMP.

3.1.2 WASTE MANAGEMENT DURING THE OPERATIONAL PHASE:

General Waste:

- Ensure that Oneshila Proper and Extension 1 include efficient waste management infrastructure for households and businesses, including recycling facilities.
- Entrust the Oshakati Town Council or a designated service provider with the collection of household and business waste.
- Establish a closed-system pipeline for sewerage, connecting to the Oshakati Town Council's bulk sewerage lines.

Responsibility: The Oshakati Town Council is responsible for monitoring and maintaining sewerage pipelines post-construction and solid waste removal.

3.2 PLAN COMPONENT 2: HEALTH AND SAFETY

The health and safety of workers and the surrounding community are of paramount importance in the construction industry due to the potential for unforeseen severe events. Careful planning and prevention measures are essential to minimize the risk of injuries.

3.2.1 HEALTH AND SAFETY MANAGEMENT:

General:

- Adhere to the provisions of the Labour Act, Nr. 11 of 2007, in conjunction with Regulation 156, which outlines health and safety regulations for employees at work.
- Include measures to mitigate health and safety risks for both on-site workers and nearby residents in the EMP.

HIV/AIDS and TB training:

- Collaborate with the Ministry of Health and Social Services to designate a health officer responsible for periodic on-site HIV/AIDS and TB education programs during the construction phase.

Road Safety:

- Ensure that all vehicles adequately secure their contents to prevent items from falling off.

- Cover all trucks transporting sand or fine materials with shade net covers to prevent material spillage onto approaching vehicles.
- Strictly prohibit the use of construction vehicles for personnel transportation, emphasizing the associated safety risks and legal consequences.

Safety around Excavated and Work Areas:

- Hold meetings with the neighbouring community to explain safety precautions in the construction area.
- Limit the time excavations are left open to an absolute minimum.
- Ensure trenches and box areas for services or foundations are not left unattended for more than 24 hours.
- Clearly demarcate excavation works, soil and material stockpiles, and temporary waste stockpiles with danger tape or orange netting.
- Provide additional warning signage in areas of movement and in "no-entry" zones for non-active workers.
- Set out and isolate work areas with danger tape daily.
- Restrict storage of building materials and equipment to demarcated work areas.
- Allow only construction personnel within these demarcated work areas.
- Maintain two dry chemical powder fire extinguishers in fuel storage areas, the workshop, and the site office.

Ablutions:

- Provide separate ablutions for men and women, clearly marked.

Make portable toilets available at every construction site:

- 1 toilet for every 25 females.
- 1 toilet for every 50 males.
- Regularly remove sewage waste to an approved municipal disposal site or store it in sealable containers until removal.
- Provide latex gloves and masks to workers responsible for cleaning toilets.

Responsibility: The Contractor is responsible for implementing health and safety measures in collaboration with relevant authorities and stakeholders.

3.2.2 OPERATIONAL PHASE HEALTH AND SAFETY MANAGEMENT:

Flood Risk Impact Prevention:

- Place all services (power and sewer lines) within evaluated road reserves to safeguard against influence during rainy seasons.

- Integrate the sewerage network with the nearby sewer line running through the area, connecting it to the nearest extension's sewerage network, which flows to the oxidation ponds north of the town.
- Establish a clear procedure for residents and the Contractor to report sewer or electrical network problems to the Town Council's respective departments.
- Maintain culverts.
- Fill erven within flood-prone areas to prevent flooding.

Responsibility: The Oshakati Town Council and owners of new and existing erven are responsible for implementing and monitoring flood risk mitigation measures.

3.3 PLAN COMPONENT 3: NOISE AND DUST

Noise and dust pollution can have adverse effects on the well-being of nearby residents and construction workers. Therefore, it is crucial to prioritise mitigation measures to manage noise and dust within the area.

3.3.1 NOISE PREVENTION:

General:

- Restrict noisy activities on-site between 17:00 and 07:00.
- Conduct construction activities on Saturdays between 08:00 and 13:00.
- Prohibit noisy activities on Sundays and public holidays.
- In cases where work outside designated hours is necessary, notify all receptors (residents or businesses within 500 m of the work areas) at least two days in advance.

Responsibility: The Contractor, Environmental Compliance Officer (ECO), and Oshakati Town Council are responsible for monitoring noise pollution and ensuring compliance.

3.3.2 DUST PREVENTION:

General:

- Erect suitable screens or panels around the construction site to reduce dust dispersion.
- Apply dust palliatives to road surfaces to prevent dust clouds.
- Use a watering truck with semi-purified water on high-traffic gravel roads during dry and windy conditions, considering water restrictions during droughts.
- Keep building and earth material stockpiles moist or stabilize their surfaces. Alternatively, use nylon mesh covers to reduce dust lift.
- Limit the size of stockpiles of soil, topsoil, and fine materials.

- Provide dust protection masks to all workers exposed to dust on-site.
- Heighten awareness of ambient air quality and consider wind speed and direction when performing dust-generating activities.

Responsibility: The Contractor, Environmental Compliance Officer (ECO), and Oshakati Town Council are responsible for implementing and monitoring dust control measures.

3.4 PLAN COMPONENT 4: TRAFFIC MANAGEMENT

The construction of infrastructure is expected to disrupt surrounding traffic. Mitigation measures must be in place to minimize this disruption during the infrastructure upgrade.

3.4.1 TRAFFIC DURING THE CONSTRUCTION PHASE:

Traffic Mitigation:

Develop a Traffic Plan to reduce traffic flow interference from construction activities. The plan may include advance public notice of routing, public transportation utilisation, and satellite parking areas with shuttle services.

- Schedule construction operations during off-peak hours to minimize traffic obstruction, with the presence of flag persons for traffic guidance.
- Restrict construction vehicles during peak hours (07:00-08:00 and 17:00-18:30).
- Use appropriate advance road warning signage.

Responsibility: The Contractor is responsible for implementing and monitoring traffic management measures. The Oshakati Town Council is responsible for maintaining the road infrastructure post-construction.

3.5 PLAN COMPONENT 5: ENVIRONMENTAL TRAINING AND AWARENESS

All construction workers on the development site are required to undergo environmental training and awareness programs to ensure their understanding of and compliance with environmental best practices.

Training and Awareness:

- Provide comprehensive training sessions covering:
 - The importance of complying with the EMP.
 - Potential environmental impacts of construction activities.
 - Employee roles and responsibilities, including emergency preparedness.
 - Specific mitigation measures outlined in the EMP.

- Maintain an attendance register for all training sessions, recording names, positions, and signatures of attendees for auditing purposes.

Responsibility: The Contractor and Environmental Compliance Officer (ECO) are responsible for conducting and documenting environmental training and awareness programs.

3.6 PLAN COMPONENT 6: ENVIRONMENTAL CONSERVATION

3.6.1 4.6.1 TREE MANAGEMENT PLAN:

Efforts will be made to preserve trees on the project site during development. A Tree Management Plan will be implemented to ensure their protection.

Tree Management Plan:

- Survey all protected trees on-site.
- Obtain permits from the Environmental Regulator (ER) before removing protected trees.
- Use removed protected trees within the development's landscaping.
- Source indigenous plants and trees from commercial nurseries or local forestry officers for replacement.

Materials Camp and Lay-Down Areas:

- Identify suitable locations for materials camp and lay-down areas with input from the ER.
- Prioritize areas designated for services infrastructure.
- Avoid sensitive areas, such as watercourses.

Responsibility: The Developer and Contractor are responsible for implementing the Tree Management Plan and selecting suitable materials camp and lay-down areas.

3.7 PLAN COMPONENT 7: EMPLOYMENT/RECRUITMENT

The construction phase will employ a significant number of workers, potentially reaching up to a thousand. Local recruitment and gender-based preferences should be considered to benefit the community.

3.7.1 RECRUITMENT:

General:

- Collaborate with the ER and the Contractor to establish a recruitment process that prioritizes local residents.
- Ensure all sub-contractors are familiar with recommended recruitment procedures and discourage labour recruitment outside the agreed-upon process.

- Prioritize the recruitment of sub-contractors and individual labourers from the project area before considering surrounding towns.
- Clearly explain employment contract terms and conditions to all job-seekers, providing interpreters as needed.

Legislation:

Comply with legal provisions outlined in the Labour Act (Labour Act. 11 of 2007) regarding labour recruitment, gender balance targets, and the utilization of local labour and SMEs.

Responsibility: The ER, Contractor, and relevant stakeholders are responsible for implementing and monitoring fair recruitment practices.

3.8 PLAN COMPONENT 8: STAKEHOLDER COMMUNICATION

Effective communication with stakeholders is essential during the construction phase. A Communication Plan should be developed, and an Environmental Compliance Officer (ECO) will facilitate communication between the Contractor, stakeholders, Developer, and consultants.

3.8.1 COMMUNICATION PLAN:

General:

- Identify and record stakeholders requiring ongoing communication for the construction duration.
- Establish a systematic process for stakeholder consultation throughout the project.
- Outline procedures for lodging concerns or grievances and articulate steps for arbitration if feedback is unsatisfactory.

General Communication:

- Provide regular updates on EMP implementation during site meetings.
- Maintain a comprehensive stakeholder list with contact details for ongoing communication.
- Ensure all stakeholders are aware of the availability of a complaints register.

Responsibility: The Developer, Environmental Regulator (ER), and Environmental Compliance Officer (ECO) are jointly responsible for developing and executing the Communication Plan, with the Contractor's active cooperation. The ECO will manage communication with stakeholders.

Table 6: Public Consultation Process

THE PROCESS:	DESCRIPTION OF THE PROCESS:
DURING THE PLANNING PHASE:	
I&APs Identification:	Key Interested and Affected Parties (I&APs) were identified at Oneshila and were documented in an official list of I&APs. This list notably featured the inclusion of the Oshakati Town Council.
Newspaper Notices:	Notices were placed in two widely circulated newspapers for duration of two consecutive weeks. These notices provided brief descriptions of the developments and their respective locations, and they extended invitations to the public to register as Interested and Affected Parties (I&APs).
Information Provision:	A Background Information Document (BID) was prepared, containing crucial information about the project.
Meetings:	<ul style="list-style-type: none"> – Urban Dynamics was responsible for publicising the public meeting. – The meeting was scheduled for the 18th of July 2023. – Stakeholders, including the Oshakati Town Council, were furnished with relevant information.
Public Comments Period:	Between 5 July to 16 August 2023
DURING THE CONSTRUCTION PHASE:	
Communication Plan:	<ul style="list-style-type: none"> – During each site meeting, it is imperative that the Contractor provides a comprehensive report on the status of implementing all aspects of the EMP. – The Environmental Compliance Officer (ECO) is responsible for compiling a list of project stakeholders and their contact details that will necessitate ongoing communication throughout the contract's duration. This list, along with the Communication Plan, must be mutually agreed upon and submitted to the Environmental Regulator (ER) before the commencement of construction. – Once the Communication Plan has received approval from the Developer, it becomes binding. – All interactions with stakeholders should be coordinated through the ECO, who serves as the primary point of contact. – A copy of the EMP must be readily available at the site office, ensuring accessibility to all stakeholders. – Prior to commencing construction, the Contractor should collaborate with the Developer to address community consultation and negotiation matters. – Implement a procedure to confirm that raised concerns have been duly addressed and followed up on. – The ER is responsible for formally notifying all individuals on the stakeholder list about the existence and availability of the complaints register in written form before the initiation of construction activities.

3.9 PLAN COMPONENT 9: SOCIO-ECONOMIC AND MISCELLANEOUS

While no heritage or archaeological sites have been identified in the area, the EMP still includes standard procedures for such sites. Since no formal archaeological survey was conducted during the field studies, there is a possibility of remnants when excavations occur.

Heritage or Archaeological Sites Procedure (Chance Find):

- If operating machinery or equipment, immediately stop work.
- Demarcate the site with danger tape.
- If possible, determine GPS coordinates.
- Report the findings to the foreman.
- Halt any work near the site.
- Assess if work can proceed without harming the findings.
- Establish exclusion boundaries.
- Inspect and confirm the exact location.
- Notify the National Heritage Council (NHC) and seek written permission to remove findings.
- Recover, package, and label findings for transfer to the National Museum.

Discovery of Human Remains Procedure:

- Follow the same 'chance find' procedure.
- Schedule a field inspection with an archaeologist to confirm human remains.
- Inform and coordinate with the NHC and local authorities, including the police.
- Recover and transport remains to either the National Museum or the National Forensic Laboratory.

If the construction site is deemed a protected heritage or archaeological site, the Developer must apply for a permit from the National Heritage Council in accordance with the National Heritage Act 27 of 2004.