



# APPLICATION FOR ENVIRONMENTAL CLEARANCE:

## SCOPING ASSESSMENT

**FOR THE CONSTRUCTION OF ROADS, AND ASSOCIATED BULK INFRASTRUCTURE THROUGH THE TOWNSHIP ESTABLISHMENT OF ANDREWVILLE EXTENSION 1 – PORTION 19 OF FARM MALTAHÖHE TOWNLANDS NO. 35 MALTAHÖHE, HARDAP REGION, NAMIBIA**

### PROPONENT:

Maltahöhe Village Council  
P.O. Box 98,  
Maltahöhe  
**Namibia**

### SUBMISSION TO:

Ministry Of Environment, Forestry and Tourism  
Private Bag 13306  
**Windhoek**  
Namibia

### CONSULTANT:

**Urban Dynamics Africa**  
P O Box 20837  
Windhoek  
**Namibia**

### APP-006259

REFERENCE: 1315  
ENQUIRIES: HEIDRI BINDEMANN-NEL  
TEL: +264-61-240300  
EMAIL: [heidri@udanam.com](mailto:heidri@udanam.com)

## DOCUMENT INFORMATION

Title	Scoping Report for the Construction of Roads, and Associated Infrastructure Through the Township Establishment of Andrewville Extension 1 – Portion 19 of Farm Maltahöhe Townlands No. 35 Maltahöhe, Hardap Region, Namibia
Client	Maltahöhe Village Council
Project Manager	Allison Anderson
Project Manager Email	<a href="mailto:allison@udanam.com">allison@udanam.com</a>
Author	Heidri Bindemann-Nel
Reviewer	Allison Anderson
Keywords	Public Roads, Bulk Infrastructure
Status	Final
Report No.	1
Company	Urban Dynamics Africa (Pty) Ltd.
MEFT App Ref	250624005967
UDA Project No.	Maltahöhe 1315
Report Date:	February 2026

**TABLE OF CONTENTS**

1 INTRODUCTION ..... 8

1.1 BACKGROUND ..... 8

1.2 PROJECT LOCATION ..... 9

1.3 PURPOSE OF THE REPORT ..... 9

1.4 NATURE OF THE ACTIVITY ..... 10

2 LEGAL FRAMEWORK ..... 11

3 PROJECT DESCRIPTION ..... 13

3.1 OVERVIEW ..... 13

3.2 BULK INFRASTRUCTURE ..... 15

3.3 CONSTRUCTION ACTIVITIES ..... 15

4 ALTERNATIVES ASSESSMENT ..... 16

4.1 NO-GO ALTERNATIVE ..... 16

4.2 PREFERRED DEVELOPMENT ALTERNATIVE ..... 16

4.3 LAYOUT AND INFRASTRUCTURE ALTERNATIVES ..... 16

5 ESIA APPROACH AND METHODOLOGY ..... 17

5.1 SITE INFORMATION AND TOPOGRAPHY ..... 17

5.2 NATURAL AND SOCIAL RECEIVING ENVIRONMENT ..... 17

5.3 PUBLIC CONSULTATION ..... 17

6 BASELINE ENVIRONMENTAL AND SOCIAL CONDITIONS ..... 18

6.1 SITE INFORMATION AND TOPOGRAPHY ..... 18

6.1.1 Locality ..... 18

6.1.2 Topography and Drainage ..... 19

---

6.2	LAND USE.....	19
6.2.1	Ownership and Current Land Use.....	19
6.2.2	Surrounding Land Use.....	20
6.2.3	Existing Services Context.....	20
6.2.4	Sensitivities.....	21
6.3	BIOPHYSICAL ENVIRONMENT.....	21
6.3.1	Climate.....	21
6.3.2	Topography and Drainage.....	21
6.3.3	Soils.....	22
6.3.4	Vegetation.....	22
6.3.5	Protected Areas and Biodiversity Status.....	23
6.3.6	Habitats on Site.....	23
6.3.7	Status of Protected Area.....	23
6.4	KEY SENSITIVITIES:.....	24
7	STAKEHOLDER ENGAGEMENT.....	25
7.1	METHODS.....	25
7.1.1	Newspaper Notices:.....	25
7.1.2	Background Information Document (BID):.....	25
7.1.3	Site Notice:.....	25
7.1.4	Village Council Notice Board:.....	26
7.1.5	Public Meeting:.....	26
7.2	REGISTERED STAKEHOLDERS.....	26
7.3	SUMMARY OF COMMENTS / ISSUES RAISED.....	27

8	IMPACT ASSESSMENT .....	28
8.1	SUMMARY OF POTENTIAL IMPACTS .....	28
8.1.1	Benefits of the Project:.....	28
8.1.2	Potential Negative Impacts during Construction: .....	28
8.2	POTENTIAL IMPACTS .....	29
8.2.1	Project Benefits: .....	29
8.2.2	Potential Negative Impacts during Planning and Construction: .....	29
8.3	DEALING WITH RESIDUAL IMPACTS .....	30
8.3.1	Residual Social Impacts:.....	30
8.3.2	Residual Environmental Impacts: .....	30
9	SUMMARY AND APPLICATION.....	31
9.1	PROJECT IMPACTS, AVOIDANCE MEASURES AND RESIDUAL IMPACTS .....	31
10	APPLICATION FOR ENVIRONMENTAL CLEARANCE .....	33

#### FIGURES

FIGURE 1:	MALTAHÖHE WITHIN THE HARDAP REGION .....	9
FIGURE 2:	PROPOSED ANDREWVILLE EXT 1 LAYOUT .....	14
FIGURE 3:	LOCALITY OF THE ANDREWVILLE EXT 1 WITHIN MALTAHÖHE .....	18
FIGURE 4:	CURRENT LAND USE.....	19
FIGURE 5:	CURRENT INFRASTRUCTURE .....	20
FIGURE 6:	REGIONAL VEGETATION.....	22
FIGURE 7:	ON VEGETATION .....	23
FIGURE 8:	PUBLIC MEETING IN MALTAHÖHE .....	26

#### TABLES

TABLE 1:	NATIONAL AND ENVIRONMENTAL LEGISLATION .....	11
TABLE 2:	INFRASTRUCTURE AND HAZARDOUS SUBSTANCES.....	12
TABLE 3:	HEALTH, SAFETY, AND SOCIAL LEGISLATION .....	12
TABLE 4:	OTHER RELEVANT FRAMEWORKS.....	12
TABLE 5:	LAND-USE ALLOCATIONS .....	13
TABLE 6:	BIOPHYSICAL ENVIRONMENTAL KEY SENSITIVITIES.....	24

## ANNEXURES

<b>ANNEXURE 1:</b>	MEFT REPORT FORM 1 (SCREENING FORM)
<b>ANNEXURE 2:</b>	CURRICULUM VITAE (CV) OF THE EAP
<b>ANNEXURE 3:</b>	DECLARATION FOR THE SUBMISSION OF ASSESSMENT REPORTS
<b>ANNEXURE 4:</b>	CONFIRMATION OF SCREENING NOTICE
<b>ANNEXURE 5:</b>	PROJECT LOCATION MAP
<b>ANNEXURE 6:</b>	PUBLIC CONSULTATION DOCUMENTATION
<b>ANNEXURE 6.1:</b>	PROOF OF PUBLIC NOTIFICATION
<b>ANNEXURE 6.2:</b>	PROOF OF WRITTEN NOTICES
<b>ANNEXURE 6.3:</b>	REGISTERED INTERESTED AND AFFECTED PARTIES
<b>ANNEXURE 6.4:</b>	CORRESPONDENCE LOG AND COPIES OF WRITTEN REPRESENTATIONS
<b>ANNEXURE 6.5:</b>	PUBLIC MEETING RECORD
<b>ANNEXURE 7:</b>	ENVIRONMENTAL MANAGEMENT PLAN (EMP)

## LIST OF ABBREVIATIONS

<b>BID</b>	Background Information Document
<b>ECC</b>	Environmental Clearance Certificate
<b>ECO</b>	Environmental Control Officer
<b>EMP</b>	Environmental Management Plan
<b>ER</b>	Employer's Representative
<b>E&amp;S</b>	Environmental and Social
<b>GN</b>	Government Notice
<b>I&amp;AP</b>	Interested and Affected Party
<b>ILO</b>	International Labour Organization
<b>MEFT</b>	Ministry of Environment, Forestry and Tourism
<b>NamPower</b>	Namibia Power Corporation
<b>NamWater</b>	Namibia Water Corporation
<b>NSA</b>	Namibia Statistics Agency
<b>PPE</b>	Personal Protective Equipment
<b>Sec</b>	Section
<b>SME</b>	Small and Medium Enterprise
<b>TB</b>	Tuberculosis
<b>UDA</b>	Urban Dynamics Africa (Pty) Ltd

---

# 1 INTRODUCTION

---

The Maltahöhe Village Council has appointed Urban Dynamics Africa (Pty) Ltd (UDA), a registered town and regional planning consultancy, to:

- Prepare the re-submission for township establishment of Andrewville Extension 1 (Portion 19 of Maltahöhe Townlands No. 35) in terms of the Urban and Regional Planning Act, 2018 (Act No. 5 of 2018); and
- Act as the independent Environmental Assessment Practitioner (EAP) to undertake the Environmental Scoping Assessment (ESA) and associated Environmental Management Plan (EMP) in support of an application for an Environmental Clearance Certificate (ECC) in terms of the Environmental Management Act, 2007 (Act No. 7 of 2007).

It is confirmed that township establishment itself is not a listed activity under the EMA. The requirement for an ECC arises from the bulk infrastructure components required to service the township, which fall under the listed activities set out in the EIA Regulations, 2012.

This Scoping Assessment therefore forms part of the ECC application process and is supported by a draft Environmental Management Plan (EMP).

---

## 1.1 BACKGROUND

---

The proposal for Andrewville Extension 1 was first initiated in 2009, and approval for township establishment was granted by the former Townships Board on 9 March 2010 under Item 36/2010. That approval subsequently lapsed due to layout amendments and financial constraints which delayed implementation by the Maltahöhe Village Council.

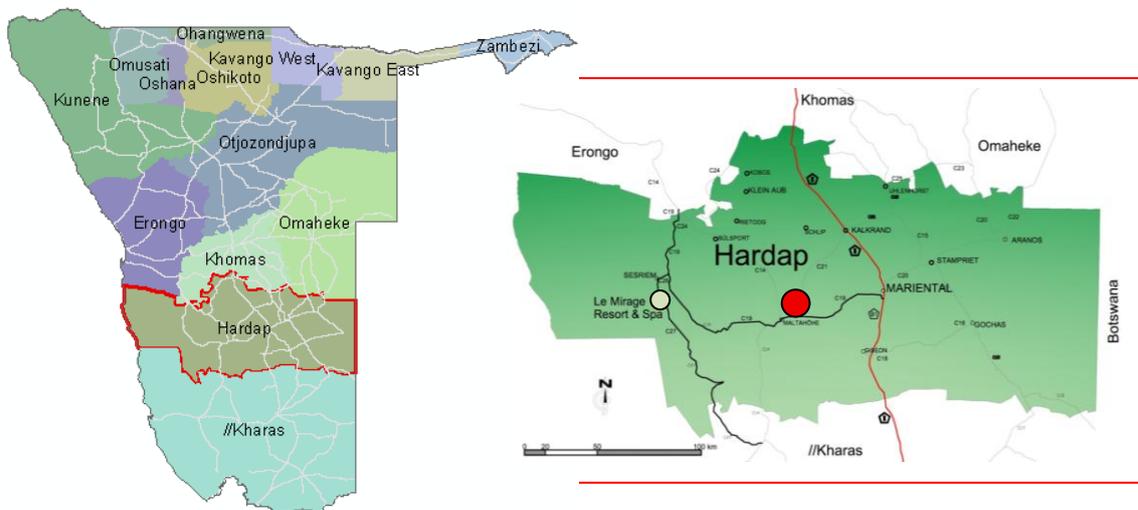
Although the layout was approved and surveyed, the process of final township registration was never completed. Some erven were allocated to organisations and structures were erected, not always in full accordance with the approved plan. Consequently, Maltahöhe remains without a zoning scheme, lease agreements issued in the past have limited validity, and many residents and organisations lack formal tenure.

The current re-submission provides an opportunity to complete the statutory township establishment and registration process; ensuring erven can be legally zoned, serviced, and transferred. In parallel, this Scoping Assessment addresses the bulk infrastructure works still required to service the township in accordance with the EMA.

## 1.2 PROJECT LOCATION

Andrewville Extension 1 is within Maltahöhe Village in the Hardap Region. It lies between the existing Maltahöhe Township, and the Andrewville area. Maltahöhe is located approximately 110 km west of Mariental by road via the C19. The C19 runs just south of the site, with local access from the D861 and existing village streets. This means the area is readily reachable on existing public roads and links well to Maltahöhe's services and movement routes. Figure 1 shows the locality of Maltahöhe within the region.

**Figure 1: Maltahöhe within the Hardap Region**



## 1.3 PURPOSE OF THE REPORT

The purpose of this Scoping Assessment is to provide the information required under the Environmental Management Act, 2007 (EMA) and the EIA Regulations, 2012 in support of an application for an Environmental Clearance Certificate (ECC) for the construction of bulk infrastructure in Andrewville Extension 1, Maltahöhe.

The report specifically:

- Describes the planning background and project scope;
- Identifies the listed activities applicable to the bulk infrastructure works;
- Summarises the baseline environmental conditions of the site;
- Records the outcomes of the public consultation process;
- Provides an initial assessment of potential impacts; and
- Outlines avoidance and mitigation measures contained in the Environmental Management Plan (EMP).

Together, this report and the EMP form the documentation to be submitted to the Environmental Commissioner for decision-making in terms of the EMA.

---

## 1.4 NATURE OF THE ACTIVITY

---

Township establishment, in itself, is not a listed activity under the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulations, GN No. 30 of 2012. An Environmental Clearance Certificate (ECC) is therefore not required for township establishment alone.

The requirement for an ECC arises from the bulk infrastructure and road construction activities required to service the township, which constitute listed activities in terms of the EIA Regulations.

The following listed activities under Section 10: Infrastructure of the EIA Regulations (GN No. 30 of 2012) are applicable:

- 10.1 The construction of –
  - (b) Public roads.
- 10.2 Route determination of roads and design of associated physical infrastructure where –
  - (a) it is a public road.

In addition, depending on the final alignment of bulk pipelines and drainage infrastructure, the following listed activities under Section 8: Water Resource Developments may apply should construction occur within flood lines, drainage lines, or catchment areas:

- 8.6 Construction of industrial and domestic wastewater treatment plants and related pipeline systems;
- 8.8 Construction and other activities in watercourses within flood lines;
- 8.9 Construction and other activities within a catchment area.

This application therefore focuses on the construction of bulk infrastructure and public roads associated with the Andrewville Extension 1 township, which legally requires environmental authorisation in terms of the Environmental Management Act.

## 2 LEGAL FRAMEWORK

The development will comply with all relevant Namibian national legislation. These frameworks govern a wide range of aspects, including environmental protection, infrastructure development, occupational health and safety, social safeguards, land use planning, and the conservation of heritage resources. Tables 1 to 4 summarise the key legislative provisions and their implications for the project.

**Table 1: National and Environmental Legislation**

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
<b>NATIONAL</b>	Constitution of the Republic of Namibia (Amendment Act 34/1998)	Guarantees property rights (Art. 16(1)) and mandates sustainable ecosystem management (Art. 95(i))	Supports land ownership and mandates environmental sustainability.
<b>ENVIRONMENTAL</b>	Environmental Management Act, 7 of 2007	Requires Environmental Impact Assessments (Sec 27); mandates public participation (Sec 2(b-c))	Obtain Environmental Clearance Certificate (ECC) and hold consultations.
	Environmental Impact Assessment Regulations, GN No. 30 of 2012	Lists activities requiring environmental clearance including roads and pipelines (Sec 10(1))	ECC and consultation processes are compulsory.
	Environmental Impact Assessment Regulations, GN No. 30 of 2012	Regulates noise, dust control, and land rehabilitation.	Construction must mitigate noise, dust, and restore land.
	Water Act, 54 of 1956	Regulates abstraction, diversion, and use of water resources.	Obtain water use permits for abstraction, diversion, or discharge; comply with water protection measures.

**Table 2: Infrastructure and Hazardous Substances**

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
<b>INFRASTRUCTURE</b>	EIA Regulations, GN No. 30 of 2012	Covers pipelines and roads (Sec 10.1(a), 10.1(b))	ECC required for pipeline and road works.
<b>HAZARDOUS SUBSTANCES</b>	EIA Regulations, GN No. 30 of 2012	Regulates hazardous materials handling and waste permits (Sec 9.1, 9.2)	Ensure safe storage, handling, and disposal of hazardous substances.

**Table 3: Health, Safety, and Social Legislation**

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
<b>HEALTH &amp; SAFETY</b>	Labour Act, 11 of 2007	Regulates worker rights and prohibits child/forced labour.	Comply with labour laws; promote fair employment.
	Public and Environmental Health Act, 2015	Covers health standards, waste management, and water quality.	Maintain health and safety compliance.
	Health and Safety Regulations, 2011	Requires workplace safety measures, PPE, and accident prevention.	Implement occupational health and safety measures.

**Table 4: Other Relevant Frameworks**

THEME	LEGISLATION	PROVISION	PROJECT IMPLICATIONS
<b>SOIL CONSERVATION</b>	Soil Conservation Act, 76 of 1969	Regulates erosion prevention and soil protection.	Apply erosion control measures.
<b>WASTE MANAGEMENT</b>	Waste Management and Pollution Control Act	Regulates disposal of solid and hazardous waste.	Comply with waste disposal and effluent discharge standards.
<b>CHILD LABOUR</b>	Labour Act, 11 of 2007; Child Care and Protection Act, 2015	Prohibits child labour; sets employment age limits.	Enforce zero tolerance on child labour.
<b>WORKER RIGHTS</b>	ILO Conventions (29, 87, 98, 100, 111)	Prohibits forced labour; guarantees union rights and equal pay.	Ensure fair and non-discriminatory working conditions.
<b>ARCHAEOLOGY</b>	National Heritage Act, 27 of 2004; Burial Place Ordinance	Protects heritage sites and graves.	Report findings; follow legal procedures for heritage sites.

## 3 PROJECT DESCRIPTION

This section outlines the design and scope of the proposed Andrewville Extension 1 township development. It provides an overview of the layout, the bulk and internal infrastructure required to service the area, and the construction activities that will be undertaken. Together, these elements form the foundation for understanding the project’s requirements and its potential environmental and social impacts.

### 3.1 OVERVIEW

The Andrewville Extension 1 township will cover approximately 25.4 hectares and provide for 144 erven across a range of land uses, including residential, business, institutional, administrative and public open space. The township layout is structured to support a formal settlement with secure tenure and access to essential services.

The design incorporates a hierarchical road network and service corridors, ensuring integration with Maltahöhe’s existing infrastructure. Streets and remainders account for approximately 45% of the total layout, providing circulation, accessibility, and space for utility services. Table 5 summarises the land-use allocations, and Figure 2 shows the proposed layout.

**Table 5: Land-use allocations**

Land Use / Zoning	Number of Erven	Total Area (sqm)	Average Erf Size (sqm)	% of Layout
<b>Residential (Single)</b>	118	45,545	385	18%
<b>General Residential</b>	2	7,198	3,599	3%
<b>Local Authority</b>	1	3,499	3,499	1%
<b>Business</b>	6	24,803	4,134	10%
<b>Institutional</b>	5	25,358	5,072	10%
<b>General Administration</b>	3	7,667	2,556	3%
<b>Public Open Space</b>	8	28,208	3,526	11%
<b>Streets &amp; Remainders</b>	1	114,332	—	44%
<b>Total</b>	144	256,610	—	100%

**Figure 2: Proposed Andrewville Ext 1 Layout**



---

## 3.2 BULK INFRASTRUCTURE

---

Bulk and internal services will be constructed within the designated road reserves and public open spaces. The infrastructure to be developed includes:

- Roads: Construction of internal streets within 13 m and 16 m reserves, linking erven to the existing village road network and the C19/D861 routes.
- Water Supply: Installation of a reticulated pipeline network connecting erven to NamWater's bulk supply, to be managed by the Maltahöhe Village Council.
- Sewerage: Development of a sewer reticulation system, manholes and (if required) a pump station, connected to Maltahöhe's wastewater treatment facilities.
- Electricity: Extension of the local distribution network with poles, transformers and individual service connections from the NamPower/Village Council supply.
- Stormwater Management: Provision of culverts, soak-aways and drainage structures within road reserves and open spaces to manage runoff and reduce flood risk.

The installation of bulk infrastructure will be implemented in phases, subject to the availability of financial resources, ensuring progressive servicing of erven.

---

## 3.3 CONSTRUCTION ACTIVITIES

---

The construction phase will involve the following key activities:

- Clearing and preparation of erven and road reserves;
- Trenching and installation of water, sewerage, and electricity networks;
- Roadbed preparation, compaction, and gravel surfacing;
- Installation of manholes, culverts and soak-aways;
- Construction of a sewerage pump station, if required;
- Placement of electricity poles, cables, transformers and meter boxes;
- Stockpiling and handling of gravel, sand and other construction materials; and
- Operation of trucks and earthmoving equipment.

These activities represent standard township servicing works and form the basis for assessing potential environmental impacts during the construction phase.

---

## 4 ALTERNATIVES ASSESSMENT

---

In accordance with the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN No. 30 of 2012), reasonable alternatives to the proposed activity were considered at a scoping level. The assessment of alternatives is intended to demonstrate that the preferred option represents the most environmentally and socially acceptable approach for achieving the project objectives.

---

### 4.1 NO-GO ALTERNATIVE

---

Under the no-go alternative, the proposed construction of bulk infrastructure and public roads associated with Andrewville Extension 1 would not proceed. As a result, the area would remain partially developed, with limited access to formal services such as water supply, sewerage, electricity, and properly constructed public roads.

The no-go alternative would perpetuate insecure land tenure, unplanned development, and reliance on informal infrastructure solutions. It would also fail to address existing socio-economic challenges within Maltahöhe, including the shortage of serviced residential erven and the need for structured urban growth. For these reasons, the no-go alternative is not considered viable.

---

### 4.2 PREFERRED DEVELOPMENT ALTERNATIVE

---

The preferred alternative is the proposed township layout and associated bulk infrastructure development as described in this report. This alternative enables the formalisation of Andrewville Extension 1 through the provision of serviced erven, secure land tenure, and improved access to basic services.

The development is located within the existing settlement footprint of Maltahöhe, thereby limiting urban sprawl and reducing pressure on undeveloped land. Potential environmental impacts associated with bulk infrastructure construction can be effectively managed and mitigated through the implementation of the Environmental Management Plan.

---

### 4.3 LAYOUT AND INFRASTRUCTURE ALTERNATIVES

---

No additional feasible layout or routing alternatives were identified at this stage. The proposed layout is constrained by existing settlement patterns, surrounding development, road access points, and established infrastructure networks. Minor adjustments to service alignments may occur during detailed design; however, these will remain within existing road reserves and public open spaces and will not materially alter the environmental footprint of the project.

---

## 5 ESIA APPROACH AND METHODOLOGY

---

The following section discusses the methodology used by UDA in assessing the site in terms of its strengths, weaknesses, opportunities, and threats and to then formulate a planning approach to prepare a layout that harnesses the strengths, accommodate the weaknesses, utilise the opportunities and avoid the threats identified. These also include the natural and social environment within which the project is set.

---

### 5.1 SITE INFORMATION AND TOPOGRAPHY

---

UDA conducted a site visit in 2008, and a follow-up visit in 2025 to identify existing structures, infrastructure, and topography, land uses, and assess the settlement's current functionality. To ensure accuracy in topographical mapping and aerial survey images, a registered land surveyor appointed by the Council surveyed the site.

---

### 5.2 NATURAL AND SOCIAL RECEIVING ENVIRONMENT

---

The assessment of the natural receiving environment involved orthophoto analysis, site visits, literature surveys, and leveraging extensive regional experience.

Data sources included:

- The Atlas of Namibia (Atlas of Namibia Team, 2022),  
Atlas of Namibia (Mendelsohn et al., 2002).

---

### 5.3 PUBLIC CONSULTATION

---

A public consultation campaign was conducted to ensure transparent and inclusive stakeholder engagement. As part of this process, statutory notices were published in two newspapers over successive weeks (refer to Annexure 6).

In addition, a community meeting was scheduled for 3 April 2025 at the Andrewville project site in Maltahöhe. The meeting was intended to provide information on the proposed project and to create an opportunity for community members to raise questions and concerns. Representatives from UDA and the Maltahöhe Village Council were present at the venue to facilitate the session.

## 6 BASELINE ENVIRONMENTAL AND SOCIAL CONDITIONS

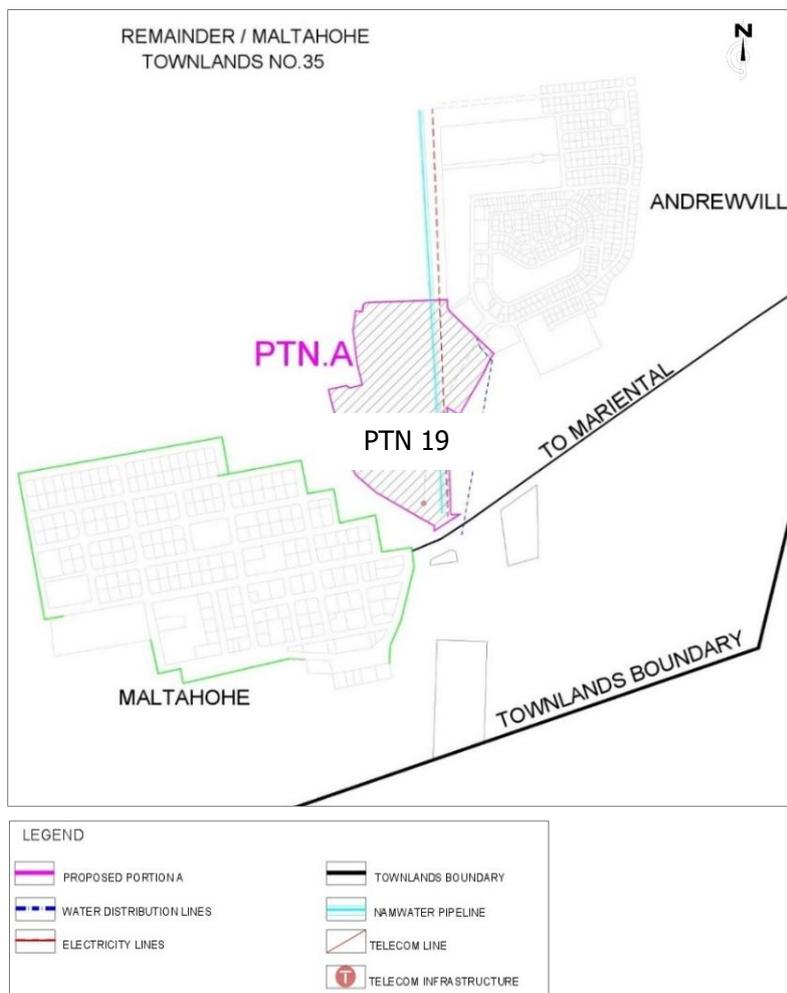
This section presents the environmental and social characteristics of the Andrewville Extension 1 project site and its surroundings. It establishes the baseline conditions against which project impacts will be assessed and management measures developed. The focus is on the site's location, ownership, land use, biophysical environment, and socio-economic context.

### 6.1 SITE INFORMATION AND TOPOGRAPHY

#### 6.1.1 Locality

Andrewville Extension 1 is situated on Portion 19 of the Remainder of Farm Maltahöhe Townlands No. 35, within the Maltahöhe Village within the Hardap Region, Namibia. The site is centred at approximate coordinates  $-24.83897^{\circ}$  S,  $16.9842^{\circ}$  E and covers an area of about 25.4 hectares. It lies between the existing Maltahöhe township to the east and Andrewville Proper to the west, placing the project within the built-up footprint of the settlement.

**Figure 3: Locality of the Andrewville Ext 1 within Maltahöhe**



The C19 trunk road runs directly south of the site, providing a vital regional link between Maltahöhe and Mariental. This road is used by residents, freight transport, and tourism traffic and therefore represents a key consideration in terms of traffic safety during construction. Local access to the site is provided via the D861 and internal village roads. The locality of the project site is illustrated in Figure 3.

---

### 6.1.2 Topography and Drainage

---

The site is relatively flat, with ground levels ranging between 1,345 m above sea level in the east and 1,343 m in the west, sloping gently towards a natural drainage line located near the western boundary. This streambed provides seasonal drainage but does not form part of a major watercourse. The generally level terrain is suitable for township development but requires careful stormwater management to avoid potential localised stormwater impacts during construction.

---

## 6.2 LAND USE

---

This section describes land use within and around the project site and highlights sensitive land-use interfaces that may be affected by the township extension.

### 6.2.1 Ownership and Current Land Use

---

The site is owned and administered by the Maltahöhe Village Council. The zoning is currently “undetermined”, although several existing land uses are evident. These include cleared areas with scattered shrubs, informal goat grazing, and approximately twelve Build Together residential houses constructed within the site. In addition, public facilities such as the Daweb Constituency Office are located on the property.

Figure 4 provides photographs of the existing land uses, showing the church and selected Build Together houses. These features illustrate the partial utilisation of the site prior to formal township registration and zoning.

**Figure 4: Current Land Use**



*Source: UDA Site Visit, 2025*

## 6.2.2 Surrounding Land Use

---

The project area is surrounded by a mix of land uses:

- North and East – residential erven forming part of the Maltahöhe township.
- West – Andrewville Proper, an area of informal settlement with scattered housing.
- South – the C19 trunk road, carrying local, freight, and tourism traffic.

These surrounding land uses place the project within the existing settlement structure of Maltahöhe, with direct interfaces to residential and public facilities.

## 6.2.3 Existing Services Context

---

The following existing services are available within the site:

- Road Access: The C19 provides the main regional connection, while internal access is possible through existing village roads.
- Water Supply: Maltahöhe sources bulk water from NamWater. Connection points for township extensions are available within proximity of the site.
- Electricity: NamPower distributes electricity locally, and the existing grid already extends into Maltahöhe.
- Sewerage and Sanitation: Parts of Maltahöhe are served by sewer reticulation and pump stations, while informal areas rely on septic tanks and pit latrines.
- Community Facilities: Government and constituency offices are present within the site, while schools and shops are located within short walking distance.

**Figure 5: Current Infrastructure**



(Source: UDA Site Visit, 2025)

---

#### **6.2.4 Sensitivities**

---

Given its location, construction activities may temporarily affect adjacent land uses, especially nearby residences, the Constituency Office, and traffic on the C19. Service connections will need careful planning to avoid disrupting existing supply during construction.

---

### **6.3 BIOPHYSICAL ENVIRONMENT**

---

This section outlines the natural features of the Andrewville Extension 1 site and surrounding area, including climate, soils, vegetation, and drainage. The purpose is to provide a baseline for assessing sensitivities that may influence or be affected by the proposed township development.

---

#### **6.3.1 Climate**

---

Maltahöhe falls within Namibia's arid to semi-arid climate zone, characterised by low rainfall (100–200 mm annually), high evaporation rates, and large differences between day and night temperatures. Rainfall occurs mainly between November and April, often in the form of localised thunderstorms. Prolonged drought years are common, with occasional heavy rainfall events (Atlas of Namibia; 2022).

According to the Atlas of Namibia, temperatures regularly exceed 30–33°C in summer (December–January), while winter (June–July) brings average daytime highs of about 20°C, with night-time lows often below 10°C. Sunshine levels are high year-round, with 10.5 hours/day in June and up to 14 hours/day in December.

Prevailing winds in Maltahöhe shift seasonally:

- Easterly winds dominate during the summer months (December–March).
- Northerly winds are most common in autumn and winter (March–August).
- Westerly winds prevail in the dry season (August–December), often mobilising dust on bare surfaces.

These wind and rainfall patterns create a sensitive environment where dust generation, soil erosion, and water scarcity are key factors for consideration during construction.

---

#### **6.3.2 Topography and Drainage**

---

The site is gently sloped, from around 1,345 m above sea level in the east down to 1,343 m in the west. Drainage follows this gradient towards a shallow seasonal streambed near the western boundary. This feature conveys runoff during heavy rainfall but does not form part of a major

perennial watercourse. While the area is generally not flood-prone, stormwater management will be necessary to avoid localised pooling or erosion.

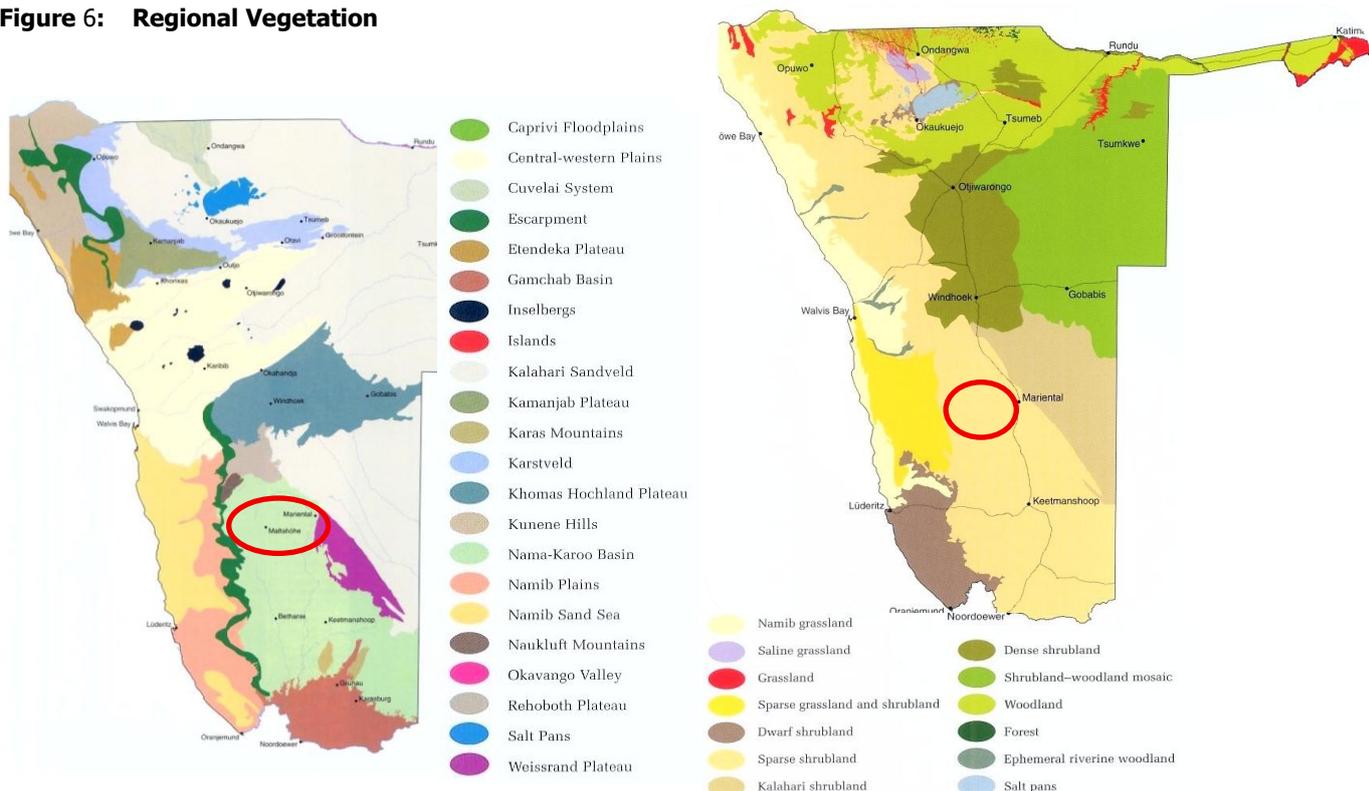
### 6.3.3 Soils

According to the Atlas of Namibia (2022), the project area lies within the Leptosols zone. These soils are shallow and stony, with limited water-holding capacity, and are highly vulnerable to erosion when disturbed. Localised patches of sandy Arenosols may occur, which are porous and prone to wind erosion. These characteristics highlight the importance of controlled clearing and effective stormwater management during construction.

### 6.3.4 Vegetation

Regionally, Maltahöhe falls within the Nama Karoo dwarf shrubland zone, with sparse cover of hardy perennial grasses, dwarf shrubs, and scattered Acacia species (Mendelsohn et al., 2002; Atlas of Namibia Team, 2022). Figure 6 shows the regional vegetation.

**Figure 6: Regional Vegetation**



(Source: Mendelsohn et al., 2002)

As shown in Figure 7 the project site itself is already disturbed by past clearance and informal grazing. Remaining vegetation is scattered and degraded, consisting mainly of shrubs and occasional small trees. A few protected species, such as Shepherd’s tree (*Boscia albitrunca*) and Camelthorn (*Vachellia erioloba*), may be present in low numbers. If any such trees must be removed during servicing works, permits will be required in terms of the Forestry Act (Act No. 12 of 2001).

**Figure 7: On Vegetation**



---

### 6.3.5 Protected Areas and Biodiversity Status

The project site is not located within, nor adjacent to, any proclaimed protected area. Given the disturbed condition of the land, it does not constitute a sensitive or intact habitat. However, vegetation clearance and soil disturbance must be carefully managed to prevent unnecessary loss of flora and to minimise erosion risks.

Within the Biological Environment segment, this report provides the key natural features of the project site and its surrounding environment, including climate, soils, vegetation, and drainage. The purpose is to provide baseline context for assessing environmental sensitivities that may influence or be affected by the township development.

---

### 6.3.6 Habitats on Site

The project site has experienced habitat alteration, leading to ecological degradation. Consequently, the site can no longer be regarded as pristine, and its ecosystem no longer functions fully at its natural level. It is more appropriately categorised as an impacted ecosystem rather than a natural environment.

---

### 6.3.7 Status of Protected Area

- **Habitats and Protected Areas**

The project site is already transformed and does not contain intact or sensitive habitats. No part of the site falls within a legally protected area (Atlas of Namibia, 2022).

- **Socio-Economic Conditions**

Maltahöhe has a population of approximately 3,464 residents (NSA, 2023). The town faces persistent socio-economic challenges, including high unemployment and limited access to serviced land. Informal settlements such as Andrewville Proper reflect the shortage of planned residential erven.

The Andrewville Extension 1 project is intended to improve access to formal housing and bulk services, strengthen long-term town planning, and support socio-economic development in Maltahöhe.

The project will also create short-term employment opportunities during the construction of bulk infrastructure.

### Key Sensitivities

Key sensitivities relevant to the project include:

- **Soils:** Loose, erosion-prone soils are susceptible to dust generation and runoff impacts during construction.
- **Traffic:** Construction activities may temporarily affect traffic volumes and safety on the C19 trunk road.
- **Noise and Dust:** Nearby residences and facilities may be affected by elevated dust and noise levels during construction.
- **Drainage:** Protection of the ephemeral streambed and natural runoff pathways is necessary to prevent potential localised stormwater impacts during construction.

## 6.4 KEY SENSITIVITIES:

**Table 6: Biophysical Environmental Key Sensitivities**

FEATURE	DESCRIPTION	SENSITIVITY	POTENTIAL IMPACT
<b>Soil:</b>	The soil type in the project area possesses a loose structure and is vulnerable to wind erosion.	Construction activities.	Increase in dust.
		Sandy porous soil structure.	Contamination of surface and ground water.
<b>Traffic:</b>	Construction activity increase will result in higher traffic volume.	Lack of formal traffic assessment.	Traffic congestion is expected during the construction phase, necessitating proper planning and management.
<b>Noise:</b>	Increased construction activity will lead to elevated noise levels.	Proximity of residences and businesses to construction sites.	Potential disruption due to increased noise.

---

## 7 STAKEHOLDER ENGAGEMENT

---

Public consultation is a key requirement of the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN No. 30 of 2012). The purpose of the stakeholder engagement process was to inform Interested and Affected Parties (I&APs) of the proposed project, provide access to information, and afford stakeholders an opportunity to register as I&APs and submit comments.

The stakeholder engagement process was conducted in a transparent and inclusive manner and is considered appropriate for a scoping-level assessment. See Annexure 6.

---

### 7.1 METHODS

---

The methods used during the public consultation to communicate with Interested and Affected Parties (I&APs) were as follows:

#### 7.1.1 Newspaper Notices:

---

Notices were published in two newspapers, *The Namibian* and *New Era*, for two consecutive weeks in March 2025. The notices provided a brief description of the proposed project and its location and invited members of the public to register as I&APs and attend the public meeting. One written submission was received during the consultation phase. Proof of advertisements and comments received are provided in Annexure 6.1.

#### 7.1.2 Background Information Document (BID):

---

A Background Information Document (BID) describing the proposed development and environmental assessment process was prepared and distributed electronically to all identified and registered I&APs.

#### 7.1.3 Site Notice:

---

A site notice was erected at the project location to inform the local community and passers-by of the proposed development and the public consultation process.

Notification to Surrounding Property Owners:

Surrounding property owners and community members were notified of the public meeting via SMS and email in March 2025. One I&AP registered during this process and submitted comments, which were forwarded to the Maltahöhe Village Council for consideration.

---

### 7.1.4 Village Council Notice Board:

---

Notices regarding the proposed development and public meeting were displayed on the Maltahöhe Village Council notice board.

### 7.1.5 Public Meeting:

---

A public meeting was scheduled for 3 April 2025 at 14:00 in Maltahöhe and was attended by representatives of Urban Dynamics Africa and the Maltahöhe Village Council. No members of the public attended the meeting. The absence of attendance was recorded and forms part of the consultation record (Annexure 6.5).

**Figure 8: Public Meeting in Maltahöhe**



---

## 7.2 REGISTERED STAKEHOLDERS

---

In accordance with the Environmental Impact Assessment Regulations, only individuals who formally requested registration as Interested and Affected Parties (I&APs) or who submitted written comments are included in the stakeholder register.

One individual submitted written correspondence during the public consultation period and was therefore recorded as a registered stakeholder.

The stakeholder register is provided in Annexure 6.3, and includes the name, affiliation (where provided), method of engagement, and date of registration.

---

## **7.3 SUMMARY OF COMMENTS / ISSUES RAISED**

---

One written submission was received during the public consultation process. The submission raised concerns related to community consultation, land-use planning, socio-economic integration, and the provision of community facilities.

The comment was formally acknowledged and forwarded to the Maltahöhe Village Council for consideration within the broader township establishment and implementation process.

The correspondence and the response issued by Urban Dynamics Africa (Pty) Ltd are included in Annexure 6.4.

---

## 8 IMPACT ASSESSMENT

---

This section presents a scoping-level assessment of the potential environmental and social impacts associated with the construction of bulk infrastructure and public roads for Andrewville Extension 1. The assessment identifies potential positive and negative impacts and considers their nature, extent, and manageability.

These impacts and strategies for dealing with them are discussed here, but given that this document is an application for environmental clearance, the measures dealing with their mitigation/enhancement are dealt with in detail in the Environmental Management Plan (EMP).

---

### 8.1 SUMMARY OF POTENTIAL IMPACTS

---

The planning of the alignment and construction of roads has the potential to cause environmental and social impacts. The following is a list of potential impacts identified through the scoping process:

#### 8.1.1 Benefits of the Project:

---

- Provision of formally serviced erven and improved land tenure security.
- Stimulation of economic development and providing new employment opportunities during construction;
- Improve health and safety of the residents.

#### 8.1.2 Potential Negative Impacts during Construction:

---

- Impact of dust;
- Impact of noise;
- Impact on traffic flow;
- Impact as a result of potential localised stormwater impacts during construction;
- Impact on the health and safety of workers; and
- Impact of waste.

---

## 8.2 POTENTIAL IMPACTS

---

### 8.2.1 Project Benefits:

---

**Provide for serviced erven:** The project will provide the community access to adequately planned erven with specified erf boundaries. The provision of service erven ensures that the residents have a formal and permanent land occupation and security of tenure.

**Stimulate employment creation and local economic development:** The development will lead to employment creation during the construction phase. By providing for employment within Maltahöhe, contribute to rates and taxes and spend money within the same economy.

**Stimulate health and wellness within Maltahöhe and the Hardap Region:** The site is not connected to water, electricity, or sewer services; however, there are connection points close to the site. The layout will provide much-needed water, electricity and sewer connections that are safe and in line with the layout. To further enhance the health and safety of residents in the plan includes formal roads that are safe and comply with planning standards. This will improve traffic flow within the township.

### 8.2.2 Potential Negative Impacts during Planning and Construction:

---

- **Impact of construction traffic:** Construction vehicles would need to haul the excavated soil to a disposal site and provide building materials and other supplies (i.e. fuel etc.) to the construction site, most of which could be delivered by truck. Construction vehicles are most likely to pass near erven and disrupt traffic flow within the project site and Andrewville Proper (although the exact access routes to the site are yet to be defined).
- **Impact of dust:** The movement of construction vehicles on bare soil is anticipated to generate excessive dust, posing potential health risks to both the surrounding community and construction workers. Dust pollution resulting from these activities can lead to respiratory issues and other health complications. Furthermore, the visibility impairment caused by dust can impact air quality, potentially affecting. To mitigate these adverse effects, preventative measures should be implemented to control dust emissions and safeguard public health and environmental quality.
- **Impact of potential construction noise:** Construction machinery creates substantial noise, and this will impact the surrounding community. Constant noise can cause stress and health impacts on nearby residents.
- **Impact of construction waste:** Solid waste is the expected source of waste at the construction site. If no construction Waste Management Plan (WMP) is in place to address

general and hazardous waste disposal, it can lead to water and soil pollution on the site and nearby water areas.

- **Impact on the health and safety of workers:** Construction activities always have potential risks for workers. Inadequate site management measures can expose workers to hazardous chemicals, dust, and noise. A lack of notices and signs within the area where deep excavation work is done can put workers' lives in danger.

These potential negative impacts during construction underscore the need for meticulous planning, proactive measures, and effective waste management. Addressing these concerns will not only ensure the safety of workers and the community but also contribute to responsible and sustainable construction practices.

---

## 8.3 DEALING WITH RESIDUAL IMPACTS

---

### 8.3.1 Residual Social Impacts:

---

Residual social impacts are expected to be low and manageable with the implementation of mitigation measures contained in the Environmental Management Plan.

### 8.3.2 Residual Environmental Impacts:

---

Residual environmental impacts associated with the project are expected to include the following:

- **Removal of protected trees during the planning and construction phases:** Not all protected trees can be accommodated within the layout. Mitigation measures should be included in the EMP.
- **Impact of dust and noise:** The development project will create dust and noise during the construction phase. This will be limited; methods to limit it are contained in the EMP.
- **Impact of construction traffic:** The project development will have an impact on traffic during the construction phase. To minimise the increase in transportation during the construction phase, mitigation measures to manage the vehicles on the construction site when services are included in the EMP provisions.
- **Impact of solid waste:** As mentioned before, solid waste is the expected source of waste at the construction site. Mitigation methods are contained in the EMP regarding a WMP for the construction site.

- **Health and safety:** During the construction phase, there will be a potential impact on the workers' health and safety due to their work environment. This will be limited, and methods to restrict it are contained in the EMP.

## 9 SUMMARY AND APPLICATION

### 9.1 PROJECT IMPACTS, AVOIDANCE MEASURES AND RESIDUAL IMPACTS

POSITIVE IMPACTS				
Potential Impact	Avoidance	Mitigation	Enhancement	Residual Impacts
<b>Stimulation of Local Economic Development and Employment</b>	Not applicable	Preference to employ local labour where feasible	Local procurement and use of local services during construction	Positive socio-economic impacts are expected during the construction phase through employment creation and expenditure within the local economy.
<b>Provision of Serviced Residential Erven</b>	Not applicable	Appropriate township layout and service provision	Formalisation of land tenure and access to municipal services	Long-term positive impacts including secure land tenure, improved access to services, and participation in the formal economy.
<b>Improved Health and Community Well-being</b>	Not applicable	Infrastructure designed to reduce environmental health risks	Improved accessibility and integration with existing town infrastructure	Positive residual impacts due to improved living conditions, pedestrian safety, and proximity to social services.

NEGATIVE IMPACTS				
Potential Impact	Avoidance	Mitigation	Enhancement	Residual Impacts
<b>Removal of Protected Trees</b>	Avoid removal where feasible	Identify protected trees, incorporate them into public open spaces and road reserves, and obtain permits where removal is unavoidable	Rehabilitation and landscaping where feasible	Residual impacts are expected where removal is unavoidable but can be managed through EMP measures and permitting.
<b>Dust and Noise During Construction</b>	Limit activities during sensitive hours	Implement dust suppression, noise control measures, and worker training	Good housekeeping practices	Residual dust and noise impacts are expected to be temporary and manageable through EMP implementation.
<b>Increased Construction Traffic</b>	Avoid unnecessary vehicle movement	Restrict construction traffic to daytime hours (07h00–18h00) and implement traffic management measures	Clear signage and access control	Residual traffic impacts are expected to be low to moderate and temporary.
<b>Health and Safety Risks to Workers</b>	Avoid unsafe working conditions	Apply occupational health and safety procedures and training	Safety awareness programmes	Residual risks are inherent to construction but manageable with compliance to safety standards.
<b>Construction Waste Generation</b>	Avoid poor waste handling practices	Implement a Waste Management Plan to prevent pollution	Waste segregation and proper disposal	Residual waste impacts are expected to be low with effective EMP implementation.

---

## 10 APPLICATION FOR ENVIRONMENTAL CLEARANCE

---

Findings from the scoping assessment indicate that the construction of bulk infrastructure and public roads associated with the Andrewville Extension 1 township will result in socio-economic benefits, including the provision of serviced erven, improved security of land tenure, and enhanced access to basic services.

Potential adverse impacts identified during the assessment include dust generation, noise, increased construction traffic, vegetation loss, health and safety risks, and construction-related waste. These impacts are localised, temporary, and manageable through appropriate planning and the implementation of mitigation measures contained in the Environmental Management Plan (EMP) (refer to Annexure 5).

Residual environmental and social impacts are expected to be low to moderate in significance and can be effectively managed through compliance with the EMP and relevant permitting requirements.

The proposed project complies with the Environmental Management Act, 2007 (Act No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN No. 30 of 2012). Based on the findings of this scoping assessment, it is recommended that the Environmental Commissioner issue an Environmental Clearance Certificate (ECC) for the proposed bulk infrastructure and road construction activities, subject to adherence to the Environmental Management Plan and all applicable conditions and permits.