ENVIRONMENTAL SCOPING ASSESSMENT STUDY

MARBLE PROCESSING PLANT AND RELATED ACTIVITIES

ERF 1509, EXTENSION 6, KARIBIB (ERONGO REGION)

11 DECEMBER 2020

URBAN Green
SUSTAINABILITY CONSULTANTS

PROJECT INFORMATION

STUDY PHASE	**Final Scoping Phase**
PROJECT TITLE	Marble Processing Plant and Related Activities
DEVELOPMENT LOCATION	Erf 1509, Extension 6, Karibib (ERONGO REGION)
COMPETENT AUTHORITY	Ministry of Trade and Industry Ministry of Mines and Energy
PROPONENT	Namibia Marble and Granite (PTY) LTD
ENVIRONMENTAL ASSESSMENT PRACTITIONER	Urban Green cc P O Box 11929 Klein Windhoek Telephone: +264-61-300 820 Fax: +264-61-401 294 E-mail: urbangreen@iway.na Website: www.urbangreenafrica.net

EXECUTIVE SUMMARY

Namibia Marble & Granite (PTY) LTD., the owner of Erf 1509, Extension 6, Karibib, has signed an agreement with Exclusive Marble Processing for the construction and operation of a marble processing plant at Erf 1509, Extension 6, Karibib.

Extension 6 is a mixed use extension to the town of Karibib earmarked for industrial and business activities of a larger scale and more of an industrial- and light industrial nature, hence the locality of the extension outside of town to the south west.

The raw marble will be supplied by Namibia Marble and Granite (PTY) LTD. from their mine (ML142) to Exclusive Marble Processing at Erf 1509, Extension 6, Karibib, who will be responsible for the processing of the marble into a variety of products and sale. ML142 is located approximately 25km to the south of Karibib Town along the MR77 district road within the Erongo Region.

The marble process plant entails the processing of raw marble blocks by means of an industry-specific process, which comprises of different components and stages with steps (i.e. cutting machine, microwave resining and polishing). The proposed development and activities require water and electricity, which is obtained from available resources from both the local authority (i.e. Karibib Town Council) and bulk suppliers (i.e. Namwater). The development includes a solar system, diesel generator and process water recycling system, taking the pressure off the natural resources and supply infrastructure.

The proponent (Namibia Marble & Granite (PTY) LTD.) commissioned this environmental assessment and appointed Urban Green cc to undertake the necessary study (i.e. Environmental Scoping Assessment), as prescribed by the Environmental Impact Assessment Regulations (Government Notice No. 30 of 2012), to enable an application for an Environmental Clearance Certificate with the Environmental Commissioner as required by Section 27(3) of the Environmental Management Act (No. 7 of 2007).

Considering the proposed development and associated activities during both the construction and operational phases, evaluated against the sensitivity of the receiving environment (i.e. build-up industrial urban township), the proposed development is expected to have minor impacts. The proposed development is best located within this particular township of Karibib, located outside of town and of an industrial- and light industrial nature.

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ABBREVIATIONS AND ACRONYMS

BID	Background and Information Document
BMP	Best Management Practices
CV	Curriculum Vitae
DEA	Department of Environmental Affairs
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
GG	Government Gazette
GN	Government notice
I&AP	Interested and Affected Party
IUCN	International Union for Conservation of Nature
MAWF	Ministry of Agriculture, Water and Forestry
MET	Ministry of Environment and Tourism
PPP	Public Participation Process
PV	Photovoltaic
RA	Roads Authority
ToR	Terms of Reference

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1 INTRODUCTION

This chapter of the report provides a background and motivation to the proposed development; the study's terms of reference, approach and methods applied; purpose of this report, the assumptions and limitations of the study, and opportunity to comment on this report.

1.1 DEVELOPMENT BACKGROUND

Namibia Marble & Granite (PTY) LTD., the owner of Erf 1509, Extension 6, Karibib, has signed an agreement with Exclusive Marble Processing for the construction and operation of a marble processing plant at Erf 1509, Extension 6, Karibib.

Extension 6 is a mixed use extension to the town of Karibib earmarked for industrial and business activities of a larger scale and more of an industrial- and light industrial nature, hence the locality of the extension outside of town to the south west.

The raw marble will be supplied by Namibia Marble and Granite (PTY) LTD. from their mine (ML142) to Exclusive Marble Processing at Erf 1509, Extension 6, Karibib, who will be responsible for the processing of the marble into a variety of products and sale. ML142 is located approximately 25km to the south of Karibib Town along the MR77 district road within the Erongo Region.

The marble process plant entails the processing of raw marble blocks by means of an industry-specific process, which comprises of different components and stages with steps (i.e. cutting machine, microwave resining and polishing). The proposed development and activities require water and electricity, which is obtained from available resources from both the local authority (i.e. Karibib Town Council) and bulk suppliers (i.e. Namwater). The development includes a solar system, diesel generator and process water recycling system, taking the pressure off the natural resources and supply infrastructure.

In accordance with the Environmental Management Act, (Act No. 7 of 2007) and within the framework of the Environmental Impact Assessment Regulations (2012), Urban Green cc has been appointed by the Proponent to undertake an environmental scoping assessment (ESA) and apply for an Environmental Clearance Certificate for the proposed marble processing plant.

1.2 NEED FOR THE PROPOSED DEVELOPMENT

This proposed development will be a secondary activity to the current primary activity of marble mining, whereby value is added to the raw material. Instead of the current practise of raw marble being exported, processed and then imported back into Namibia, this proposed development will include final processing of marble products at Karibib.

This business imitative of Namibia Marble and Granite (PTY) LTD. is in line with Vision 2030 whereby value is added to Namibia's natural resources and socio-economic development stimulated.

Final products will not only be sold in Namibia, but also exported within the SADC Region, as well as internationally, which again attracts foreign currency, generate much needed employment, and stimulate the local economy of Karibib.

1.3 TERMS OF REFERENCE

This environmental assessment's terms of reference is set by section 8 of the Environmental Impact Assessment Regulations (GN. No. 30 of 2012), provided for by Section 56 of the Environmental Management Act (No. 7 of 2007).

1.4 STUDY APPROACH AND METHODS

The study's approach and methods were guided by the Terms of Reference (Section 1.2) and the relevant legislation (Chapter 4).

The EA process is a planning, design and decision-making tool used to inform the relevant authorities and proponent what the consequences of their decisions will be in biophysical and social terms. As such, it identifies potential impacts (negative and positive) that the proposed development may have on the environment; as well as identifying potential opportunities and constraints the environment may pose to the proposed development.

The steps followed as part of this EA process are registration of application for an ECC and execution of the Scoping Phase (content of this report). A flowchart indicating the process being followed is presented by Figure 1.1 below.

1.4.1 REGISTRATION OF APPLICATION FOR ENVIRONMENTAL CLEARANCE CERTIFICATE

The first step followed as part of this EA process was to identify the listed activities, which the proposed project entails, as stipulated in the '*List of Activities that may not be undertaken without an Environmental Clearance Certificate'* (GN. No. 29 of 2012) and register the mentioned with the Office of the Environmental Commissioner.

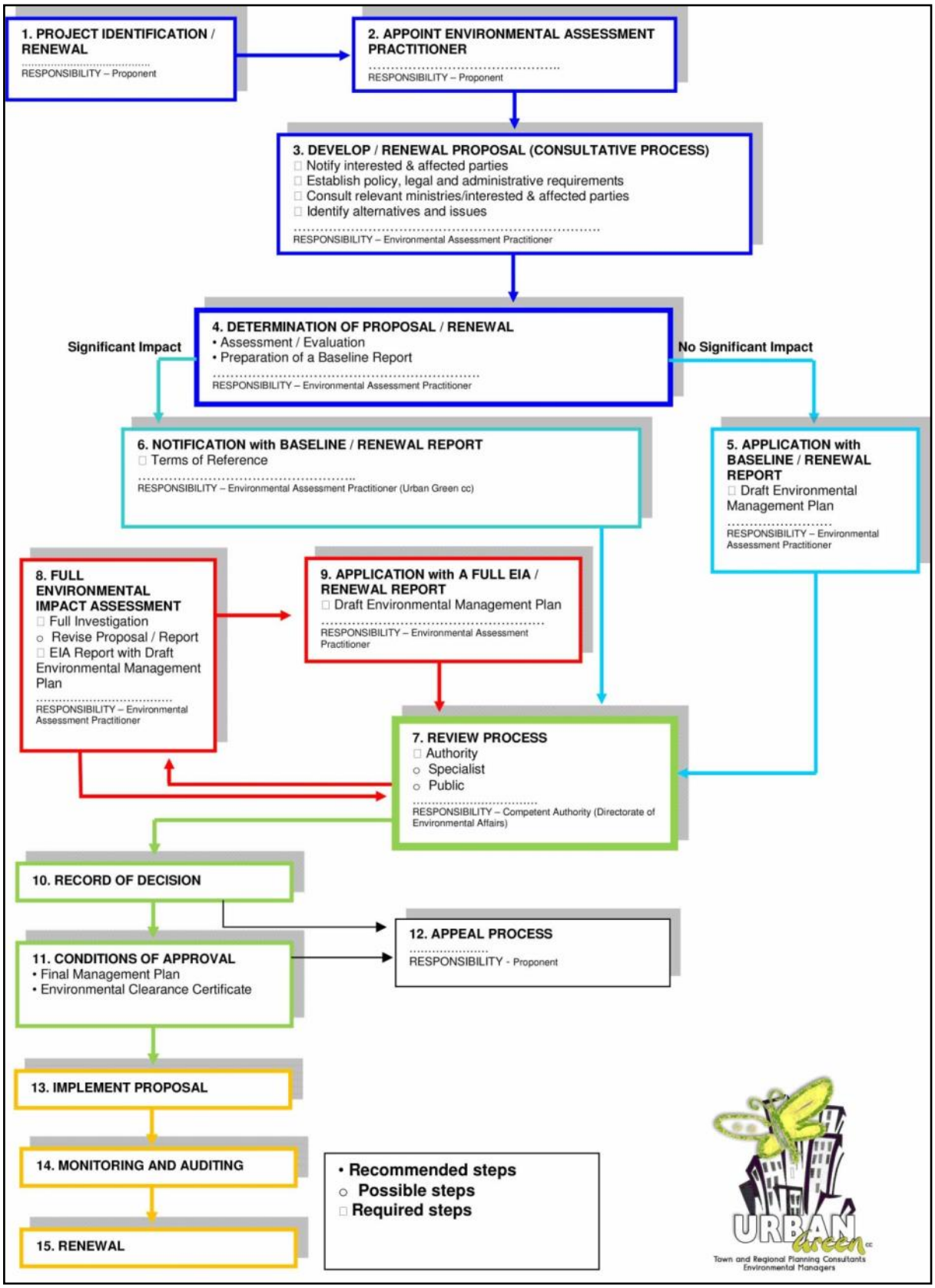


Figure 1.1: Diagrammatic representation of Namibia's Environmental Assessment process

The listed activities identified for which an ECC is required are listed below.

- **Activity 1(a) – Energy Generation, Transmission and Storage Activities**
  The construction of facilities for the generation of electricity *(solar & diesel power)*

- **Activity 1(b) – Energy Generation, Transmission and Storage Activities**
  The construction of facilities for the transmission and supply of electricity (solar & diesel power)

- **Activity 2.3 – Waste Management, Treatment, Handling and Disposal Activities**
  Temporary storage of waste *(marble off-cuts)*

- **Activity 3.3 – Mining and Quarrying Activities**
  Resource manipulation and related activities

- **Activity 8.6 – Water Resource Development**
  Construction of industrial wastewater treatment *(recycling of process water for cutting of marble)*

- **Activity 9.4 – Hazardous Substance Treatment, Handling & Storage**
  Storage of hazardous substances *(diesel)*

In accordance with Section 32 of the EMA, applications for an ECC should be submitted with the relevant Competent Authority, which for this development was identified to be the Ministry of Trade and Industry and the Ministry of Mines and Energy. Both the mentioned authorities were informed in writing on 21 September 2020 of the proponent's intention to apply for an ECC with the Environmental Commissioner (Appendix A).

1.4.2 SCOPING STAGE AIMS

The next step followed as part of this EA process was the scoping assessment stage, which entailed the identification of impacts and their significance, as well as public consultation (as prescribed by Regulation 21 to 24 of the EIA Regulations (GN. No. 30 of 2012).

1.4.3 SCOPING STAGE METHOD

The method followed during the scoping stage was as per requirements set by the Environmental Impact Assessment Regulations (GN. No. 30 of 2012), which included –

- Giving notice to all potential interested and affected parties (I&APs) of the application (ECC application);
- Public consultation as per Regulation 21 which included the -
  - Opening and maintaining a register of all I&APs;

  - Receiving and recording of all comments and representations received from I&APs following the public consultation processes;

- Preparing a scoping report by subjecting the proposed application to scoping by -
  - Assessing the potential effects of the proposed listed activities on the environment (specialist studies also formed part of this stage);
  - Assessing whether and to what extent the potential effects identified can be mitigated and whether there are any significant issues and effects that require further investigation;
  - Identifying feasible alternatives related to the development;
  - Setting the Terms of Reference for further investigations (if required);
  - Informing I&APs of the way forward in the EA process;
  - Ensuring informed, transparent and accountable decision-making by the relevant authorities; and
  - Inviting all registered I&APs to comment on the scoping report.
- Informing all registered I&APs of the decision of the office of the Environmental Commissioner.

1.5 PURPOSE OF THE FINAL SCOPING REPORT

This EIA report serves the purpose of providing information to the Competent Authorities and the Office of the Environmental Commissioner with the information necessary to make an informed decision with respect to the awarding or refusing of the application for an ECC associated with the proposed development.

1.6 STUDY ASSUMPTIONS AND LIMITATIONS

In undertaking the ESA and compiling of the scoping assessment report, the following assumptions and limitations apply:

- It is assumed that all the information provided by the proponent, the project engineers and authorities consulted is accurate and that those aforementioned have disclosed all necessary information available;
- No alternative site or development layout for assessment was provided;
- It is assumed that all permit or licence requirements, other than the ECC, associated with the development will be addressed as separate investigations and are not included in this EA process;

- It is assumed that there will be no significant changes to the development (see Chapter 3) or the affected environment (see Chapter 5) between the compilation of this report and implementation of the development that could substantially influence findings, recommendations with respect to mitigation and management, etc.;
- The EA process involved the assessment of impacts on the current conservation value of affected land and not on either the historic or potential future conservation value; and
- The assessment is based on the prevailing environmental (social and biophysical) and legislative context at the time of writing.

2 PROJECT TEAM AND EXPERTISE

2.1 ROLE PLAYERS

The role players in this project are set out in Table 2.1.

Table 2.1: Project role players

ORGANISATION	PROJECT ROLE
Department of Environmental Affairs	Decision-making authority for environmental authorisation
Ministry of Mines and Energy	Competent Authority
Ministry of Trade and Industry	Competent Authority
Namibia Marble and Granite (PTY) LTD	Proponent
Urban Green cc	Independent Environmental Consultant (EAP)
Urban Green cc	Public participation

2.2 EXPERTISE OF THE EAP

The qualifications and expertise of the environmental consultant, as required by section 8(a) of the EIA Regulations, are set out in Table 2.2 below. A detailed CV of the Environmental Assessment Practitioner (EAP) is attached as Appendix C.

Table 2.2: Qualifications and expertise of the environmental consultants

NAME	Mr Brand van Zyl
Responsibility on the Project	EAP; project management; public & stakeholder consultation; impact assessment and mitigation formulation; reporting and application for Environmental Clearance
Qualifications	M. Degree in Environmental Management; M. Degree Town and Regional Planning; Bachelor of Arts Urban Geography
Professional Registration	Namibian Council for Town and Regional Planners Member of the Green Building Council of South Africa
Experience in years	16
Experience	Brand van Zyl has been involved in various Environmental Impact Assessment studies throughout Namibia and of different kind.

3 DEVELOPMENT DESCRIPTION

This chapter provides a description of the proposed development, as presented to the EAP by the Proponent and Project Engineers.

3.1 LOCATION

Erf 1509, on which the processing plant will be constructed and operated, is located within Karibib Extension 6, a mixed use township located outside of town (south west) which is earmarked for large scale industrial and light industrial type of activities. Figure 3.1 below gives an indication of the locality of Erf 1509, Extension 6 in relation to the larger Karibib.

Figure 3.2 below gives an indication of where the processing plant will be constructed in relation to the other activities on Erf 1509, Extension 6.

3.2 PROPOSED DEVELOPMENT OVERVIEW

The 'proposed development' (i.e. processing plant) entails the construction and operation of a marble processing plant, which comprises of different components and stages with steps (i.e. industrial cutter machine, industrial microwave resining machine and industrial polishing plant), as well as supporting infrastructure services (i.e. diesel generator, solar plant & process wastewater recycling plant), as explained below. Figure 3.3 below gives an indication of the site layout of the various activities.

The larger part of the plant will be located within a building having the appearance of a warehouse. The extent of this building is 100m in length x 30m in width x 12m in height. The structure is a steel frame with concrete floor, cladded with bricks and corrugated iron sheets, similar to other structures within the area.

The proposed development has both an off-site component and an on-site component, as presented below.

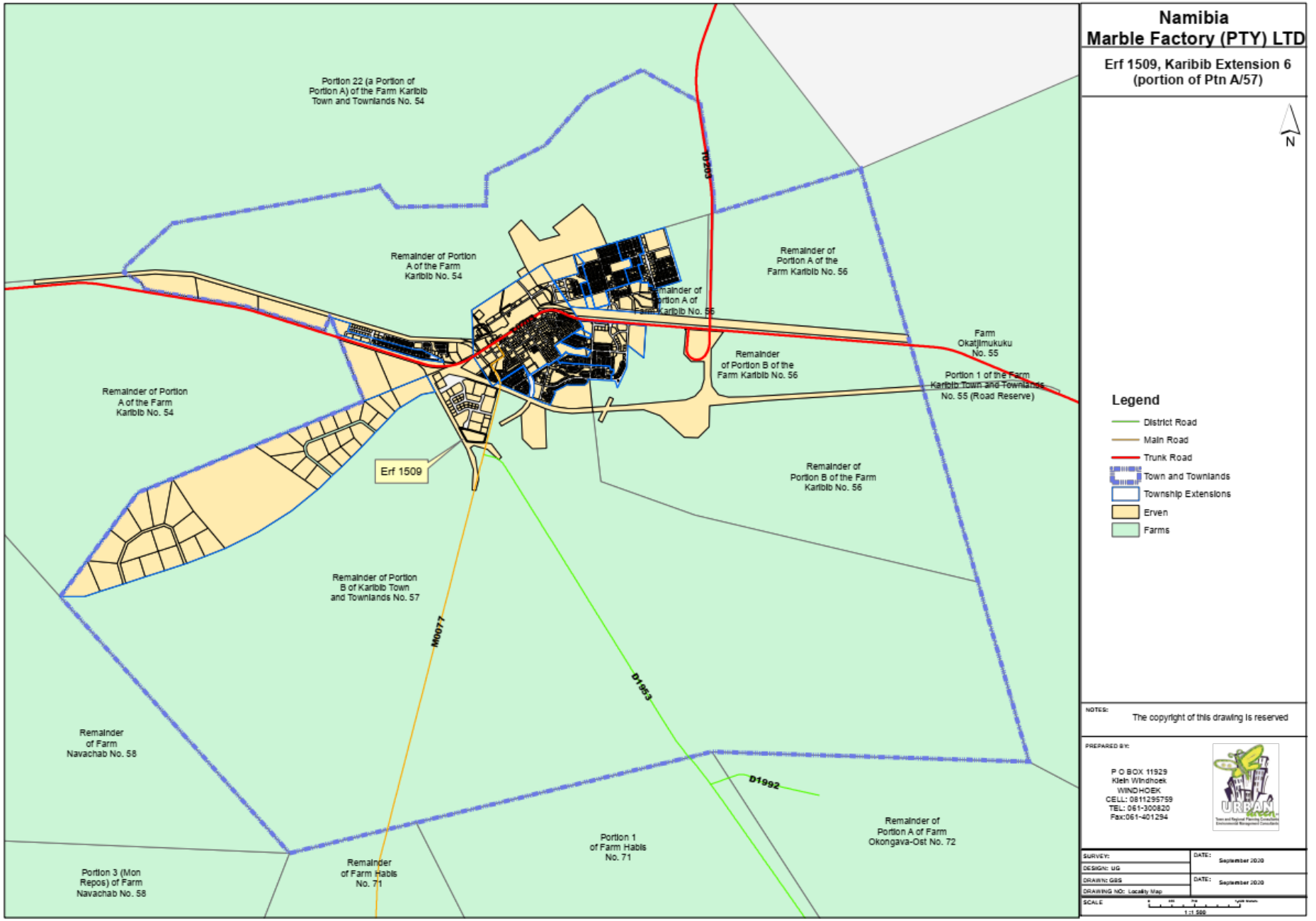


Figure 3.1: Locality of Erf 1509, Extension 6 in relation to larger Karibib Town

Figure 3.2: Locality of processing plant in relation to other activities on Erf 1509

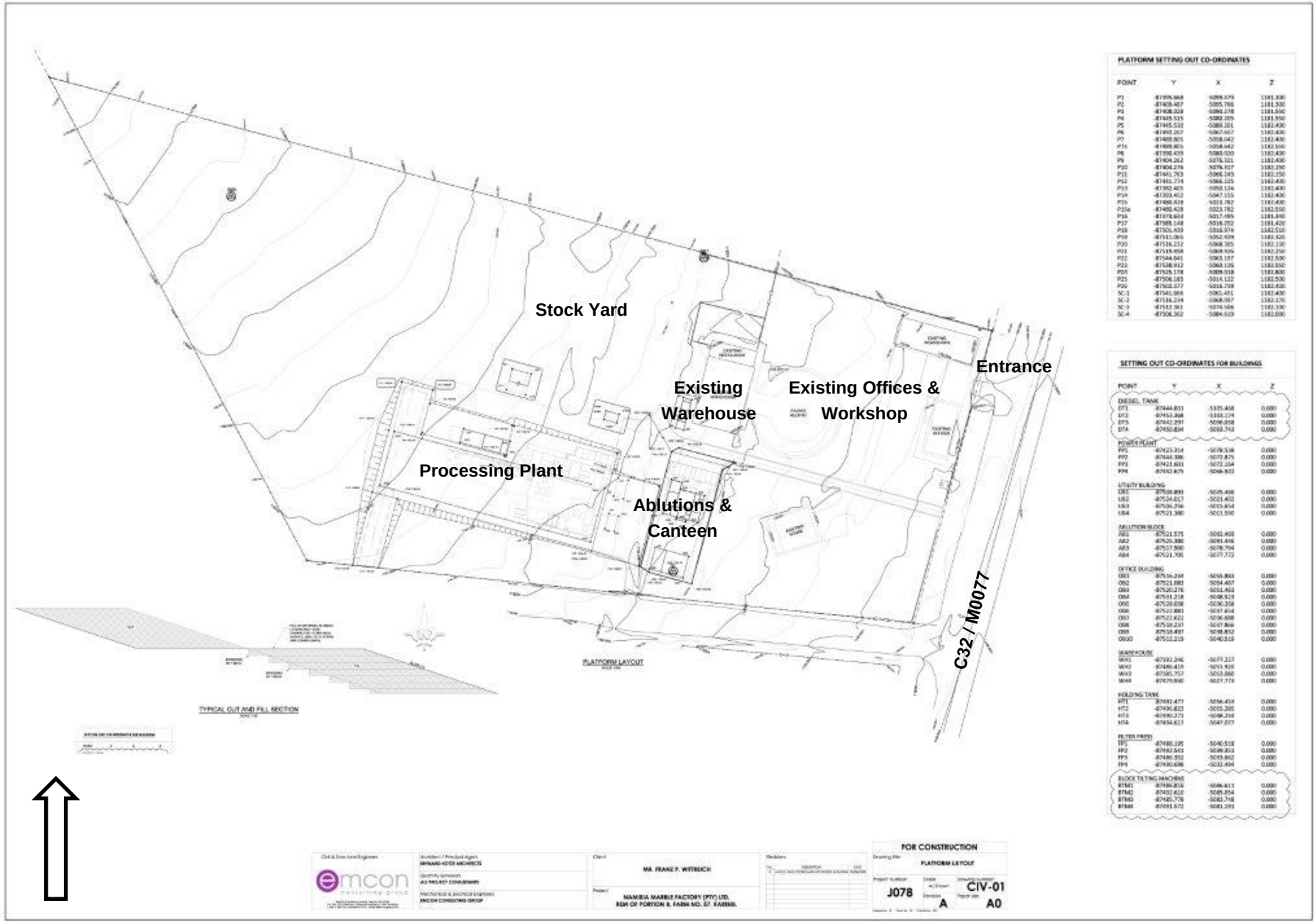


Figure 3.3: Site Layout

3.2.1 OFF-SITE COMPONENT

The off-site activities entail the –

- extraction of the marble blocks, which in this case is done at the NAMAGRA Mine (ML142) located 25km to the south of Karibib;
- the transportation of the marble blocks with trucks from the mine to the processing plant making use of the C32/M0077 road; and
- transportation of processed marble products to Walvis Bay harbour, larger Namibia and SADC Region making use of the existing national road infrastructure.

3.2.2 ON-SITE COMPONENT

This component includes the marble process plant and related activities (i.e. diesel generator; solar plant and process water recycling plant).

The processing of raw marble blocks is done by means of an industry-specific plant, in this case the Pedrini processing plant from Italy, which is the highest technology currently available. The proposed development and activities require water and electricity, which is obtained from available resources from both the local authority (i.e. Karibib Town Council) and bulk suppliers (i.e. Namwater). In support to the processing plant and in specific to ensure a smaller carbon footprint, the development includes a diesel generator, solar system and process water recycling system, taking the pressure off the natural resources and supply infrastructure.

The activities taking place on-site are the -

- arrival and offloading of marble blocks from trucks on-site by means of forklifts or cranes;
- storage of the marble blocks outdoors at the stock yard;
- movement and handling of the marble blocks with cranes from the storage area to the processing plant, where the block is placed on a block carrier trolley ensuring easy movement of the block throughout the entire processing plant. The processing is taking place within a single facility forming an integrated chain of multiple steps/activities. The processing steps entails -
    - *diamond wire cutting* – marble cutting is done outdoors by means of a multi wire stationary cutter machine (see Photo 3.1), which consists of multiple diamond wires cutting the marble block into multiple vertical slabs of about 1.8m (width) x 2m (height) x 1.5cm (thickness). For purpose of easy and effective cutting, the marble block and diamond cutters are continuously wetted with water, which is treated and recycled for reuse (see point 3.3.5);
    - *grinding* – slabs are individually grinded to remove excess material and ensuring a flat surface;

- *pre-polishing and washing* - polishing entails a process of removing material and producing a desired dimension, surface finish or shape, which is done by means of an automated machine fitted with multiple rotor spindles with polishing plates (see Photo 3.2). Once polished, the slabs are washed before entering the drying section. Water is again used during this process, which is treated and recycled for reuse (see point 3.3.5);
- *drying* – by making use of powerful dryers the washed marble slabs are dried;
- *microwave resination* – resin is manually applied to each slab to fill the cracks and then enters a microwave oven which increase the abrasion resistance of the slabs (see Photo 3.3);
- *final polish* – this last step in the process entails the application of a high quality polish finish to the marble slab;

- storage of finished slabs within warehouse for packaging and distribution; and
- loading and transportation to client, either via Walvis Bay Harbour or internal national road network.

Photo 3.1 – View of diamond multiple-wire cutting machine

Photo 3.2 – View of pre-polishing and washing

Photo 3.3 – View of microwave resining

3.3 SUPPORT INFRASTRUCTURE AND SERVICES

This section deals with the infrastructure and supply of services of the proposed Marble Processing Plant.

3.3.1 POTABLE WATER DEMAND & SUPPLY

Bulk potable water, estimated at 6m³/month, will be supplied via the existing water network from the Karibib Municipality, which will be used for administrative purpose (i.e. offices, toilets, showers).

3.3.2 RAW WATER DEMAND & SUPPLY

Raw water, estimated at 312m³/month, will be supplied via the NamWater network from Swakoppoort Dam, which will be used for the processing plant.

An estimated 280m³/month of the 312m³/month will be recycled water and reused at the processing plant.

3.3.3 ELECTRICITY DEMAND & SUPPLY

Electricity will be supplied to the factory by means of a diesel (900kW) / solar (350kWp) hybrid plant, while the offices and other facilities will be supplied from the grid-tied solar system.

Diesel will be stored on-site in a 23,000l diesel tank within a bunded area to be serviced by Total. The solar PV installation is fitted to the roofs of the buildings.

3.3.4 WASTE WATER (SEWAGE) SUPPLY & TREATMENT

Waste water originating from the toilets, showers and kitchens will be diverted to two on-site conservancy tanks (i.e. 60m³ & 60m³). The conservancy tank will be pumped on demand by the Karibib Municipality and waste dumped at the wastewater treatment plant of the Karibib Municipality.

3.3.5 WASTE WATER (PROCESS WATER) SUPPLY & TREATMENT

Waste water originating from the cutting and polishing processes will enter an on-site recycling treatment plant where 90% of the water will be cleaned for reuse in the same process.

3.3.6 PROCESS WASTE (OFF-CUTS & PROCESS DUST) SUPPLY & TREATMENT

Marble off-cuts, which will be generated during the cutting process, will be temporarily stored on-site and removed to Namagra's mining site (ML142) where the off-cuts will be stored for future rehabilitation purpose of the mining area.
The dried dust that results from the recycling of the process waters is packed in bags, temporarily stored on-site and removed to Namagra's mining site (ML142) where the dust will be stored for future rehabilitation purpose of the mining area.

3.3.7 GENERAL WASTE

Waste generated at the offices and workshops will be collected on-site and removed by the Karibib Municipality on a weekly basis and dumped at the municipal dump site.

3.3.8 ACCESS & ROADS

Accesses to Erf 1509, Extension 6, Karibib, will be obtained from the existing eastern entrance of the C32 / M0077 road (see Figures 3.1 to 3.3 above).

The proposed development is estimate to generate and additional 3 trucks per week only. For the rest of the national road network, an estimated 2 trucks per month from Karibib to Walvis Bay is expected.

3.4 CONSTRUCTION PHASE

Some of the typical activities associated with construction of the Marble Processing Plant include:

- Setting-up of a temporary –
    - construction yard;
    - site office and parking area;

  - workshop and stores;
  - batching area;
  - ablution facilities;
  - solid waste disposal facility;
  - stockpile area; and
- Transportation of construction materials as well as construction labourers;
- Possible excavations and earth moving (i.e. trench digging), with the associated construction machinery, to prepare the site for construction;
- Pouring of concrete and brick work;
- General carpeting work (roof trusses etc.);
- General steel welding work;
- Installing sewer lines and other utilities (electrical, plumbing etc);
- Generation of construction waste, temporary storage and removal from site;
- Usage of water for daily construction activities and generation of wastewater; and
- Post-construction rehabilitation of disturbed area.

3.5 OPERATIONAL PHASE

Activities associated with the operational phase, but not necessarily limited to, are:

- Traffic movement to and from the site;
- Generation of dry- (dust & off-cuts) and wet waste (process waters), the temporary storage thereof and removal;
- Noises associated with this activity (trucks; cranes); and
- Resource consumption (i.e. electricity & water).

3.6 SOCIO-ECONOMIC CONTRIBUTION

The proposed development is expected to have a direct and indirect positive socio-economic impact, especially during the current poor economic times. These positive impacts can briefly be summarised as –

- Employment and skill transfer during both the construction phase and the operational phase;
- Community and local socio-economic upliftment; and

- Increased income generation for local entrepreneurs and service providers providing services/supplies to the construction and operations process.

4 LEGAL AND REGULATORY REVIEW

For environmental protection and sustainable renewable resource management to the benefit of all, legislation from different spheres under control of different ministries have been adopted and enacted by parliament. In support to the goal of sustainable renewable resource management, various international treaties and conventions have also been agreed to by Namibia.

There are several sectoral laws that fall under the general rubric of environmental laws. Sectoral laws are generally specific and apply to sectors such as forestry, water, mining and so forth. Any development, such as this, is expected to have certain impacts and would therefore have to comply with some or other legislative requirement/s before commencement.

This chapter provides an overview to the legislation that is applicable to both the assessment process and the various activities making up the Marble Processing Plant development. It is accordingly divided into: (i) the legal framework for environmental management in Namibia; (ii) national sectoral legislative requirements applicable to the activities of the development; and (iii) other relevant legislation and approvals required for the commencement of the development.

4.1 NAMIBIAN LEGAL FRAMEWORK FOR EIA

Several Namibian legislation and policies have environmental considerations with respect to the proposed development.

The aforementioned instruments accounting for the legal framework for conducting an environmental assessment is listed in Table 4.1 below.

Table 4.1 Legislation guiding the EIA

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
ENVIRONMENTAL ASSESSMENT LEGAL FRAMEWORK		
The Namibian Constitution (1990)	Article 95 (1) states that "*the State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at… maintenance of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of natural resources on a sustainable basis"* Article 100 stipulates that all natural	The development should support the provisions of the Namibian Constitution

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
	resources are vested in the state, unless otherwise legally owned. The use of such resources is only allowed within reasonable limits and beyond such limits, permission should be obtained from a competent authority responsible for the use and governance of the concerned natural resources.	
Environmental Management Act (No 7 of 2007)	Section 3(2) of the EMA provides a set of principles that give effect to the provisions of the Namibian Constitution for integrated environmental management. Section 27(3) stipulates that no party, whether private or governmental, can conduct a listed activity without an ECC obtained from the Environmental Commissioner. Section 40(1) stipulates that an ECC remains valid for a period not exceeding three years, subject to cancellation or suspension.	The development should adhere to the principles provided in the EMA. An ECC should be obtained for the development. The proponent should renew the ECC (if granted) every three years.
EIA Regulations 2012 (GG No. 4878 GN No. 29 and 30)	Provides for the process to be followed in undertaking an environmental assessment, stipulating particular requirements with regards to public consultation, the identification of impacts and establishing the significance thereof, as well as the content of an environmental scoping report. Of particular interest is the transfer of an ECC, which is regulated by section 20 of the EIA Regulations.	The EA process should be undertaken as prescribed in the EIA Regulations. Transfer of the ECC should be done as per the requirements, at the time when so required.

4.2 NAMIBIAN SECTORAL LEGISLATIVE REQUIREMENTS

A number of Namibian legislation and policies have environmental considerations in respect of the proposed development, as listed in Table 4.2 below.

Table 4.2 Cross-sectoral legislation applicable to the development

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
NATIONAL SECTORAL LEGISLATION		
Water Act No. 54 of 1956, as amended	Makes provision for a number of functions pertaining to the management, control and use of water resources, water supply and the protection of water resources. Of importance is that the Act - • Prohibits the pollution of underground and surface water bodies. • Liability of clean-up costs after closure / abandonment of an activity.	The proponent should ensure that water use during the construction- and operational phase is as sustainable as possible and that no pollution of any above and/or below ground water resource takes place.
Soil Conservation Act No. 76 of 1969, as amended	Prevention and combating of soil erosion; conservation, improvement and manner of use of soil and vegetation, and protection of water sources.	Topsoil should be stockpiled where sand is mined for building purposes Vegetation along the banks of a watercourse should not be removed, without the relevant permits
Hazardous Substances Ordinance No. 14 of 1974, as amended	The Ordinance applies to the manufacture, sale, use, disposal and dumping of hazardous substances, and is administered by the Minister of Health and Social Services. Its primary purpose is to prevent hazardous substances from causing injury, ill health or the death of human beings.	During the construction and operation phases, any hazardous waste needs to be handled, stored and disposed of in a responsible manner and at appropriate waste sites.
Atmospheric Pollution Prevention Ordinance No 11 of 1976, as amended	Provides for the prevention of the pollution of the atmosphere. Part IV of this ordinance deals with dust control and provides for the proclamation of dust control areas.	Excessive dust emissions should be avoided as it could be categorised as causing a public nuisance under common law.
Public Health Act No. 36 of 1919, as	Section 119 states that “no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied	The Proponent has a general obligation not to cause any nuisance, which

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
amended Health and Safety Regulations GN 156/1997 (GG 1617)	by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	may have an implication on human health
Labour Act No. 11 of 2007, as amended	The Labour Act (No. 6 of 1992), the New Labour Act (no. 11 of 2007) and Government Notice 156 of 1997: Labour Act, 1992: Regulations Relating to the Health and Safety of Employees at Work, governs working conditions of employees. These regulations are prescribed for among others safety relating to hazardous substances, exposure limits and physical hazards. Special consideration must be given to: • Chapter 3: Welfare and Facilities at Work-Places • Chapter 4: Safety of Machinery • Chapter 5: Hazardous Substances Chapter 6: Physical Hazards and general provision	The Proponent (including their appointed contractors) needs to comply with health and safety regulations pertaining to the health and safety of employees during construction. Operational activities should not result in any potential negative health implications to the residents and/or larger community.
Road Traffic and Transport Act 52 of 1999 and its 2001 Regulations, as amended	Provides for the control of traffic on public roads and the regulations pertaining to road transport, including the licensing of vehicles and drivers. Part 5 of the 2001 Regulations lays out detailed provisions pertaining to vehicle loads – i.e. types of loads and the appropriate manner in which loads for different vehicle classes should be carried.	All personnel and vehicles active during the construction phase should be appropriately licensed. Construction materials transported/delivered to the construction site should adhere to the requirements of the 2001 Regulations – i.e. should note exceed limits stipulated and should be transported in a safe manner.
National Heritage Act (Act 27 of 2004), as amended	• The Act requires the identification of cultural and archaeological sites within the study area, registration and protection thereof.	All protected heritage resources (e.g. human remains etc.) discovered, need to be reported immediately to the National Heritage Council (NHC) and require a permit from the

STATUTE	PROVISIONS	DEVELOPMENT IMPLICATIONS
		NHC before they may be relocated. Heritage resources need to be considered by a heritage specialist.

4.3 PERMITS, LICENCES AND/OR APPROVALS REQUIRED

The following permits and/or licenses (Table 4.3) should be obtained for the development.

Table 4.3 – Permits, licenses and/or approvals that may also be required

Activity	Type of Permit / License	Legislation / Institute
Water provision	Approval obtained	NamWater
Access from the C32 / M0077	Approval obtained/Existing Access	Roads Authority
Removal of protected and indigenous species	Permit required if protected trees will be removed	Forest Act (No. 12 of 2001) & Nature Conservation Ordinance No. 4 of 1975, as amended. Ministry of Agriculture, Water and Forestry; Directorate of Forestry.
Storage of more than 600 litres of diesel on site (if applicable)	Consumer Installation Certificate required of the particular volume will be stored on-site	Petroleum Product and Energy Act (Act No. 13 of 1990), as amended. Ministry of Mines and Energy

5 DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter describes the details pertaining to the site on which the proposed development will take place and surroundings.

This chapter provides the basis for assessing the likely negative and positive impacts that the proposed development might have on the receiving environment (e.g. natural and social), as well as the significance thereof, which again will inform the applicable mitigating measures to be applied during the design stage, construction and operation.

5.1 LOCATION

The proposed development will take place on Erf 1509, Extension 6, located within the town of Karibib, a small mining town located to the central-eastern parts of the Erongo Region, which again is located to the west of the Khomas Region. Figure 3.1 above gives an indication of the locality of Erf 1509, Extension 6 in relation to the larger Karibib.

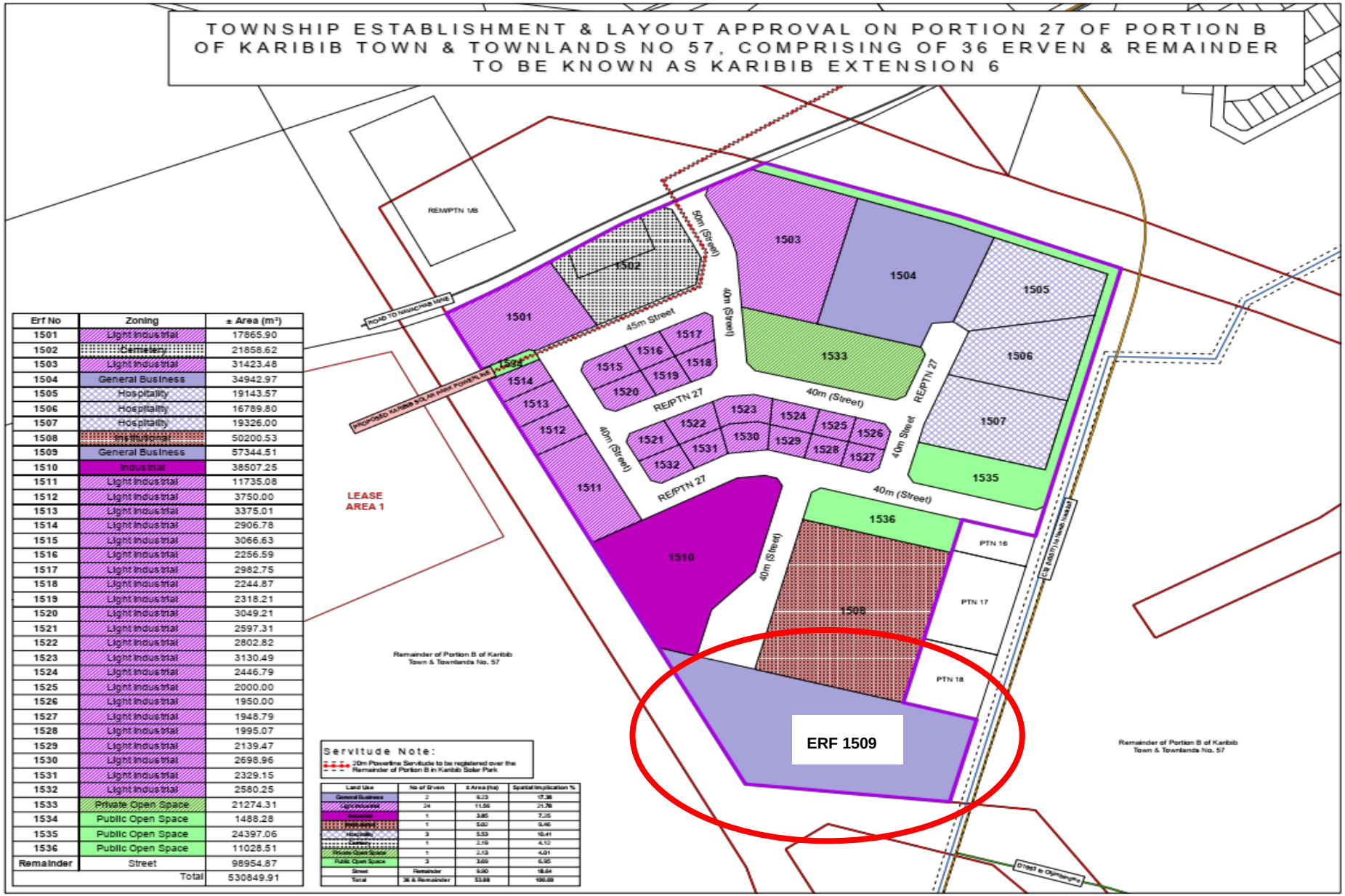
5.2 BUILD-UP ENVIRONMENT

Erf 1509, Karibib, the directly affected environment, is a mixed use township (Extension 6) located outside of town to the south west (see Figure 3.1), which is earmarked for large scale industrial and light industrial type of activities. A variety of land uses are provided for of which 'light industrial' land use dominates, as can be seen from Figure 5.1 below.

Extension 6 is currently predominantly undeveloped, as can be seen from Figure 5.2, with only the southern part already developed. The larger surroundings are still undeveloped and is characterised by large open areas, which in the near future will change as more and more activities locate within Extension 6. The future by-pass passing through Karibib will also bring a change to the surroundings.

The other activities, adjacent to Erf 1509, Karibib are all industrial like activities with supporting offices (see Photo 5.1). The current sense of place is thus a mixture of industrial and open areas as depicted by the aerial image in Figure 5.2 below.

Photo 5.1 – View of build-up industrial like activities & buildings



Erf No	Zoning	± Area (m²)
1501	Light Industrial	17865.90
1502	Cemetery	21858.62
1503	Light Industrial	31423.48
1504	General Business	34942.97
1505	Hospitality	19143.57
1506	Hospitality	16789.80
1507	Hospitality	19326.00
1508	Institutional	50200.53
1509	General Business	57344.51
1510	Industrial	38507.25
1511	Light Industrial	11735.08
1512	Light Industrial	3750.00
1513	Light Industrial	3375.01
1514	Light Industrial	2906.78
1515	Light Industrial	3066.63
1516	Light Industrial	2256.59
1517	Light Industrial	2982.75
1518	Light Industrial	2244.87
1519	Light Industrial	2318.21
1520	Light Industrial	3049.21
1521	Light Industrial	2597.31
1522	Light Industrial	2802.82
1523	Light Industrial	3130.49
1524	Light Industrial	2446.79
1525	Light Industrial	2000.00
1526	Light Industrial	1950.00
1527	Light Industrial	1948.79
1528	Light Industrial	1995.07
1529	Light Industrial	2139.47
1530	Light Industrial	2698.96
1531	Light Industrial	2329.15
1532	Light Industrial	2580.25
1533	Private Open Space	21274.31
1534	Public Open Space	1488.28
1535	Public Open Space	24397.06
1536	Public Open Space	11028.51
Remainder	Street	98954.87
	Total	530849.91

Figure 5.1 Land use plan of proposed Extension 6, Karibib

Figure 5.2: Aerial image of the site and surroundings

The site itself, Erf 1509, accommodates existing buildings, located to the east along the C32 / M0077 road (see Figures 3.2 & 3.3, and 5.2 above), while the western part has not been developed.

Since December 2012 when the property was formally fenced off there has been various activities taking place on the property and has since then been heavily disturbed due to the nature of the activities being carried out on the property. The extent of disturbance that has already taken place can clearly be seen in the images below (Photos 5.4 and 5.5).

Photo 5.1 – View of the north-western part of the Erf

Photo 5.2 – View of the south-western part of the Erf

The processing plant and related activities will be constructed on top of this already disturbed western area.

5.3 BIOPHYSICAL ENVIRONMENT

5.3.1 CLIMATE

The study area and larger surroundings are located within a semi-arid environment. Annual average rainfall varies between about 100 and 150 mm, with a clear increasing trend eastward (Mendelsohn, Jarvis, Roberts and Robertson, 2002). Rainfall occurs almost entirely in summer (November to February), with the winter months (May to August) usually being dry. The study area is characterised by high evaporation and a large temperature range. The prevailing wind direction is southwest.

5.3.2 TOPOGRAPHY

The topography of the larger area, i.e. Karibib and surroundings, can be described as fairly flat with some outcrops, having a above ground water flow towards the north-west.

The site itself, Erf 1509, has a flat topography with a slight fall towards the north-west.

5.3.3 GEOLOGY AND SOILS

The geology around the town of is predominantly characterised by rocks of the Damara Sequence (Mendelsohn, Jarvis, Roberts and Robertson, 2002). The main types of rock found in and around Karibib are schists, limestone and dolomite rocks. (Stubenrauch Planning Consultants, 2016).

Petric calcisols are the dominant soil type in and around Karibib. These soils are shallow but relatively fertile and support a relatively diverse range of plant species (Mendelsohn, Jarvis, Roberts and Robertson, 2002). The perennial and annual vegetation supported by these soils are sufficient to sustain commercial livestock farming activities in the area.

5.3.4 GROUNDWATER

The hydrogeological units in the area comprises of limestone, dolomite and marble. Fractured or karstified aquifers are of moderate groundwater potential and high yields can be found at selected targets like fracture zones and karstified contact zones. Some of these moderate and high yielding aquifers are located along the ephemeral rivers as evidenced by the extant boreholes along the banks of the Khan River near Usakos, 30km to the west. Others are located near rocky outcrops such as the one located approximately 10 km to the east of Karibib on Farm 55 (Okatjimukuju).

The regional groundwater potential is of low to moderate yield. The low yield could be explained by the presence of some Swakop Group (Damara Sequence) aquifers that generally have low groundwater potential. The main aquifer in the Karibib area is the fractured and slightly karstified, marble band of Karibib Formation.

5.4 SOCIO-ECONOMIC ENVIRONMENT

The Erongo Region is located in the central western areas of Namibia including the central coastal areas.

5.4.1 POPULATION STATISTICS

Based on the latest national census results (National Statistics Agency (NSA), 2011), the total population for Karibib is approximately and 3 583 respectively. The populations of Karibib have increased by approximately 38% from 2001 to 2011. The annual growth rate for the Erongo Region is estimated to be 3.4 % based on the population growth between 2001 and 2011. The percentage increase in the Erongo Region's urban population between 2001 and 2011 is slightly lower than the national average (approx. 43%). However, the annual growth rate for the Erongo Region is significantly higher than the national average (1.4%).

5.4.2 ECONOMY

Some of the current economic activities taking place in the areas in and around Karibib include a mix of mining (large and small scale), commercial livestock farming and to a lesser extent game farming. In terms of mining, the most significant activities include the open pit Navachab gold mine and several other larger scale marble quarries.

According to the NSA (2011), the percentage of the total of residents in Erongo of working age (15-59 years) in 2011 was 67%. 79% of these are in the labour force. 30% of those in the labour force are unemployed, which is lower than the national percentage of 37%. When these statistics are applied to the total population for Karibib it looks as follows:

- The working age population for Karibib and Usakos are approximately 3 438 and 2 401 respectively;

- The labour force population for Karibib and Usakos are approximately 2 716 and 1 896 respectively; and

- The unemployed portion of the labour force population for Karibib and Usakos are approximately 815 and 569 respectively, while the employed portions are approximately 1 901 and 1 328 respectively.

Mining, tourism and to a lesser extent agriculture are the main sources of income for the project area. The agricultural activities consist mostly of livestock farming.

5.5 ARCHAEOLOGY AND CULTURAL SIGNIFICANT SITES

Detailed archaeological site distribution data are only available for a few parts of the country. High-density survey data is mostly available for the areas surrounding the Spitzkoppe, Erongo Mountains and the Brandberg (Kinahan, 1990).

The history of the area surrounding Karibib involves that of hunter-gather settlement during the Later Stone Age (during the last 4000 years), with gradual shifts toward pastoral settlement with the introduction of domestic livestock (Kinahan, 1990).

The history of the town dates back to the late 1890s to early 1900s. Historically significant sites within Karibib include a railway station and a church dating back to the early 1900s (Allegemeine Zeitung, 2013).

During past excavations that were undertaken at the site, no remains of any heritage artefacts were found. The processing plant and related activities will be constructed on top of this already disturbed area to avoid any possible impact/s.

5.6 SERVICE INFRASTRUCTURE

5.6.1 TRANSPORT INFRASTRUCTURE

Karibib is located along the B2 trunk road and TransNamib railway line between Okahandja and Swakop. The B2 carries large traffic volumes through Karibib and Usakos and is considered to be a significant trade route, locally, nationally and internationally. Goods and commuters are transferred along the railway line, although not to the same extent as the road usage.

The site, Erf 1509, is located adjacent west of the C32 / M0077 road, a gravel road providing access in between Karibib and the village of Otjimbingwe. Various other activities, i.e. tourism, farming and mining, are located along the C32 / M0077.

5.6.2 ELECTRICAL INFRASTRUCTURE

Electricity is supplied by NamPower and the Erongo Regional Electricity Distributor (ErongoRED).

5.6.3 WATER INFRASTRUCTURE

Karibib is located within a water scarce environment. NamWater supplies 100% of the Karibib potable demand from the Karibib Water Treatment Plant (NamWater, 2013). The plant's water source is the Swakoppoort Dam.

Mines and farmers in and around Karibib and Usakos abstract groundwater for their respective purposes.

The site, Erf 1509, is linked with the water supply network of the town of Karibib for potable water, while a Namwater raw water connection point also exists.

5.6.4 WASTE MANAGEMENT

Karibib Town Council provides the service of waste removal for both domestic waste and sewage, which is dumped at the domestic waste site and oxidation ponds, respectively.

The site, Erf 1509, has closed septic tanks which are pumped on request by the Karibib Town Council.

6 PUBLIC CONSULTATION

Public consultation and participation are an important aspect of an EA process. During public consultation, potential impacts that the development may have on the natural and/or socio-economic environments, were identified.

The public consultation process assists the Environmental Assessment Practitioner (EAP) in identifying all potential impacts and to what extent further investigations are needed. Public consultation can also aid in the process of identifying possible mitigations measures.

Public consultation for the purposes of this development was done as prescribed by Regulations 21 to 24 of the Environmental Impact Assessment Regulations (GN. 30 of 2012).

This chapter describes in detail the full extent of the public consultation process that was followed and the I&APs and authorities that were notified of the study being undertaken. It also includes the main issues and concerns raised during the public consultation process and comments received on the Background Information Document (BID) distributed during the first round of public consultation, as well as the comments received in response to the Draft Scoping Report.

6.1 PUBLIC ENGAGEMENT

6.1.1 FIRST ROUND OF CONSULTATION

Engagement with the public and authorities as part of the first round of public consultation commenced on the 5th of October 2020 and concluded on the 26th of October 2020. During the first round of consultation, I&APs and authorities were given an opportunity to register and submit comments and/or concerns on the proposed development.

6.1.1.1 Activities of Public Engagement

Activities undertaken to date to ensure effective and adequate I&AP involvement, are as follows:

- A list of predetermined I&APs and authorities was compiled to which communication was sent (Appendix D1).
- Notification letters (Appendix D2) with Background Information Document (BID) (Appendix D3) was sent via registered post (Appendix D4) on the 5th October 2020 to all neighbouring property owners (Appendix D1).
- A notification email (Appendix D5) with BID (Appendix D3) was sent to all I&APs (Appendix D1) on the 5th of October 2020.

- Notification letters (Appendix D6) with BID (Appendix D3) was hand delivered on the 5th of October 2020 to all applicable Line Ministries and State-Owned Enterprises situated in Windhoek.
- Notification letters (Appendix D7) with BID (Appendix D3) was courier on the 1st of October 2020 to all applicable Line Ministries and State-Owned Enterprises situated within the Erongo Region (Appendix D8).
- Public notices announcing the commencement of the EA and an invitation to register as an I&AP were placed in 'The Republikein' and 'Namibian' on 5 October 2020 and 12 October 2020 (Appendix D9).
- A notice was placed at the Erongo Regional Council and the Karibib Municipality (Appendix D10).
- An on-site notice was posted at the property entrance gate (Appendix D11).
- A register was opened and maintained and included all registered I&APs who because of the consultation process submitted comments or raised their concerns (Appendix D12).

6.1.1.2 Comments Received and Responses Provided

All comments and feedback received from I&APs and authorities are summarised in Table 6.1 below, while a copy of the original correspondence is attached as Appendix D13.

Table 6.1: Comments received during the first round of public consultation

NO.	NAME	COMMENTS	NAME	RESPONSE
1.	Bianca Foelscher – Community Activist (26/10/2020)	Dear Sir Please find my document. Please reply to this email that you got this document. Kind regards Bianca Foelscher	Urban Green cc (26/10/2020)	Dear Ms. B. Foelscher, We acknowledge receipt of your communication. Regards Brand van Zyl **Urban *Green* cc**
	Bianca Foelscher – Community Activist (26/10/2020)	Mr. Brand van Zyl, <u>Questions referring to the Background Information Document:</u> <u>1. Proposed Development Description:</u> i) Who is "Exclusive Marble Processing? i.e who are the owners of this company and are they a fully Namibian owned and registered company? We want more light to be shed on this new business relationship, it's history and also the background of this "partner". ii) Application for Environmental Clearance Certificate for proposed marble and granite processing plant – we <u>demand a public participation meeting</u>, for more clarity and transparency on this project. We, the Karibib community understand that the public participation meeting is mandatory, and we therefore demand: NO PUBLIC PARTICIPATION MEETING NO ENVIRONMENTAL CLEARANCE	Urban Green cc (10/11/2020)	Dear Ms. B. Foelscher, Your previous communication with regards to the above project refers. For purpose of completeness of the environmental study and planning for the requested public meeting, the following please? 1. Can you please submit with our office the list of people that you are representing? 2. Please indicate to us the amount of people that will be attending the public meeting? We need to arrange for a suitable venue in Karibib. Can you please provide us with feedback by latest Thursday 12 November? Further arrangements will then be communicated to you. Regards Brand van Zyl

NO.	NAME	COMMENTS	NAME	RESPONSE
		CERTIFICATE for this newly proposed marble and granite processing plant! 2. Need for the proposed development: i) With Best Cheer (trading as Marmorwerke Karibib) we already have an exclusive marble processing factory in Karibib! ii) Marmorwerke Karibib was previously owned by Namibia Marble and Granite (Namagra) (Pty) Ltd who then sold this factory and processing plant to Best Cheer, a Chinese Investor. Now Namagra wants to establish a new (or just another?) marble and granite processing plant in the same town (Karibib) with another partner being "Exclusive Marble Processing"? We fail to see the logic behind this business manoeuvre, and therefore demand more transparency and clarity on this business transaction and business partnership's history. iii) We, the actually residing people of Karibib are sick and tired of promises about new investments (and investors), which will generate much needed employment opportunities and also thereby stimulate the local (i.e Karibib) economy. To us local residents simply means people physically and actually living in this mining town and not those people that only abuse our town for their own enrichment and aggressive business opportunities, while these so-called "local" investors happily reside in other more appealing and socially more attractive and		**Urban *Green* cc**
			Urban Green cc (11/11/2020)	Dear Ms. B. Foelscher, Your communication dated 26 October 2020 with regards to the above project refers. Find herewith our feedback in response to your concerns/questions. 1. The company Exclusive Marble Processing & NAMAGRA are solely owned/financed/operated by the family Wittreich. 2. Please note that a public meeting is NOT 'mandatory' as stated by you. The Environmental Management Act (No. 7 of 2007) and the EIA Regulations (GG. No. 30 of 2012) does not require a public meeting, but public consultation by means of notices and written correspondence. **As requested in our communication dated 10 November 2020 to you, (i) please provide our office with a list of people from Karibib Community that you are representing; and (ii) please indicate to us the number of people that will be attended the public meeting? We will on receipt of the requested information accordingly arrange a meeting.** 3. Marble processing can be done by any company and no law in Namibia prohibits any two similar businesses to operate within the same

NO.	NAME	COMMENTS	NAME	RESPONSE
		convenient towns. While the Karibib residents are being left behind time and time again, these exploitive investors move ahead and to greener pastures, with very little return towards the socio-economic development for our little town, for the betterment of its local residents. Here is real NEED for socio-economic development and therefore (without fear or favour!) we, the general public of Karibib demand for open and transparent inclusion of the entire public participation process, should the proponent wish to push his/her proposed development ahead! We have many questions, which need acceptable answers! iv) As a result of enormous tax-evasion and gigantic self-enrichment schemes in Namibia (e.g SME Bank and Fishrot scandals) Namibians are increasingly getting more alert on new development funding. Our question therefore her is : <u>Is this new marble processing plant financed through our own (or private) funding or is public funding (i.e development money) involved?</u> We need an honest and clear answer on this question as well!! Previously public money meant for national development was massively abused by getting channelled into private investment opportunities which means such funding was misused for private enrichment, and not to improve the local socio-economic situation. We have no respect for such kind of business developments and relationships! Measured against our country's absolutely poor and devastating socio-economic circumstances, it has now become of		town or region or even Country. The need for the marble processing plant was identified feasible and viable based on international and local demand, hence the reason to continue with the plant. 4. This investment will result in a variety of socio-economic opportunities for both local residents in Karibib, as well as larger Region and Namibia, as the plant requires skilled operators, unskilled labourers and service and maintenance personnel. From the processing of raw marble other economic activities may arise as the demand and value of marble products increase locally. Should you have any further comments/questions, please let me know? Regards Brand van Zyl Urban Green cc

NO.	NAME	COMMENTS	NAME	RESPONSE
		national interest and concern, to carefully evaluate each and every new investment, that puts our natural environment and our financial status quo at risk. Namibia can simply no longer afford to entertain capricious turbo-capitalistic individual business interests, while the country is bleeding , because of lack of interest and concern from such kind of unsympathetic investors into the nation's upliftment and well-being in general. And for this very negative, if not immoral, phenomenon to change for the better, extended public participation processes have become inevitable and are long overdue! Please confirm date and venue for such meeting to take place in Karibib, introducing the proposed project to our residents. v) It should not be forgotten, that many people lost their jobs, when Namagra closed its tiling and marble cutting factory the last time, so what will be different with this new factory? We want to know whether there will be more secured job opportunities this time or will "the developer" just bring in more sophisticated machinery that provides only limited and highly technical professionals with an employment opportunity? We know very well that this does not cater for our country's unemployment crisis! The continuous ripping off and plundering of our natural resources just for turbo capitalistic gain, and not for real and justified employment opportunities must stop. What we currently really don't need is more high powered machinery to		

NO.	NAME	COMMENTS	NAME	RESPONSE
		destroy our beautiful landscape's natural beauty even faster as it is already happening very visible over our vast and pristine environment. What we though well need is a strong and well trained workforce with relatively good income to improve the socio-economic shortcomings that are haunting us seriously. It has transpired that both greed and turbo capitalistic doings have dine huge damage to underdeveloped countries, especially to African countries, which have been labelled "shitholes". It must though be clearly understood that exploitive investors, who do not carry our beloved country's interest at heart and who continuously fail to improve the African continents social dilemma are the actual and real creators behind these "shitholes". Therefore loud and clear: What is the commitment from Namibia Marble and Granite (Namagra) this time? We demand valid answers. Enough is enough!!! Bianca Foelscher / Community Activist		
2.	NP du Plessis - NamWater (21/10/2020)	Dear Brand Please register NamWater as an I&AP with the following contact details: NP du Plessis - Plessisn@namwater.com.na 081 127 9040 Jolanda Kamburo KamburonaJ@namwater.com.na 081 217 8116	Urban Green cc (10/11/2018)	Dear NP, Our communication with regards to the above mentioned project refers. Find below our feedback in response to your questions following a discussion with the client. **1. Can NamWater supply an additional 318 m3 per month to Karibib?**

NO.	NAME	COMMENTS	NAME	RESPONSE
		Please keep us dated. I would like to register the following concerns: 1. Can NamWater supply an additional 318 m3 per month to Karibib? 2. Does the infrastructure has spare capacity to supply in the increased demand? 3. Please provide evidence that the developer does have a valid agreement with NamWater to supply water to him. 4. What is the planning for water supply when Swakoppoort Dam is running dry or nearly dry? Regards NP		The volume of 312m³ will only be applicable on start-up, where after the monthly demand will be 32m³/month or 1.1m³/day for a 30-day calendar month. As part of the development a wastewater recycling plant will be constructed, which according to the engineer recycles up to an estimated 90% of the daily wastewater for reuse. The operational demand from month 2 onwards will thus range between 2m³/day to 1.1m³/day, which is believed to be able to be supplied from the Namwater supply line. **2. Does the infrastructure has spare capacity to supply in the increased demand?** Considering the demand of between 2m³/day to 1.1m³/day, I believe this question is best answered by the technical team from the side of Namwater please? **3. Please provide evidence that the developer does have a valid agreement with NamWater to supply water to him.** Find attached the agreement that is in possession with the client as well as one of their Namwater invoices. **4. What is the planning for water supply when**

NO.	NAME	COMMENTS	NAME	RESPONSE
				Swakoppoort Dam is running dry or nearly dry? Feedback from the client is that operations will then stop. The client is currently investigating the possibility of treating wastewater to a quality suitable for use. I would appreciate if Namwater can give feedback with respect to question 2 above? Should there be any further questions, please let me know? Regards Brand van Zyl
	Dr. V. Eino - NamWater (2/12/2020)	Dear Mr. van Zyl, NamWater has no objections. Kind regards, Eino		
3.	Elina Lumbu - Roads Authority (20/10/2020)	Good morning I, Ms Elina Lumbu, am hereby registering as a representative of the Roads Authority as an Interested and Affected Party (I&AP). Kindly send me a registration form if there is any?	Urban Green cc (27/05/2020)	Dear Ms. E. Lumbu, Our communication with regards to the above mentioned project refers. Find below our feedback in response to your questions following a discussion with the client.

NO.	NAME	COMMENTS	NAME	RESPONSE
		Kindly provide us with the following information: 1. To what extend do additional traffic would need to be accommodated on MR77 and on the rest of the national road network? 2. According to subsection 2.4.4 (viii) Accesses to erf 1509 will be obtained from the existing eastern entrance (C32 M0077), and then in addition from the south off the future access road (D1953). What is reason for requesting such two accesses to the national road network? More comments might follow before the 26th of October 2020. Kind Regards, Elina Lumbu		**1. To what extend do additional traffic would need to be accommodated on MR77 and on the rest of the national road network?** The section in between the Mine and Erf 1509, Karibib (25km) is expected to have an additional 3 trucks per week only. For the rest of the national road network, an estimated 2 trucks per month from Karibib to Walvis Bay. **2. According to subsection 2.4.4 (viii) Accesses to erf 1509 will be obtained from the existing eastern entrance (C32 M0077), and then in addition from the south off the future access road (D1953). What is reason for requesting such two accesses to the national road network?** The access of the D1953 is for purpose of the construction period only. This will not become a permanent access point. Should there be any further questions from your side, please let me know? Regards Brand van Zyl
4.	Mrs. Erica Ndalikokule (19/10/2020)	Dear Mr. van Zyl, RE: APPLICATION FOR AN ENVIRONMENTAL	Urban Green cc	Dear Ms. E Ndalikokule, RE: APPLICATION FOR AN ENVIRONMENTAL

NO.	NAME	COMMENTS	NAME	RESPONSE
		CLEARANCE CERTIFICATE FOR MARBLE PROCESSING PLANT AT ERF 1509, EXTENSION 6, KARIBIB (ERONGO REGION) NHC hereby acknowledge receipt of the ESA report received on the 6th of October 2020 titled "Environmental Scoping Assessment Study Marble Processing Plant and Related Activities Erongo Region Namibia", which we reviewed and would like to bring the following to your attention. Your report does not reveal any plan to conduct a Heritage Impact Assessment. NHC would like to notify you that Erongo region hosts an extensive wealth of heritage resources, amongst others, hundreds of archaeological sites (documented and undocumented). It is therefore against this background that the NHC recommends that the proponent be compelled to conduct Heritage Impact Assessment study of the area. A site-specific study should provide the NHC with enough information to understand the impact of these activities on the significance of the heritage resources of the area. We look forward hearing from you. Yours in Heritage Conservation and Management, Mrs. Erica Ndalikokule	(10/11/2020)	CLEARANCE CERTIFICATE FOR A MARBLE PROCESSING PLANT AT ERF 1509, EXTENSION 6, KARIBIB (ERONGO REGION) Your communication dated 19 October 2020 with regards to the above refers. Please note that the document send to your office and received by your office on 6 October 2020 is not an ESA report, but a background information document, which forms part of the 1st round of public consultation as provided for by the EIA Regulations (GG. No. 30 of 2012). We are fully aware of the fact that the Erongo Region host an extensive wealth of heritage resources, as highlighted in your communication dated 19 October 2020. However, please note that the area on which the development will take place has been in existence since May 2011 with the first development taking place. This particular area to the south-west of Karibib Town was earmarked and used for industrial like activities as far back as prior to 2004, which is best located outside of town. Since December 2012 when the property was formally fenced off there has been various activities taking place on the property and has since then been heavily disturbed due to the nature of the activities practised on the property. From Appendix D of the Background Information

NO.	NAME	COMMENTS	NAME	RESPONSE
				Document, which your office received on 6 October 2020, you will see the extent of disturbance that has already taken place. The processing plant will be constructed on top of this disturbed area. During the time of the excavations and activities prior to date, no remains of any heritage artefacts were found by the owner. I trust that your office finds the above in order and should your office have any further questions please contact us. Regards Brand van Zyl

6.1.2 SECOND ROUND OF CONSULTATION

Engagement with the public and authorities as part of the second round of public consultation commenced on the 2nd of December and concluded on the 9th of December 2020. During the second round of consultation, I&APs and authorities were given an opportunity to submit comments on the Draft Scoping Report.

6.1.2.1 Activities of Public Engagement

Activities undertaken during the 2nd round to ensure effective and adequate I&AP involvement, are as follows:

- A notification email (Appendix D13) informing all affected authorities and registered I&APs of the availability of the Draft Scoping Report and request for comment was distributed on 2 December 2020. The proof of successful delivery of emails is attached as Appendix D14.

6.1.2.2 Comments Received and Responses Provided

No comments were received from I&APs and authorities. Copy of email communication with I&APs are attached as Appendix D15.

7 ASSESSMENT OF ENVIRONMENTAL ISSUES, POTENTIAL IMPACTS AND MITIGATIONS

This chapter provides a description and assessment of the key issues of concern and potential impacts associated with the construction of the Marble Processing Plant and related activities. Mitigation measures relevant to the development as appropriate are recommended. These measures are aimed at avoiding, minimising, or rehabilitating negative impacts or enhancing potential benefits. The significance of potential impacts without and with mitigation is also provided.

7.1 METHODOLOGY OF ASSESSMENT

The assessment process consisted of two phases, the first being the screening phase and the second the scoping phase, as explained below.

7.1.1 SCREENING PHASE

Each of the potential impacts identified during public consultation and the scoping assessment was screened according to a set of questions (Figure 7.1), which resulted in highlighting the key impacts requiring further assessment.

This list of impacts that were subjected to a scoping assessment is presented in Table 7.2 and Table 7.15, below, as per the evaluation criteria presented in Table 7.1.

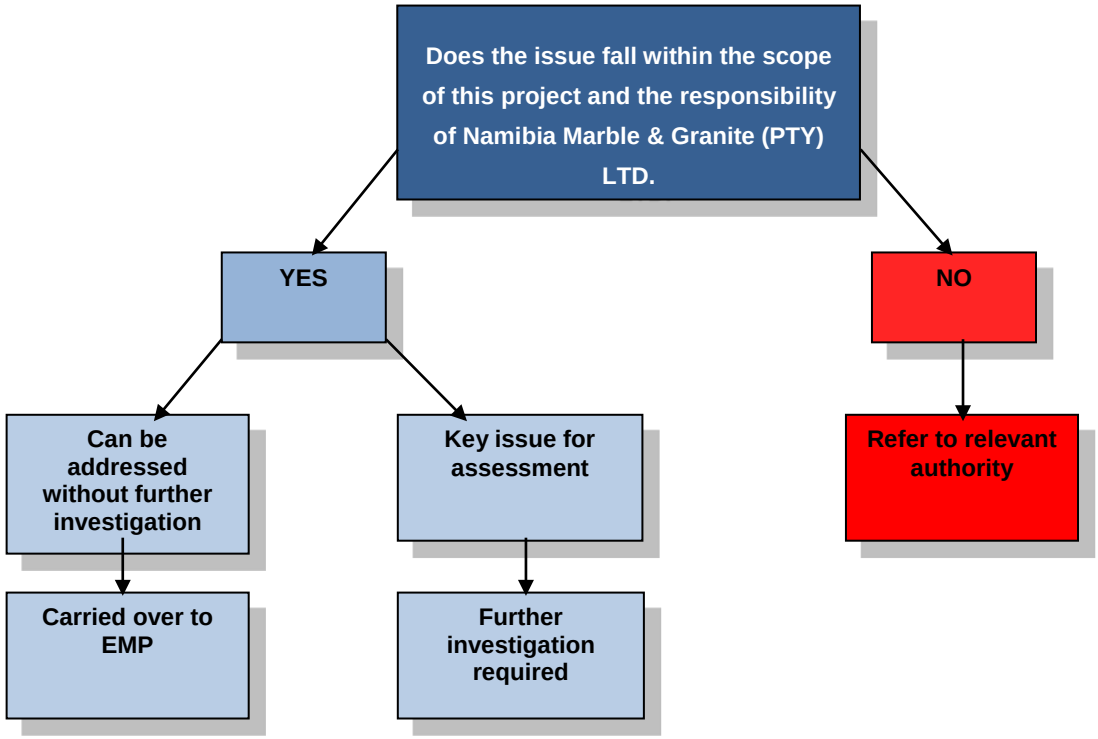


Figure 7.1: Screening process for determining key impacts

7.1.2 SCOPING ASSESSMENT PHASE

The key impacts, identified after carrying out screening (see Section 7.1.1 above), were evaluated in terms of duration (time scale), extent (spatial scale), intensity (magnitude), probability, and status, in combination with providing the expected significance. The means of arriving at the different significance ratings is explained in Table 7.1 below.

These criteria are used to ascertain the *significance* of the impact, firstly in the case of no mitigation and then with the most effective mitigation measure(s) in place. The significance of an impact is derived by considering the temporal and spatial scales and magnitude. Such significance is also informed by the context of the impact, i.e. the character and identity of the receptor of the impact.

Table 7.1: Criteria for impact evaluation

CRITERIA	CATEGORY
Impact	This is a description of the expected impact
Nature	**Positive** – environment overall will benefit from the impact **Negative** – environment overall will be adversely affected by the impact **Neutral** – environment overall will not be affected
Extent	**Site Specific:** Expanding only as far as the activity itself *(onsite)* **Small:** Restricted to the site's immediate environment within 1 km of the site *(limited)* **Medium:** Within 5 km of the site *(local)* **Large:** Beyond 5 km of the site *(regional)*
Duration	Reviews the lifetime of the impact, as being - **Very short** – days, <3 days **Short** - days, <1 month) **Medium** - months, <1 year **Long** - years, 1 -10 years **Permanent** - >10 years
Intensity	Establishes whether the magnitude of the impact is destructive or innocuous and whether it exceeds set standards, and is described as – **None** (No environmental functions and processes are affected); **Low** (Environmental functions and processes are negligibly affected); **Medium** (Environment continues to function but in a noticeably modified manner); **High** (Environmental functions and processes are altered such that they temporarily or permanently cease and/or exceed legal standards/requirements).
Probability	Considers the likelihood of the impact occurring and is described as – **Improbable** (low likelihood), **Probable** (distinct possibility),

CRITERIA	CATEGORY
	Highly probable (most likely) or **Definite** (impact will occur regardless of prevention measures).
Significance (no mitigation)	**None** (A concern or potential impact that, upon evaluation, is found to have no significant impact at all) **Low** (Any magnitude, impacts will be localised and temporary. Accordingly, the impact is not expected to require amendment to the project design) **Moderate** (Impacts of moderate magnitude locally to regionally in the short term. Accordingly, the impact is expected to require modification of the project design or alternative mitigation) **High** (Impacts of high magnitude locally and in the long term and/or regionally and beyond. Accordingly, the impact could have a "no go" implication for the project unless mitigation or re-design is practically achievable)
Mitigation	Description of possible mitigation measures
Significance (with mitigation)	**None** (A concern or potential impact that, upon evaluation, is found to have no significant impact at all) **Low** (Any magnitude, impacts will be localised and temporary. Accordingly, the impact is not expected to require amendment to the project design) **Moderate** (Impacts of moderate magnitude locally to regionally in the short term. Accordingly, the impact is expected to require modification of the project design or alternative mitigation) **High** (Impacts of high magnitude locally and in the long term and/or regionally and beyond. Accordingly, the impact could have a "no go" implication for the project unless mitigation or re-design is practically achievable)
Confidence level	The degree of confidence in the predictions, based on the availability of information and specialist knowledge. **Low** (based on the availability of specialist knowledge and other information) **Medium** (based on the availability of specialist knowledge and other information) **High** (based on the availability of specialist knowledge and other information)

7.1.3 MITIGATION APPLICATION METHODOLOGY

There is a hierarchy of actions which can be undertaken to respond to any development or activity. These cover avoidance, minimisation, and compensation. It is possible and considered sought after to enhance the environment by ensuring that positive gains are included in the development. If negative impacts occur then the hierarchy, as a guiding philosophy, recommends the following steps.

- **Impact avoidance:** This step is most effective when applied at an early stage of project planning. It can be achieved by:
    - not undertaking certain actions or elements that could result in adverse impacts;

- avoiding areas that are environmentally sensitive; and
- putting in place preventative measures to stop adverse impacts from occurring.

- **Impact minimisation:** This step is usually taken during impact identification and prediction to limit or reduce the degree, extent, magnitude, or duration of adverse impacts. It can be achieved by:
  - scaling down or relocating the proposal;
  - redesigning elements of the project; and
  - implementing mitigation measures to manage the impacts.

- **Impact compensation:** This step is usually applied to remedy unavoidable residual adverse impacts. It can be achieved by:
  - rehabilitation of the affected site or environment, for example, by habitat enhancement;
  - restoration of the affected site or environment to its previous state or better; and
  - replacement of the same resource values at another location (off-set), for example, by wetland engineering to provide an equivalent area to that lost to drainage or infill.

The decision as to which combination of alternatives and mitigation measures to apply lies with Namibia Marble & Granite (PTY) LTD. as the proponent, and their acceptance and approval ultimately with the relevant Competent Authority.

7.2 POTENTIAL IMPACTS IDENTIFIED

The information presented in this section has mainly been drawn from the assessment conducted by the EAP and public consultation undertaken.

For this assessment's purpose the issues and impacts identified are grouped according to the main development phases – i.e. the construction phase, operational phase, and decommissioning and closure phase. Sections 7.2.1, 7.2.2 and 7.2.3 give a broad overview of each potential impact expected during the three phases, while a comprehensive assessment outcome with mitigations is presented for each potential impact.

7.2.1 CONSTRUCTION-RELATED IMPACTS

The construction activities which have been considered include those activities based on the information provided by the proponent and project engineers.

Construction impacts are apart from a few, mostly temporary in nature, but may result in permanent damage if not addressed in time and in an effective manner. Details concerning the potential impacts expected during the construction phase are briefly discussed below.

Detailed mitigation measures and environmental requirements having direct relevance to the expected construction impacts are presented in the tables below and in the Environmental Management Plan (Appendix B).

Table 7.2 below presents the potential impacts expected to occur during the construction phase of the development, while Table 7.3 to Table 7.14 presents each potential impact and outcome in detail.

Table 7.2: Key issues and potential impacts expected during the construction phase

IMPACT	CAUSE
Erosion & Sedimentation	Vegetation clearance
	Trenches & excavated areas
Ground and Surface Water Pollution	Waste disposal
	Hazardous material & liquid disposal
Habitat Destruction and Loss of Biodiversity	Vegetation clearance & removal of trees
	Erosion & sedimentation
	Poaching
Visual Aesthetics and Sense of Place	Vegetation clearance
	Poorly planned construction sites
	Insensitive infrastructure design and scale
Socio-Economic	Dust nuisance
	Noise and vibration nuisance
	Traffic safety
	Health, safety, and security
	Employment creation (positive impact)
Heritage and Archaeological Resources	Removal and/or disturbance
Natural Resources (water & energy)	Unacceptable high levels of consumption
	Wastage

7.2.1.1 Erosion and Sedimentation

Erosion and sedimentation will take place in the event that soils are exposed to the natural elements (i.e. winds and rains) through clearing of vegetation or steep excavations, which in turn could result in seasonal (rain season) degradation of habitats and visual downgrade. The amount of erosion and sediment transport is related to what time of the year the construction activities occur and the duration thereof, as well as the site's topography. If clearing and grading activities take place during the wetter months of the year (November to March), substantially more erosion can be expected, especially if the sites has a steep gradient.

The Soil Conservation Act 76 of 1969 requires the prevention and combating of soil erosion; the conservation, improvement, and manner of use of the soil and vegetation; and the protection of water sources.

Although all vegetation has been removed in the past, the site's flat topography and good drainage potential will counter any possible erosion and/or sedimentation transfer.

Considering current condition of the development site (flat topography and good drainage), erosion and sedimentation is unlikely resulting in an expected ***low-none*** impact before mitigation and ***none*** following mitigations.

Table 7.3 below presents the detailed assessment outcome.

Table 7.3: Impact assessment pertaining to erosion and sedimentation

CRITERIA	DESCRIPTION
Risk Event	**Erosion and Sedimentation**
Nature of Impact	Negative
Extent	Site Specific
Duration	Medium
Intensity	None (*no vegetation and/or habitat remains on site)*
Probability	Improbable
Significance (no mitigation)	Low-none
Mitigation	Apply acceptable engineering standards and design, or Best Management Practices (BMP). BMPs are defined as physical, structural, and/or managerial practices, that when used singly or in combination, prevent or reduce the expected impact/s. Structural BMPs typically include sediment ponds or traps, stabilised construction entrances, filter fences, check dams, and riprap. Managerial BMPs include preserving the natural vegetation, leaving buffer zones, and providing dust control. Plan the timing of construction to avoid clearing and grading during erosive high rainfall months of the year.

CRITERIA	DESCRIPTION
	Avoid unnecessary and excessive vegetation clearance and disturbance of topsoil. Limit on-site vehicle speed. Apply dust suppressant to unpaved areas. Limit or even prohibit activities during high winds. The contractor should draft a Rehabilitation Plan and re-vegetate exposed areas once construction at the particular area ceased. The Rehabilitation Plan should provide for a phased approach ensuring that no large area is exposed to natural elements (e.g. wind, water).
Significance (with mitigation)	None
Confidence level	High
Legal Implications	Soil Conservation Act 76 of 1969

7.2.1.2 Ground and Surface Water Pollution

Construction activities are associated with a variety of potential pollution sources (i.e. cement, oils, diesel, chemicals, paints, etc.), either having a direct and immediate impact or indirect and longer-term impact. As a single incident, for the downstream ground water to be contaminated, exceptionally large quantities of pollutants will have to be released into the environment, of which the volumes are not associated with this type of development. Although, however small these potential sources of pollution might be, it still requires special attention (i.e. planning, control and management) to avoid any potential pollution of the immediate environment and contributing to the cumulative pollution impacts on downstream resources. Consideration should be given to controlling potentially harmful impacts on surface and groundwater while 'best' practice measures are applied to minimise the potential for discharges of pollutants to nearby receiving drainage channels in vicinity of the development site.

Given the environment's natural characteristics, the type of construction and extend of development, construction pollution is expected to have a ***low*** significance before mitigation and a ***low-none*** significance following proper mitigation measures and continues monitoring. With the proper precautionary measures in place, it is unlikely that groundwater contamination will occur at the site and therefore the proposed construction phase is not likely to have any detrimental impacts on the groundwater resources of the area.

Table 7.4 below presents the comprehensive assessment outcome.

Table 7.4: Impact assessment pertaining to groundwater and surface water pollution

CRITERIA	DESCRIPTION
Risk Event	**Groundwater and surface water pollution**
Nature of Impact	Negative
Extent	Medium
Duration	Long Term
Intensity	Low
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	Draft and implement a Construction Waste Management Plan to be maintained for the duration of the construction phase. Waste should be stored in appropriate containers in an appropriately constructed area protected against exposure to high intensity rainfall. Waste should be frequently disposed of. Storage and service areas must be sited in areas away from the alluvial sediments and / or drainage channels. Storage of any material or substance that may cause pollution to water sources should be safely handled and stored in accordance with appropriate legislation. Contractor should submit a Method Statement for the purpose of handling and storage of hazardous materials on-site. A Storm Water Management Plan should be drafted to be maintained for the duration of the construction time frame. Ensure proper maintenance of all construction vehicles and equipment and conduct continuous maintenance and check-ups. Draft and implement a Detailed Preparedness and Emergency Plan for all construction related spillages. Ensure that oil/ fuel spillages from construction vehicles and machinery are minimised and that where these occur, that they are appropriately dealt with. Polluted soil and building rubble must be transported away from the site to an approved and appropriately classified waste disposal site. Polluted soil must be remediated where possible. Drip trays must be placed underneath construction vehicles when not in use to contain all oil that might be leaking from these vehicles.

CRITERIA	DESCRIPTION
	All fuel tanks must be bunded to 120% of the capacity of the tank to contain any spillages that might take place. Washing of personnel or any equipment should not be allowed on site. Should it be necessary to wash construction equipment these should be done at an area suited and prepared to receive and contain polluted waters. These polluted waters should be transported and disposed at a waste site for hazardous materials. Appointing qualified and reputable contractors is essential. Proper training of construction personnel would reduce the possibility of the impact occurring. 'Best' practice measures should be applied to minimise the potential discharge of pollutants onto open soil especially near ephemeral rivers intersected by the proposed power line routes. Method Statements are compulsory for this aspect of the Construction Phase and should be closely monitored by the Environmental Control Officer (ECO). Various Method Statements (e.g. bunding; camp establishment and fencing; concrete batching; bulk earthworks; demolition; fuels and fuel spills; solid waste management; wash areas; storm water management) are required to combat any potential surf/ace and underground water pollution.
Significance (with mitigation)	Low-none
Confidence level	High
Legal Implications	Water Act No. 54 of 1956, as amended /Soil Conservation Act 76 of 1969 / Hazardous Substances Ordinance No. 14 of 1974, as amended / Public Health Act No. 36 of 1919, as amended

7.2.1.3 Habitat Destruction and Loss of Biodiversity

Being situated inside an already developed Erf, the development site has already been cleared of vegetation and no natural environment exists and will therefore have no negative impact/s on the environment and associated flora and fauna. The impact associated with habitat destruction and loss of biodiversity is expected to have a ***no*** significance.

Table 7.5 below presents the comprehensive assessment outcome.

Table 7.5: Impact assessment pertaining to habitat destruction and loss of biodiversity

CRITERIA	DESCRIPTION
Risk Event	**Habitat destruction and loss of biodiversity**
Nature of Impact	Negative
Extent	Site Specific
Duration	Long Term
Intensity	Low
Probability	Improbable
Significance (no mitigation)	None
Confidence level	High
Legal Implications	Forest Act No. 12 of 2001, as amended / Nature Conservation Ordinance No. 4 of 1975, as amended / Soil Conservation Act No. 76 of 1969, as amended

7.2.1.4 Visual Aesthetics and Sense of Place

Construction activities are known to have a visual impact owed to the nature of the activity, although temporary in lifespan. The significance of this impact is linked to the topography and vegetation occurrence at the site, the nature of the already build-up urban area, as well as the scale and distance between the site and the receptor.

Given the fact that the construction site is inside of an already build-up urban area of an industrial nature (large scale buildings), as well as the small scale of the construction activities expected and temporary nature of these, no significant change is expected. The sense of place at the construction site will temporarily change to that associated with a construction site. Poorly planned construction activities will result in unnecessary disturbance to the areas adjacent to the development site and should therefore be avoided. Therefore, caution should be applied from the side of the appointed contractor not to unnecessarily detract from the existing visual character and sense of place of the receiving environment.

The significance of the pre-mitigation visual impact on the area of the development site during the construction phase is expected to be ***low-none***. Mitigation measures exist to reduce the significance of the impact to ***none***.

Table 7.6 below presents the comprehensive assessment outcome.

Table 7.6: Impact assessment pertaining to visual aesthetics and sense of place

CRITERIA	DESCRIPTION
Risk event	**Visual aesthetics and sense of place**
Nature of Impact	Negative
Extent	Site specific
Duration	Medium
Intensity	Low
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	Restrict the amount of structures on site and restrict the height to a maximum of 3 meters, where possible. Keep the construction site tidy and clean of any construction waste. The appointed contractor should ensure that adequate temporary disposal facilities are available on site. Products that can be re used or recycled need to be kept separate. Waste should be disposed of regularly and at appropriate facilities.
Significance (with mitigation)	Low-None
Confidence level	High

7.2.1.5 Socio-economic Implication

Construction activities are associated with a variety of impacts that has either a direct or indirect implication on the surrounding residents' living conditions and/or socio-economic status, as covered below.

(i) Income Generation & Skills Transfer (Employment)

Construction makes use of larger numbers of unskilled labour, as well as skilled labour although to a lesser extent, which does not only contribute to income generation and a security of better livelihoods but contributes to skills transfer as well. The real impact thereof depends on the size of the workforce required and duration of the construction phase.

Considering the socio-economic standing of the Region, a serious need for employment opportunities and improved living conditions exists, which would contribute to achieve Vision 2030.

It is important that local people be employed and that the necessary opportunities exist for unskilled labour to undergo on the job training and skills enhancement.

Table 7.7 below presents the comprehensive assessment outcome.

Table 7.7: Impact assessment pertaining to income generation & skills transfer

CRITERIA	DESCRIPTION
Risk event	**Income Generation & Skills Transfer (Employment)**
Nature of Impact	Positive
Extent	Large
Duration	Medium
Intensity	High (to the unemployed)
Probability	Definite
Significance (no mitigation)	High (to the unemployed)
Mitigation	No mitigation required
Significance (with mitigation)	High (to the unemployed)
Confidence level	High

(ii) Economic Benefit to the Construction Industry

The construction of the services, as well as all other buildings will have a direct positive implication on the currently struggling construction industry, which is one of the most important employers. It is crucial that local contractors be appointed and that as many as possible of the locally available construction material be used throughout the construction of the development.

Table 7.8 below presents the comprehensive assessment outcome.

Table 7.8: Impact assessment pertaining to economic benefit to the construction industry

CRITERIA	DESCRIPTION
Risk event	**Economic Benefit to the Construction Industry**
Nature of Impact	Positive
Extent	Large
Duration	Medium
Intensity	High
Probability	Definite
Significance (no mitigation)	High
Mitigation	No mitigation required
Significance (with mitigation)	High
Confidence level	High

(iii) Dust & Emissions

The air quality in the area is considered good, based on the potential impact that current activities in the area are likely to have on air quality.

Dust and emissions are associated with construction activities (i.e. digging; clearing; excavating; transport of materials) of which the severity is related to the extent of the development and the nature of the receiving environment.

Dust control is considered important (i.e. Atmospheric Pollution Prevention Ordinance No 11 of 1976, as amended & Public Health Act No. 36 of 1919, as amended), which requires effective mitigations (Appendix B).

Given the expected scale of dust generation activities and the distance to the nearest receiver, dust and emissions from construction activities, although being temporary in nature are expected to have a ***low*** pre-mitigation impact significance rating and ***none*** post-mitigation. The reduction in the impact significance rating relates mostly to occupational dust impacts.

Table 7.9 below presents the comprehensive assessment outcome.

Table 7.9: Impact assessment pertaining to dust and emissions

CRITERIA	DESCRIPTION
Risk event	**Dust and emissions**
Nature of Impact	Negative.
Extent	Small
Duration	Short
Intensity	Low
Probability	Definite
Significance (no mitigation)	Low
Mitigation	Regular dust suppression, if required, during times of strong winds, should minimise dust impacts mainly with respect to the contractor's staff. Dust suppression by means of wetting should only be done with treated wastewaters. Construction activities during high winds should be limited to those activities not generating dust. Handling and transport of erodible materials should be avoided under high wind conditions. Where possible, topsoil stockpiles should be in sheltered areas and covered.

CRITERIA	DESCRIPTION
	Appropriate dust suppression measures should be used when dust generation is unavoidable particularly during prolonged dry periods in summer. Such measures shall also include the use of temporary stabilising measures. No fires should be allowed on-site for any what purpose and construction waste are not allowed to be burned on-site. It is imperative that all machinery and vehicles on site is road worthy and do not give rise to excessive smoke or emissions. The contractor's personnel are to be provided with access to dust masks.
Significance (with mitigation)	None
Confidence level	High

(iv) Construction Noise & Vibration

Noises and vibrations are synonymous with the construction phase, as heavy construction vehicles and machinery operates. The scale of the construction activities and type of construction activity, as well as the locality of the surrounding receptors determine the significance to this construction activity.

The severity of these impacts is likely to be more significant to those receptors living close by, compared to those further away. There are only a limited number of receptors close enough to the construction site who might be affected by noise and vibration.

The prevailing wind direction and strength may increase the impact-radius of construction noises, but is expected to be minimal, considering the prevailing wind direction as well as the distance to receptors.

Given the small scale of the development and resulting construction activities; the construction period being temporary and the existing sources of noise 'pollution' (i.e. other surrounding industries), the potential impact is regarded as having ***low-none*** significance after mitigation.

Table 7.10 below presents the comprehensive assessment outcome.

Table 7.10: Impact assessment pertaining to noise and vibration

CRITERIA	DESCRIPTION
Risk event	**Noise and Vibration**
Nature of Impact	Negative.
Extent	Small

CRITERIA	DESCRIPTION
Duration	Medium
Intensity	Low
Probability	Highly Probable
Significance (no mitigation)	Low
Mitigation	Appropriate directional and intensity settings are to be maintained on all hooters and sirens. No amplified music should be allowed on site. Inform immediate neighbours of construction activities to commence and provide for continuous communication between the neighbours and residents engineer. The contractor shall not use sound amplification equipment on site unless in emergency situations. Limit construction times to acceptable daylight hours. Should blasting be required all residents as per the legal requirements should be informed. Blasting times must be limited to the hours from 08:00 to 17:00 during weekdays only. Blasting should be considered as the last option. Screen construction activities from residential, social, and business entities as far as reasonably possible. The World Health Organization (WHO) guideline on maximum noise levels (guidelines for Community Noise, 1999) to prevent hearing impairment can be followed during the construction phase. This limits noise levels to an average of 70db over a 24-hour period with maximum noise levels not exceeding 110db during the period. All construction vehicles and machinery should be kept in good working condition. If any noise-related complaints are registered the applicable construction vehicles and machinery should be fitted with noise reduction devices. Personnel working in noisy environments must be issued with hearing protectors.
Significance (with mitigation)	Low-none
Confidence level	High

(v) Traffic & Safety

Construction activities are associated with an increase in vehicles of different kinds (i.e. workers' busses, delivery vehicles and construction vehicles) to and from the site, which inevitably increase risk and conflict.

Access to Erf 1509, Extension 6, Karibib, will be obtained from the existing eastern entrance (C32 / M0077) only. A limited number of delivery vehicles, busses and construction vehicles are expected to use the C32 / M0077, i.e. maximum of two per day, but most of the days only one being the workers' buss. All intersections and junctions should be considered dangerous and requires caution from both the construction vehicle drivers and other road users. Strict road safety measures will have to be applied during the construction phase.

The significance of conflict on this road is expected to be **low** during the construction phase considering the few construction vehicles to enter and exit the site and the very good visibility along the C32 / M0077. The post-mitigation impact can be reduced to ***none***.

Table 7.11 below presents the comprehensive assessment outcome.

Table 7.11: Impact assessment pertaining to traffic and safety

CRITERIA	DESCRIPTION
Risk event	**Traffic and Safety**
Nature of Impact	Negative.
Extent	Small
Duration	Medium
Intensity	Low
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	Contractor's personnel should adhere to speed limits. Appropriate signs should be in place along the roads being used by construction vehicles notifying road users of the construction activity and roads used by construction vehicles. Drivers of construction vehicles should have valid driver's licenses with ample experience on proper road usage and manners on-site as well as when making use of public roads. Construction vehicles' need to be in a road worthy condition and maintained throughout the construction phase. Make use of predetermined roads to the site and refrain from creating new roads.

CRITERIA	DESCRIPTION
	The movement of heavy vehicles from and to the site must occur outside of peak traffic hours (thus after 08h30 and before 16h30). Delivery vehicles should preferably stick to the same times to avoid peak hour traffic and resulting nuisance to residents. Provide traffic signals and road markings where necessary to ensure safe traffic movement.
Significance (with mitigation)	Low-none
Confidence level	High

(vi) Health, Safety & Security

Areas within which construction activities takes place is usually associated with criminal activity, posing a security risk to those residing in the area. It is not to say that these criminal activities are because of the construction staff but it is known to happen in the vicinity of construction sites. Prostitution is also associated with construction activities especially where construction labourers reside in temporary accommodation near or on site/s.

Construction of the development of the Marble Processing Plant has the potential for accidental injury, either minor or major accidents, to both construction workers and/or visitors. On-site safety of all personnel is an important responsibility of the appointed contractor and should be adhered to in accordance with the requirements of the Labour Act (No 11 of 2007) and the Public Health Act (No. 36 of 1919). Ensuring that the construction activities do not pose any danger to the surrounding residents is important. The contractor's site and construction site should be properly secured to prevent any injury or harm to the residents and/or any local fauna.

These potential impacts hold ***low*** significance and can with appropriate mitigations reduce its impact to ***low-none***.

Table 7.12 below presents the comprehensive assessment outcome.

Table 7.12: Impact assessment pertaining to health, safety, and security

CRITERIA	DESCRIPTION
Risk event	**Health, Safety and Security**
Nature of Impact	Negative.
Extent	Small
Duration	Medium
Intensity	Low
Probability	Probable

CRITERIA	DESCRIPTION
Significance (no mitigation)	Low
Mitigation	Ensure that all construction personnel are trained depending on the nature of their work. Provide for a first aid kit and trained person to apply first aid when necessary. A wellness program should be initiated to raise awareness on health issues, especially the impact of sexually transmitted diseases. Restrict unauthorised access to the site and implement access control measures. Clearly demarcate the construction site boundaries along with signage of no unauthorised access. Clearly demarcate dangerous areas and no-go areas on site. Staff and visitors to the site must be fully aware of all health safety measures and emergency procedures. Contractors should provide condoms to all their staff. The contractor must comply with all applicable occupational health and safety requirements. The workforce should be provided with all necessary Personal Protective Equipment including earplugs. All affected landowners should be notified at least one month in advance who the appointed contractor is and provided with details about the proposed construction activities and timeline.
Significance (with mitigation)	Low-none
Confidence level	High

(vii) Heritage / Archaeological Resources

The site on which the development is proposed has been disturbed in the past as a result of a variety of different activities that were undertaken on-site. There has been no discovery of any archaeological finds within the immediate area surrounding the site to date.

It is however important to be informed and cautious in the event should any potential remains be discovered during the construction activities. If any heritage or cultural significant artefacts are however found during the construction phase, construction must stop, and the National Heritage Council of Namibia immediately notified.

The probability of locating important archaeological/heritage remains during the construction phase of the development is unlikely. The impact rating associated with such an event is therefore considered to be ***low*** before mitigation and ***low-none*** after mitigation.

Table 7.13 below presents the comprehensive assessment outcome.

Table 7.13: Impact assessment pertaining to heritage / archaeological resources

CRITERIA	DESCRIPTION
Risk event	**Heritage / Archaeological Resources**
Nature of Impact	Negative.
Extent	Small
Duration	Permanent
Intensity	Medium
Probability	Improbable
Significance (no mitigation)	Low
Mitigation	Caution should be exercised during the construction phase if archaeological/heritage remains are discovered during the excavations. The Environmental Site Manager should receive training by a suitably qualified archaeologist with respect to the identification of archaeological/heritage remains and the procedures to follow should such remains be discovered during construction. Any archaeological materials found should be reported to the Environmental Site Manager and the National Monuments Council, and all on-site activities stopped immediately. Details with regards to the procedure to follow is defined in the EMP.
Significance (with mitigation)	Low-None
Confidence level	High

(viii) Natural Resources

The construction phase requires both water and energy of which water is currently the source under pressure. Considering the low volume of water to be used during construction (estimated at 50m³) this potential impact holds a ***low*** significance and can with appropriate mitigations reduce its impact to ***very low*** (see Table 7.14).

Table 7.14 – Natural resources

CRITERIA	DESCRIPTION
Risk event	**Natural Resources**
Nature of Impact	Negative
Extent	Large
Duration	Permanent
Intensity	Low
Probability	Probable
Significance (no mitigation)	Low
Mitigation	There should be no tolerance towards water wastage. Treated wastewater should be obtained and used for the bulk of the construction requirements.
Significance (with mitigation)	Very Low
Confidence level	High

7.2.2 OPERATIONAL PHASE

These impacts are usually more permanent in nature or at least until decommissioning of the development. Different from the construction related impacts, no Management Plan is provided for the operational phase, but rather recommendations are made to existing policies or plans to be applied.

Details with regards to the potential impacts expected during the operational phase are briefly discussed below. Detailed mitigation measures and environmental requirements having direct relevance to the expected operational phase impacts are presented in the tables below.

Table 7.15 below presents the potential impacts expected to occur during the operational phase of the development, while Table 7.16 to Table 7.24 presents the outcome of each.

Table 7.15: Key potential impacts expected during the operational phase

IMPACT	CAUSE
Ground and Surface Water Pollution	Waste disposal
	Hazardous material and liquids disposal
Visual Aesthetics and Sense of Place	Vegetation clearance / altered vegetation
	Architectural design & scale of buildings

IMPACT	CAUSE
	Land use change
Socio-Economic	Emissions and dust nuisance
	Noise
	Traffic safety
	Health, safety, and security
	Employment creation (positive impact)
Natural Resources (water & electricity)	Unacceptable high level of consumption
	Wastage
	No sustainable practises

7.2.2.1 Ground and Surface Water Pollution

Sources of potential pollution include, but are not limited to, hazardous liquids (i.e. diesel storage facility) stored at the site, sewage waters (i.e. on-site septic tanks) and slurry from the process recycling plant. Increased run-off created because of the development (i.e. roofs and other hard surfaces) could enhance pollutant transportation, as well as increased distance pollutants can be transported away from its source.

As a single incident, for the downstream ground water to be contaminated, exceptionally large quantities of pollutants will have to be released into the environment, of which volumes are not associated with this type of development. Although, however small these potential sources of pollution might be, it still requires special attention (i.e. planning, control and management) to avoid any potential pollution of the immediate environment and contributing to the cumulative pollution impacts on downstream resources. Consideration should be given to controlling potentially harmful impacts on surface and groundwater while 'best' practice measures are applied to minimise the potential for discharges of pollutants to nearby receiving drainage channels in the vicinity of the development site.

Apart from the diesel storage facility, the operational activities of the processing plant are not associated with any large volumes of potential hazardous liquids to the extent of having a significant risk factor. The focus during the operational phase should thus be on the proper management and maintenance of the diesel storage facility, but also ensuring proper waste and wastewater management and a zero-waste disposal on the site.

Possible pollution and the significance rating is initially considered to be ***low*** due to the newly build infrastructure, but has proven to increase in risk over the years as the infrastructure and equipment degrade. Should no management, policing and/or monitoring be done (i.e. no mitigations) from the side of the plant management, the risk factor can be regarded as ***high***, but

can be avoided and reduced to an expected ***low*** impact significance following proper mitigation measures and continued monitoring.

Table 7.16 below presents the comprehensive assessment outcome.

Table 7.16: Impact assessment pertaining to ground and surface water pollution

CRITERIA	DESCRIPTION
Risk event	**Ground and Surface Water Pollution**
Nature of Impact	Negative
Extent	Small (short term) / Large (long term)
Duration	Long Term
Intensity	High
Probability	Probable
Significance (no mitigation)	High
Mitigation	All infrastructure and equipment should be maintained within a perfect working order. A detailed Monitoring Plan, which includes daily check-ups to the diesel storage facility should be implemented and maintained. An emergency plan with dedicated response team should be put in place and constantly be available and active to act quickly in case of any leakages or spillages. Continued 'policing' from the side of the plant management. Continued awareness of harmful practises and keeping of hazardous liquids should be undertaken by the lodge management. The discharge of pesticides and herbicides in harmful quantities should be prevented. Pesticides and herbicides should not be used during periods of rainfall; and biodegradable pesticides and herbicides with short half-lives of three days or less should be used. It is recommended to rather use local indigenous flora throughout the landscaped areas and minimise any other plants, trees, and lawns as part of the landscaping areas to minimise the necessity for any pesticides and herbicides. Ensure that surface water is channelled and captured through a proper storm water system to be treated in an appropriate manner before disposal into the environment.
Significance (with mitigation)	Low
Confidence level	Medium

7.2.2.2 Visual Aesthetics and Sense of Place

The particular township, Karibib Extension 6, within which the development will take place, has been earmarked for larger scale activities of an industrial and light industrial nature, as can be seen from the other buildings already constructed within the area.

The proposed development will have buildings and infrastructure of a light industrial nature.

Considering the status of the activities and scale of buildings existing, the proposed buildings and structures will be of a similar nature and thus not negatively impact on the sense of place, which is is expected to be ***low-none.***

Table 7.17 below presents the comprehensive assessment outcome.

Table 7.17: Impact assessment pertaining to visual aesthetics and sense of place

CRITERIA	DESCRIPTION
Risk event	**Visual aesthetics and sense of place**
Nature of Impact	Negative.
Extent	Site specific
Duration	Permanent
Intensity	None
Probability	Improbable
Significance	Low-none
Confidence level	Definite

7.2.2.3 Socio-economic Implication

The operational phase of any type of development is associated with a variety of impacts that has either a direct or indirect implication to the surrounding residents.

(i) Income Generation & Skills Transfer (Employment)

Employment in the form of supervisors, production workers, etc. would be common during the operational phase. For each of these persons and their dependents, the income received will make a substantial difference.

Considering the current socio-economic standing of the Region, a serious need for employment opportunities and improved living conditions is desperately needed, to be able to achieve Vision 2030.

It is important that local people be employed and that the necessary opportunities exist for unskilled labour to undergo on the job training and skills enhancement.

Table 7.18 below presents the comprehensive assessment outcome.

Table 7.18: Impact assessment pertaining to Income generation & skills transfer

CRITERIA	DESCRIPTION
Risk event	**Income Generation & Skills Transfer (Employment)**
Nature of Impact	Positive
Extent	Large
Duration	Permanent
Intensity	High (to the unemployed)
Probability	Definite
Significance (no mitigation)	High (to the unemployed)
Mitigation	No mitigation required
Significance (with mitigation)	High (to the unemployed)
Confidence level	High

(ii) Value Adding & Contributing to Foreign Money

The proposed processing plant will directly result in value being added to raw material which if exported contributes to gaining foreign currencies, which has a direct positive impact and cumulative effect of the National economy.

The processing plant enables the generation of foreign money, which previously was not possible.

Table 7.19 below presents the comprehensive assessment outcome.

Table 7.19: Impact assessment pertaining to foreign income

CRITERIA	DESCRIPTION
Risk event	**Generating Foreign Income**
Nature of Impact	Positive
Extent	Large
Duration	Permanent
Intensity	High
Probability	Definite
Significance (no mitigation)	High
Mitigation	No mitigation required
Significance (with mitigation)	High

CRITERIA	DESCRIPTION
Confidence level	High

(iii) Noise & Dust & Fumes

Noises, dust and fumes generated as a result of the proposed development are from trucks, cranes, the diesel generator and/or the cutting component. The remainder of activities are located within the building and has no potential affect.

Considering the industrial nature of Extension 6, the significance of the predicted noise levels from the plant's operations to the neighbouring properties is considered ***low*** while the impact to the larger surroundings is considered ***none.***

Table 7.20 below presents the comprehensive assessment outcome.

Table 7.20: Impact assessment pertaining to noise & dust & fumes

CRITERIA	DESCRIPTION
Risk event	**Noise & Dust & Fumes**
Nature of Impact	Negative
Extent	Small
Duration	Permanent
Intensity	Low
Probability	Definite
Significance (no mitigation)	Low (direct neighbours) None (larger surroundings)
Mitigation	No practical mitigation exists
Significance (with mitigation)	None
Confidence level	High

(iv) Traffic & Safety

Operational activities in this respect are associated with vehicle movement of staff and transport vehicles to and from the plant which will make use of the C32 / M0077 road to and from the processing plant. An additional 5 trucks per day is expected as a result of this proposed development, i.e. 3 trucks delivering marble blocks to the site and 2 truck removing processed products from the site.

The potential pre-mitigation significance is regarded as ***low,*** which can be reduced to ***low-none*** through applying proper mitigations.

Table 7.21 below presents the comprehensive assessment outcome.

Table 7.21: Impact assessment pertaining to traffic and safety

CRITERIA	DESCRIPTION
Risk event	**Traffic and Safety**
Nature of Impact	Negative
Extent	Larger
Duration	Permanent
Intensity	Low
Probability	Probable
Significance (no mitigation)	Low
Mitigation	Appropriate signs should be placed along the C32 / M0077 road. Proper road designs should be incorporated to limit speeding and warn motorists of junctions and access points. These road signs should be maintained for the duration of the lifetime of the development.
Significance (with mitigation)	Low-none
Confidence level	High

(v) Natural Resources (Demand vs Supply)

(a) Water Demand

Given the nature of the development, water forms one of the main 'ingredients' and is thus directly dependent on the availability and continuous supply of water.

As mentioned, a wastewater recycling plant will be constructed as part of the development, which according to the project engineers recycles up to an estimated 90% of the daily wastewater for reuse. The operational demand from month 2 of the operational phase onwards will thus range between 2m³/day to 1.1m³/day, which is believed to be able to be supplied from the Namwater supply line. Groundwater would not be directly abstracted as part of the operational phase.

The operational phase will thus require a daily supply of 2m³/day to 1.1m³/day, which is considered minute and capable of being supplied by Namwater, as indicated by Namwater.

Table 7.22 below presents the comprehensive assessment outcome.

Table 7.22: Impact assessment pertaining to water resource and infrastructure

CRITERIA	DESCRIPTION
Risk event	**Water Resource & Infrastructure**
Nature of Impact	Negative
Extent	Larger
Duration	Permanent
Intensity	Low
Probability	Probable
Significance (no mitigation)	Low
Mitigation	None required as recycling plant is already part of development
Significance (with mitigation)	None
Confidence level	High

(b) Electricity Demand

Given the nature of the development, energy forms an equal important commodity as water and is thus directly dependent on the availability and continuous supply thereof.

As mentioned previously in this report, electricity will be supplied to the factory by means of a diesel (900kW) / solar (350kWp) hybrid plant, which will result in placing no burden on the national infrastructure and resource.

Table 7.23 below presents the comprehensive assessment outcome.

Table 7.23: Impact assessment pertaining to electricity resource and infrastructure

CRITERIA	DESCRIPTION
Risk event	**Electricity Resource & Infrastructure**
Nature of Impact	Negative
Extent	Larger
Duration	Permanent
Intensity	None
Probability	Probable
Significance (no mitigation)	None
Mitigation	None required as alternative energy is in place
Significance (with mitigation)	None
Confidence level	High

7.2.3 DECOMMISSIONING AND CLOSURE

Some development projects require decommissioning and closure. This may become necessary once the intended purpose of the development is no longer required, or its purpose is fulfilled by another development. As in the case of the construction and operational phases of a project, there are potential impacts associated with the decommissioning and closure of a project.

In such an event, the activities are 100% similar to that of the construction phase and is accordingly treated and managed in accordance with the Environmental Management Plan (Appendix B).

7.2.4 CUMULATIVE IMPACTS

As indicated under section 7.2, the introduction of any development can be expected to have both positive and negative impacts on the immediate and surrounding receiving environment (natural and social) during either the construction,- operational- and/or decommissioning phase, of which the significance is determined by the nature of the particular activity/ies and the sensitivity of the particular receiving environment.

Some of these impacts will result in having a cumulative impact along with other already existing activities. Cumulative impacts are defined as “those that result from the successive, incremental, and/or combined effects of an action or activity when added to other existing, planned, and/or reasonably anticipated future ones” (International Finance Corporation, 2013).

Although cumulative impacts cannot be entirely avoided, they ought to be significantly reduced by means of sustainable practises and thorough implementation of all recommended mitigation measures and implementation of this Scoping Assessment Report and the Environmental Management Plan. Continued monitoring of the effectiveness of mitigations is essential in the long-term sustainable existence and should be applied to all aspects of the development.

Potential impacts associated with the Marble Processing Plant (section 7.2 above) expected to have a contributing factor to existing impacts (i.e. cumulative impact), are -

- *Ground and Surface Water Pollution (e.g. wastewater; domestic waste).*
- *Socio-economic Implication*
    - *Income Generation & Skills Transfer (Employment)*
    - *Economic Benefit to the Construction and Mining Industry*
    - *Traffic & Safety*
- *Demand for resources (e.g. water & electricity).*

Considering the relatively small scale and sustainable practises proposed for implementation at the processing plant, the pre-operational cumulative impact **is considered to be low**. It is

however important that continuous assessment be done as data become available over time, and that the necessary adjustments be made as and when required.

Assessing the full extent of cumulative impacts is not accurately possible at the scale of a single environmental assessment and should include the larger surrounding area, which should consider all other contributing activities and the sensitivity of the larger surrounding receiving environment.

7.2.5 NO-GO OPTION

The scenario with or without the development can be summarised as follows -

- Socio-economic perspective:
    - With the development, various socio-economic benefits can be expected, which would directly and indirectly contribute to improved socio-economic conditions.
    - Without the proposed development, none of the socio-economic benefits would be applicable and this specific portion of land will remain to have little or no economic benefit.
- Ecological perspective:
    - Ecological degradation does not really come into play with this particular development, since the site falls within an existing urban environment which shows heavy human interference and resultant disturbance.
- Resource demand perspective:
    - With the development, an increasing load will be placed on natural resources.
    - Without the development, no additional load will be placed on the natural resource.

8 CONCLUSIONS AND RECOMMENDATIONS

This chapter of the report presents the assessment conclusion following the scoping phase, as well as the key recommendations and the environmental statement for consideration by the authorities. The conclusion and recommendations as presented in this chapter have been drawn from the assessment outcome, as presented in Chapter 7.

8.1 CONCLUSION

Following the environmental scoping assessment, the following can be concluded:

- The overall cumulative impact of the development is expected to range from ***medium*** to ***low*** after mitigation.
- The site is located inside of an urban area and in particular within a proposed mixed use urban development, dominated by industrial land uses. The proposed development is not in conflict with the established and proposed land uses of Extension 6.
- The sustainable and alternative methods of reducing the burden on the natural resources (i.e. water and electricity) applied as part of the development makes it viable and decrease the carbon footprint having a positive contribution.

Given the above, it is not to say that there will be no impact/s and potential threats, as highlighted by the study. **Construction and operational activities need to be controlled by the proponent and contractor, and monitored to ensure that all potential impacts identified in this study and other impacts that might arise during implementation is properly identified in time and addressed in an effective manner to ensure protection of all natural resources.**

Based on the baseline information, as presented in this report, this Scoping Assessment study, after following the above evaluation, concludes that, there is currently no evidence suggesting that any of the potential impacts identified are of such significance that it cannot be mitigated and that the Marble Processing Plant, as presented in this report, could not be allowed to continue. It is however required that the recommendations as presented below be satisfied with approval from the Environmental Commissioner.

8.2 RECOMMENDATIONS

It is therefore recommended that an Environmental Clearance Certificate be issued for the listed activities forming part of the Marble Processing Plant, subject to the following recommendations:

- All required permits, licenses and approvals (see section 4.2) for the development be obtained.
- All mitigations listed in Tables 7.3 to 7.14, and Tables 7.16 to 7.23, and the Environmental Management Plan (Appendix B) be implemented prior and during construction.
- Pollutants of different sorts should be managed and treated in such a manner not to cause any pollution of the immediate and surrounding receiving environments. The necessary mitigations to achieve a zero-pollution factor have been proposed within this Scoping Report and the Environmental Management Plan.
- An Environmental Control Officer should be appointed during the construction phase of the development to make sure all the requirements within the Scoping Report and Environmental Management Plan (Appendix B) are adhered to.
- If any construction material is sourced from nearby quarries it is required that the necessary approval (i.e. environmental clearance certificate) either exists or be obtained by the appointed contractor.
- Continued on-site monitoring and evaluation be conducted during the construction and operational phases to be authorised by the DEA.

8.3 ENVIRONMENTAL IMPACT STATEMENT

Based on the information presented in this scoping report, the Environmental Assessment practitioner is of the opinion that the immediate and larger environment will not be significantly impacted if the above recommendations as proposed in this report are implemented and monitored, and responsible environmental practises are applied by the proponent, appointed contractors and sub-consultants.

Urban Green cc, the independent environmental assessment practitioner, recommends to the relevant authorities that the application for the listed activities associated with the Marble Processing Plant be approved on condition that the above recommendations (Section 8.2) are met and that continuous monitoring be conducted in accordance with the Environmental Management Act (Act No. 7 of 2007), its EIA Regulations and this scoping report. It is important that proof of monitoring is submitted to the office of the Environmental Commissioner to be used as part of the review process pertaining to the 3-yearly ECC renewal.

9 REFERENCES

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