Environmental Impact Assessment (EIA) Study for the Proposed Establishment & Operation of a New Cemetery on Erf 3040 in Extension 4 of the Oranjemund Town, //Karas Region

Document Type: **Scoping Report**

Document Version: **Final for Submission**

ECC Application No.: **APP-001176**

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January 2023

EXECUTIVE SUMMARY

Oranjemund Town Council (hereinafter referred to as the *Proponent)* is responsible for the planning and management of the establishment of sufficient grave spaces and maintenance thereof within the Town. The Oranjemund Town currently has two existing and operational cemeteries in Extension 4 operated by the Town Council. The two existing cemetery sites are on Erf 900 in Extension 3 and Erf 1217 (Cemetery Site 2) in Extension 4. However, the two cemeteries are nearing capacity, and existing Cemetery Site 1, for instance no longer has space, because the available space is already reserved by some families hence the need for a new cemetery in the Town. Thus, the need to site and prepare for a new cemetery in the Town.

Following the Free Training of Environmental Health Officers (EHO) and representatives by Excel Dynamic Solutions (Pty) Ltd (EDS) from 12 local authorities in November 2021, EDS had requested the Town Council to share with EDS some of their existing facilities or planned projects that are listed activities in the Environmental Management Act (EMA) No. 7 of 2007 and its 2012 EIA Regulations requiring Environmental Clearance Certificates (ECCs). EDS then offered to assist the OTC with one project of their choice (existing) to obtain an ECC at no cost to the Local Authority (OTC). Therefore, to ensure compliance with the environmental legal requirements, the Oranjemund Town Council chose their cemetery facilities (existing and proposed). This entails the EMP development for the existing cemetery and new EIA Study for the new cemetery. Cemetery facilities are one of the listed activities that requires an EIA study and or for existing facilities, an Environmental Management Plan (EMP) under the following Section:

- 11.2 Construction of cemeteries, camping, leisure and recreation sites.

The existing cemeteries are currently not environmentally cleared as this could be explained by their establishment before the promulgation of the EMA and had not been cleared to date.

Subsequently, to ensure environmental management and compliance for the existing cemeteries and the proposed cemetery, the Town Council requires an Environmental Management Plan (EMP) & Closure Plan is developed for the existing cemeteries and to apply for the ECC. For the proposed (new) cemetery site, an Environmental Scoping Assessment (ESA) study, an ESA Report and draft EMP compiled for the new cemetery ECC. The ECC applications and the respective documents (ESA Report and EMPs) will be submitted by EDS to the Department of Environmental Affairs and Forestry (DEAF), Ministry of Environment, Forestry and Tourism (MEFT) for evaluation and consideration of the ECCs.

PROJECT DESCRIPTION

Once the ECC is issued, administrative and technical tasks completed, and the Town Council is ready, the construction works, and associated activities will commence. There will be some earthworks to prepare the site for construction and installation necessary services infrastructure and structures required for the cemetery.

Construction Phase

The construction works for the cemetery will be outsourced to an appointed contractor through the Council's Procurement Procedures. Therefore, the Council cannot predict the exact number of people to be employed by the contractor during this phase, as the contractor is likely to provide its own workforce. However, it is strongly advised that construction contractor and employment preference for unskilled (and skilled, if available) works should be given to the Town's residents. The following will be constructed in preparation of the new cemetery's operational phase:

- Cemetery wall, and other cemetery related facilities and structures
- Site access roads and parking lots preparation.
- Storeroom and male and female ablution facilities (toilets / washrooms).
- Security office.
- Installing information signs of No Vandalism / Stealing of cemetery properties (in both English, and Afrikaans languages for comprehension) and penalty thereof.
- Installation of cemetery entrance and exit points as well as emergency exits points.
- Planting of hedges around the cemetery wall to enhance the sight of the place (visual).
- Demarcation of different cemetery sections to cater for all different religions in the town.

Operational and Maintenance (Upkeep) Phase: This is the phase during which the cemetery will be operational and maintenance done by the Town Council's responsible Division. The Town Council will, as and when required by its residents provides the needed burial arrangements in the cemetery and maintenance.

PUBLIC CONSULTATION

Public Consultation Activities

The communication with the stakeholders and interested & affected parties (I&APs) about the project activities was done through the following means and in this order to ensure that the public is notified and afforded an opportunity to comment on the project:

- **Stakeholders / Interested and Affected Parties (I&APs):** The list of stakeholders (I&APs) was developed and updated throughout the EIA process, as new I&APs are identified or request for registration**.**
- **A Background Information Document (BID)** A non-technical summary of the Project activities (background information document (BID)) containing brief information about the project activities was compiled and shared with pre-identified and new registered I&APs.
- **Environmental Assessment Study notification** were published in *The Namibian* and *New Era* Newspapers dated 12 & 26 April 2022. The adverts briefly provided information on the project activities, location, inviting the public to the consultation meeting, to register as I&APs and submit their comments/concerns.
- **Project (Public) Notices:** A3 size printed posters were placed at strategic places in Oranjemund such as the two Town Council notice boards (Head Office and Technical).
- **Consultation Meeting** was scheduled for the 12th of July 2022 at in Oranjemund (Zacharias Lewala Community Hall at 09h30 AM). The meeting was a no-show. The Town Council representatives informed the Environmental Consultants that the residents of the Town are known to be selective to the type of meetings they attend. According to the Town Council personnel, from experience with public meetings in the Town, the public only attend meetings that directly affect them such as services tariff increments. There was a meeting where the Town Council invited the public to attend. The meeting was on plot allocation and budgeting. The public only stayed to listen to the plot allocation and left as soon as the budget agenda point was being discussed, as they do not apparently see the importance of this nor does it directly affect them.

Potential Impacts identified

The following potential impacts were identified:

Positive impacts:

- Social: gathering of families to give their loved ones a respectful and dignified burial process in a comfortable place.

- Employment and business opportunities: creation of jobs to the locals (temporary work for the construction phase, and permanent / contractual work for cemetery maintenance and security).

Potential Negative impacts:

- Physical land (soil) disturbance
- Impact on water resources (groundwater pollution)
- Environmental pollution (waste generation)
- Accidental fire outbreaks
- Site safety and security
- Occupation and community health and safety risks
- Vehicular traffic safety
- Noise
- Archaeological resources impact through inadvertent unearthing onsite
- Visual impact.

These project impacts were assessed, and mitigation measures provided accordingly.

RECOMMENDATIONS AND CONCLUSIONS

The potential impacts that are anticipated from the proposed project activities were identified, described, and assessed. For the significant adverse (negative) impacts with medium rating, appropriate management and mitigation measures were recommended for implementation by the Proponent.

The interested and affected parties (I&APs) and stakeholders were consulted as per the EMA and its 2012 EIA Regulations (Section 21 to 24). This was done via the two newspapers used for this environmental assessment, i.e., *New Era* and *The Namibian*. A consultation meeting was scheduled in Oranjemund on the 12th of July 2022. The meeting was no-show. The no-show situation was explained by the Oranjemund Town Council that residents only attend meetings that directly affect them such as services tariff increment or plot/housing allocation meetings. Despite,

the no-show at the meeting, some comments were collected from one of the residents (a health worker from the clinic). These were noted down for incorporation in this Report.

Recommendations

The potential impacts and issues identified during the EIA process were incorporated into this Scoping Report, have been addressed and mitigation measures provided thereto to avoid and/or minimize their significance on the environmental and social components. The potential adverse impacts were found to be of low to medium rating significance. With the effective implementation the recommended management and mitigation measures, significance of these impacts will be reduced to low rating. Monitoring should be done to ensure that the EMP implementation achieve the desirable objective of avoiding and or minimizing the adverse impacts, and that the adverse impacts might arise during project implementation are properly and timely identified and addressed accordingly.

The Scoping assessment is deemed sufficient and conclude that no further detailed assessments are required for the ECC application.

Conclusions

Based on the assessment done for the proposed cemetery establishment, the project and its associated activities do not pose a significant risk to the environment that would prompt the no-go option. Therefore, EDS Consultants are confident that the potential negative impacts associated with the project activities can be managed and mitigated by the effective implementation of the recommended management and mitigation measures. This would also be improved by more effort and commitment towards monitoring the implementation of these measures.

It is therefore, recommended that the project activities be granted an Environmental Clearance Certificate. The recommendation is set alongside high priority on effective and correct implementation of the mitigation measures provided in the Draft EMP. The monitoring of this implementation is recommended to ensure compliance, thus protecting the biophysical and social environment throughout the project duration.

Disclaimer

EDS warrants that the findings and conclusion contained herein were accomplished in accordance with the methodologies set forth in the Scope of Work and EMA of 2007 with its 2012 EIA Regulations. These methodologies are described as representing good customary practice for conducting an EIA for the purpose of identifying recognized environmental conditions. There is a possibility that even with the proper application of these methodologies there may exist on the subject project site conditions that could not be identified within the scope of the assessment, or which were not reasonably identifiable from the available information. The EDS Consultants believe that the information obtained from the record review and during the public consultation processes concerning the project is reliable. However, the Consultants cannot and does not warrant or guarantee that the information provided by the other sources is accurate or complete. The conclusions and findings set forth in this Scoping Report are strictly limited in time and scope to the date of the evaluations. No other warranties are implied or expressed.

Some of the information provided in this Report is based upon personal interviews, public / stakeholders' engagement and research of available documents, records, and maps held by the appropriate government and private agencies. This Report is subject to the limitations of historical documentation, availability, and accuracy of pertinent records and the personal recollections of the persons contacted or consulted.

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Appendix A: Draft Environmental Management Plan (EMP) – *upload on the portal separately as required*

Appendix B: Curricula Vitae (CV) for the Environmental Assessment Practitioner (EAP) - *upload on the portal separately as required*

Appendix C: EIA / ESA Notification in the newspapers (*New Era* and the *Namibian*) - *upload on the portal separately as required*

LIST OF ABBREVIATIONS

Abbreviation	Meaning
BID	Background Information Document
CV	Curriculum Vitae
DEAF	Department of Environmental Affairs and Forestry
EA	Environmental Assessment
EAP	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EDS	Excel Dynamic Solutions
EHO	Environmental Health Officer
EIA	Environmental Impact Assessment
EMA	Environmental Management Act
EMP	Environmental Management Plan
ESA	Environmental Scoping Assessment
GG & GN	Government Gazette & Government Notice
I&APs	Interested and Affected Parties
MEFT	Ministry of Environment, Forestry and Tourism
OTC	Oranjemund Town Council
PPE	Personal Protective Equipment
Reg / S	Regulation / Section

KEY TERMS

Terms	Definition
Alternative	A possible course of action, in place of another that would meet the same purpose and need of the proposal.
Baseline	Work done to collect and interpret information on the condition/trends of the existing environment.
Biophysical	That part of the environment that does not originate with human activities (e.g., biological, physical and chemical processes).
Decision-maker	The person(s) entrusted with the responsibility for allocating resources or granting approval to a proposal.
Ecological Processes	Processes which play an essential part in maintaining ecosystem integrity. Four fundamental ecological processes are the cycling of water, the cycling of nutrients, the flow of energy and biological diversity (as an expression of evolution).
Environment	As defined in Environmental Management Act - the complex of natural and anthropogenic factors and elements that are mutually interrelated and affect the ecological equilibrium and the quality of life, including – (a) the natural environment that is land, water, and air; all organic and inorganic matter and living organisms and (b) the human environment that is the landscape and natural, cultural, historical, aesthetic, economic and social heritage and values.
Environmental Management Plan	As defined in the EIA Regulations (Section 8(j)), a plan that describes how activities that may have significant environments effects are to be mitigated, controlled, and monitored.
Interested and Affected Party (I&AP)	In relation to the assessment of a listed activity includes - (a) any person, group of persons or organization interested in or affected by an activity; and (b) any organ of state that may have jurisdiction over any aspect of the activity. Mitigate - practical measures to reduce adverse impacts. Proponent – as defined in the Environmental Management Act, a person who proposes to undertake a listed activity. Significant impact - means an impact that by its magnitude, duration, intensity or probability of occurrence may have a notable effect on one or more aspects of the environment.
Fauna and Flora	All the animals and plants found in an area.
Mitigation	The purposeful implementation of decisions or activities that are designed to reduce the undesirable impacts of a proposed action on the affected environment.

Terms	Definition
Monitoring	Activity involving repeated observation, according to a pre-determined schedule, of one or more elements of the environment to detect their characteristics (status and trends).
Proponent	Organization (private or public sector) or individual intending to implement a development proposal.
Public Consultation/Involvement	A range of techniques that can be used to inform, consult or interact with stakeholders affected by the proposed activities.
Protected Area	Refers to a protected area that is proclaimed in the Government Gazette according to the Nature Conservation Ordinance number 4 of 1975, as amended.
Scoping	An early and open activity to identify the impacts that are most likely to be significant and require specialized investigation during the EIA work. Can, also be used to identify alternative project designs/sites to be assessed, obtain local knowledge of site and surroundings, and prepare a plan for public involvement. The results of scoping are frequently used to prepare a Terms of Reference for the specialized input into full EIA.
Terms of Reference (ToR)	Written requirements governing full EIA input and implementation, consultations to be held, data to be produced and form/contents of the EIA report. Often produced as an output from scoping.

1 INTRODUCTION

1.1 Project Background and Locality

Oranjemund Town Council (hereinafter referred to as the *Proponent*) is responsible for the planning and management of the establishment of sufficient grave spaces and maintenance thereof within the Town. The Oranjemund Town currently has two existing and operational cemeteries in Extension 4 operated by the Town Council. The two existing cemetery sites are on Erf 900 in Extension 3 and Erf 1217 (Cemetery Site 2) in Extension 4. However, the two cemeteries are nearing capacity, and existing Cemetery Site 1, for instance no longer has space, because the available space is already reserved by some families hence the need for a new cemetery in the Town. Thus, the need to site and prepare for a new cemetery in the Town. The locality of the existing cemetery sites (marked at ''Site 1'' and ''Site 2'') and proposed cemetery are shown on the map in Figure 1-1.

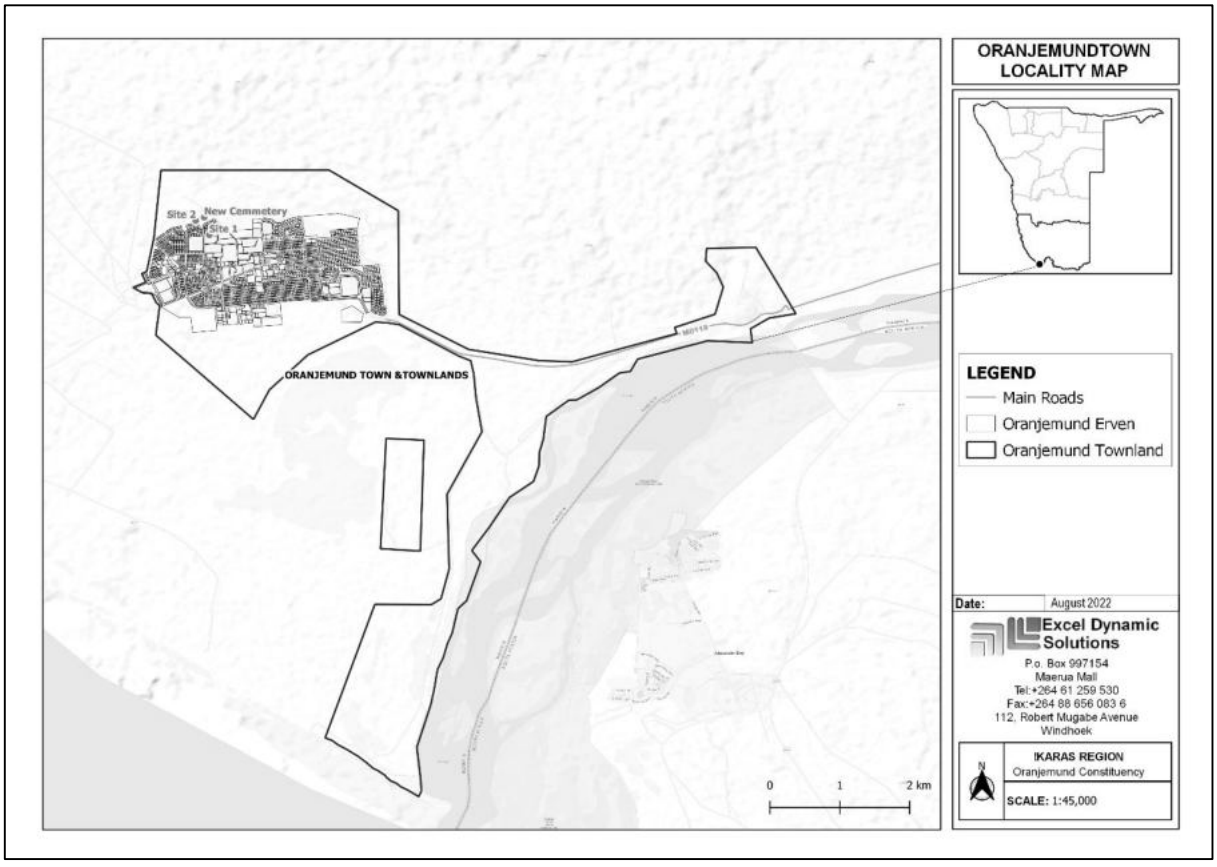


Figure 1-1: Locality Map of the Cemetery (existing and proposed) sites in Oranjemund Town, //Karas Region

The proposed (new) cemetery will be located on Erf 3040 of the Town' Extension 4 as shown in

Figure 1-2.

Figure 1-2: The Land use map of Oranjemund Town with the new cemetery site on the upper ervens

1.2 The Coordinates of the Cemetery Sites

The approximate centre GPS coordinates of the proposed cemetery site and the existing cemetery sites are as follows:

- New Cemetery Site: -28.544618° 16.416224°
- Cemetery Site 1: -28.547209° 16.417164°, and Cemetery Site 2: -28.545124° 16.415174°.

1.3 The Need for the Environmental Scoping Assessment

Following the Free Training of Environmental Health Officers (EHO) and representatives by Excel Dynamic Solutions (Pty) Ltd (EDS) from 12 local authorities in November 2021, EDS had requested the Town Council to share with EDS some of their existing facilities or planned projects that are listed activities in the Environmental Management Act (EMA) No. 7 of 2007 and its 2012 EIA Regulations requiring Environmental Clearance Certificates (ECCs).

Subsequently, EDS offered to assist the OTC with one project of their choice (existing or new) to obtain an ECC at no cost to the Local Authority. Therefore, to ensure compliance with the environmental legal requirements, the Oranjemund Town Council chose their cemetery facilities (existing and proposed). This entails the EMP development for the existing cemetery and new EIA Study for the new cemetery.

Cemetery facilities are one of the listed activities that requires an EIA study and or for existing facilities, an Environmental Management Plan (EMP) under the following Section:

- 11.2 Construction of cemeteries, camping, leisure and recreation sites.

The existing cemeteries are currently not environmentally cleared as this could be explained by their establishment before the promulgation of the EMA and had not been cleared to date.

Subsequently, to ensure environmental management and compliance for the existing cemeteries and the proposed cemetery, the Town Council requires an Environmental Management Plan (EMP) & Closure Plan is developed for the existing cemeteries and to apply for the ECC. For the proposed (new) cemetery site, an Environmental Scoping Assessment (ESA) study, an ESA Report and draft EMP compiled for the new cemetery ECC. The ECC applications and the respective documents (ESA Report and EMPs) will be submitted by EDS to the Department of Environmental Affairs and Forestry (DEAF), Ministry of Environment, Forestry and Tourism (MEFT) for evaluation and consideration of the ECC.

1.4 Application for an Environmental Clearance Certificate (ECC)

The application for the ECC has been compiled and will be submitted to the Environmental Custodian at MEFT. The ECC for the project activities will be considered by the Environmental Commissioner at MEFT, upon submission of an Environmental Scoping Assessment (ESA) or Scoping Report and Draft Environmental Management Plan (EMP),

The findings of the ESA process are incorporated into this Scoping Report and management as well as mitigation measures are provided in the Draft EMP (Appendix A). These documents will be submitted as part of the ECC application to the Environmental Commissioner at the MEFT.

The submitted Scoping Report and Draft EMP will be evaluated at the DEAF and the site ECC will be considered by the Environmental Commissioner.

1.5 Appointed Environmental Assessment Practitioner

To satisfy the requirements of the EMA and its 2012 EIA Regulations, Oranjemund Town Council appointed a team of independent environmental consultants (Excel Dynamic Solutions (Pty) Ltd (EDS)), to conduct the required Environmental Assessment (EA) process.

The Scoping Assessment Study was conducted, and reporting done by Ms. Fredrika Shagama, an experienced EAP and qualified Geohydrologist with over 7 years of experience in the Environmental and Groundwater Management Consulting sector. Ms. Shagama' CV is presented under Appendix B.

1.6 The Need for the Project

The existing cemeteries in the Town are reaching full capacity, but the remaining capacity cannot be determined because this will depend on the spacing grave size according to the grave regulations. The Town Council has ceased burials on the cemetery for reservations only, i.e., some people committed to paying a high annual fee to reserve their spaces at the Cemetery Site 1. Therefore, it is important that a new cemetery is built as delegated by the Parks recreation, Gardens and Cemeteries of the Tow Council. A new cemetery is therefore proposed to address the need for further committal grounds in the area. Furthermore, cemeteries bring families together and offer them an insight into local history. Cemeteries are known to have the following importance for the community:

- A place of historical significance: Cemeteries have a deep historical connection to the local community. They bring residents closer to an understanding of the past and help to provide insights into how people within the area used to live. By looking at the headstones and reading details about those that have passed, people can gain information on the importance of individuals to the community at the time and the jobs and social connections they had during their life.
- A connection between families: Cemeteries can also hold deep significance for families with loved ones buried in the area. Local cemeteries can help offer a space that brings comfort to families as they struggle with their grief while remembering loved ones. It can provide a serene environment in which to place flowers on important occasions and to spend time speaking on a spiritual level with the person that has passed. It's a deeply personal process that can have many psychological benefits for those who have suffered a recent death in their family.
- A location of memorial for the deceased: Beyond their functional value as an area in which to place people after they have passed, cemeteries can act as a place of memorial. These are host of ritual events for families and post-funeral events, allowing the family to give their loved one a respectful and dignified burial process at the end of their life. A cemetery therefore holds great significance to communities and their values.

The description of the project activities is provided under the next heading (Chapter 2).

2 THE DESCRIPTION OF PROJECT ACTIVITIES

2.1 Planning Phase

Once the ECC is issued, administrative and technical tasks completed, and the Town Council is ready, the construction works, and associated activities will commence. There will be some earthworks to prepare the site for construction and installation necessary services infrastructure and structures required for the cemetery.

2.2 Construction Phase

The construction works for the cemetery will be outsourced to an appointed contractor through the Council's Procurement Procedures. Therefore, the Council cannot predict the exact number of people to be employed by the contractor during this phase, as the contractor is likely to provide its own workforce. However, it is strongly advised that construction contractor and employment preference for unskilled (and skilled, if available) works should be given to the Town's residents.

The following will be constructed in preparation of the new cemetery's operational phase:

- Cemetery wall.
- Site access roads and parking lots preparation.
- Storeroom and male and female ablution facilities (toilets / washrooms).
- Security office.
- Installing information signs of No Vandalism / Stealing of cemetery properties (in both English, and Afrikaans languages for comprehension) and penalty thereof.
- Installation of cemetery entrance and exit points as well as emergency exits points.
- Planting of hedges around the cemetery wall to enhance the sight of the place (visual).
- Demarcation of different cemetery sections to cater for all different religions in the town.
- Installation of other cemetery related facilities and structures.

2.3 Operational and Maintenance (Upkeep) Phase

This is the phase during which the cemetery will be operational. and maintenance done by the Town Council's responsible Division. The Town Council will, as and when required by its residents provides the needed burial arrangements in the cemetery and maintenance.

The cemetery will be operated in a similar as the existing cemeteries but with improvements. Like what is currently done at the existing cemeteries, the graves will be prepared for burials.

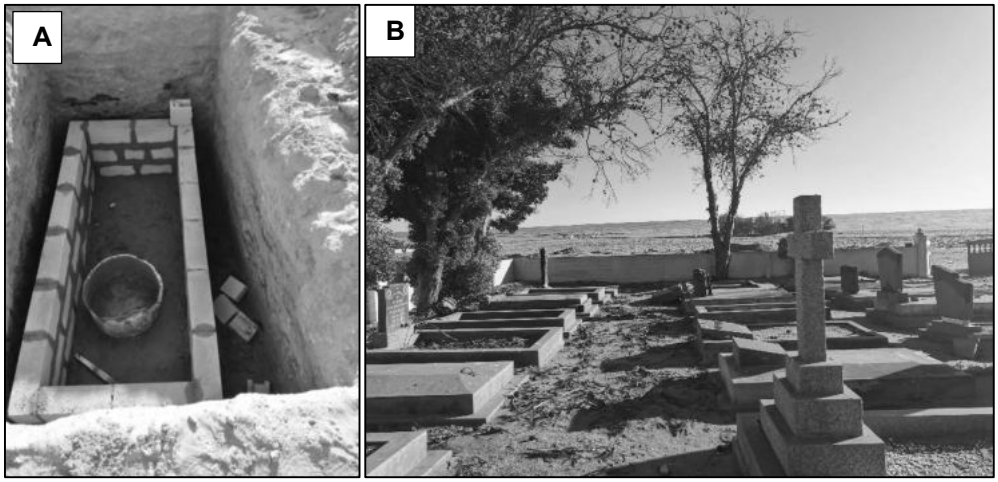


Figure 2-1: A- The typical preparation of a grave in a cemetery (photo contributed) and B- display of completed graves in the Town Council's Cemetery Site 1 (South of the new cemetery site))

2.3.1 Current Council Burial Fees (Tariffs)

According to the preliminary information provided by the Town Council responsible personnel, the current Town Council standard tariff for a standard burial is N$5000 (inclusive of TLB/excavator use and grave fee). The fee for low-cost graves cost N$500 and still born is N$250.

2.3.2 Resources, Services and Infrastructure

The required resources and services that will not require contractors will be provided by the Town Council throughout the cemetery lifecycle. The following services will be required and utilized during the construction and operational phase:

- Human Resources: About 2 to 3 people may be employed by the Town Council to work as caretaker for the cemetery to assist the Town Council Foreman. Security guards will be deployed to guard the cemetery every day, day-and-nighttime. All these employees will be housed in their own homes in Oranjemund and commute to work daily. The security guards will be on site as per their shifts.
- Water supply: Water is required for grave digging and watering the plants around the cemeteries. The Town Council will install water taps at the cemetery from its water supply line. The amount of water used for the project activities is not known but from existing operations, the volume of water is low, therefore, insignificant.
- Power supply: Currently, the cemeteries are not equipped with electricity (for lighting). This will be considered for the upgrading of the existing cemetery sites and the new (proposed)

one. There are powerlines passing on the immediate north of Cemetery Site 2 and the new cemetery site.

- Site accessibility: The site is accessible from the Town via a well-maintained unpaved access road.
- Health and safety: When required to dig graves and carrying out maintenance, the responsible personnel (employees) will be provided with appropriate Personal Protective Equipment (PPE). Since cemeteries are associated at a certain extent with manual labour such as digging, there will be one fully equipped first aid kit onsite.
- Potential Accidental Fire Outbreaks: the site will be equipped with two fully serviced fire extinguishers to be kept at the security control room (at the entrance).
- Waste management: the waste generated from the construction and operational & upkeeping phases of the cemetery will be handled as follows:
    - Solid waste: The cemetery site will be equipped with secured waste bins for each waste type. Depending on the amount generated, waste will be sorted and collected on a weekly basis or monthly and taken to the Town Council Dumpsite which located to the northwest of the site.
    - Construction rubbles: these will be stored at a designated area at the cemetery for disposal at the Town dumpsite.
    - Hazardous waste: all the fuels and lubricants that will be used onsite, particularly during construction will be properly handled and waste fuels will be stored in containers for disposal at the Town Council's hazardous waste management facility.
    - Human waste (sewage): The construction workers will be provided with movable (temporary) toilets. Permanent flushing ablution facilities (toilets) will also be constructed for cemetery operational workers, burial attendees (mourners) as well as cemetery day visitors (families, friends and acquaintances).

2.4 Decommissioning (Closure)

Cemeteries do not necessarily require decommissioning, but rather closure when they reach full capacity. Therefore, when the new cemetery reaches capacity in future, the Town Council will need to close it and look for a new site. Nevertheless, mitigation measures for closure will need to be made and provided in the draft EMP for the cemetery.

2.5 Current Challenges on the Existing Cemetery Sites

2.5.1 Sand accumulation

During site visit, there we visible signs of large volumes of sand accumulating on the outer precast walls of the seemingly low cemetery yards. The sand height settling at the low and dilapidated cemetery walls visibly exerts pressure on these walls that they start to lean in and would eventually fall over, resulting in damage as shown in Figure 2-2.

Figure 2-2: The sand accumulation issue at Cemetery Site 2 (immediate west of new cemetery site)

The Town Council also informed the Environmental Consultant about an incident in 2021 at the existing Cemetery Site 2 (next to the proposed cemetery site). The incident was that a newly dug grave for a burial collapsed and filled with sand, that a new grave had to be dug far from the northern corner side of the cemetery wall. The accumulating sand has also been covering some of the graves that have only small metal name tags and these without (unmarked) as shown in Figure 2-3. In terms of the unmarked graves, and these are possibly lost, a historical survey of the two existing cemeteries is recommended to assist the Town Council to properly document the graves, known and unknow.

Figure 2-3: The sand accumulation on and around some graves at Cemetery Site 2

The plan is to upgrade the cemetery wall from precast to brick structured wall (as it is being done already).

2.5.2 Vandalism and Theft

There are issues of some people in the Town who steal accessories from the graves at the two existing cemeteries. This includes removal of grave metal name tags and breaking into the cemetery storerooms (Cemetery Site 1). The stolen name tags are said to be potential sold at the local or possible out-of-town scrap yards for personal profits.

Furthermore, it is also suspected that some residents use cemetery grounds for indecency and criminal activities such as having romantic moments at the cemeteries and using the cemeteries as a hiding ground after committing crimes and using drugs.

2.5.3 Lack of Background Information and Data on the Existing Cemeteries

The own Council indicated that they do not have a single documentation or information about the background of the cemeteries. Therefore, they are intending on commissioning a 4-phased study to help them obtain more information. The proposed study phases would include:

- Phase 1. Planning, design of cemetery, grave layout & numbering System,
- Phase 2. Repairing the infrastructure & beautification for Cemetery Site 1 & 2,
- Phase 3. Data research on cemeteries background and unmarked graves, and
- Phase 4. Developing the cemeteries Information System.

When undertaking an environmental assessment, an EAP should also make provision for other suitable or possible environmentally friendly alternatives that may be considered for the project. These alternatives can be either in terms of "no-go", project location, other land uses for the project site, etc. These are presented under the next chapter.

3 PROJECT ALTERNATIVES

Alternatives are defined as the "*different means of meeting the general purpose and requirements of the activity*" (EMA, 2007). This section will highlight the different ways in which the project can be undertaken and to identify the alternative that will be the most practical, but least damaging to the environment is identified.

Once the alternatives have been established, these are examined by asking the following three questions:

- What alternatives are technically and economically feasible?
- What are the environmental effects associated with the feasible alternatives?
- What is the rationale for selecting the preferred alternative?

The alternatives considered for the project are discussed in the following subsections.

3.1 Types of Alternatives Considered

3.1.1 The "No-go" Alternative

The "No-Go" alternative is the option of not proceeding with the activity, which typically implies a continuation of the status quo. Should the proposed cemetery plan be discontinued, the site will continue to be vacant as it currently is and probably be planned for something else in the Town. In addition, should the cemetery be not constructed, none of the associated potential impacts would occur. Furthermore, the No-Go option would mean that the Town Council would face a challenge of not being able to cater to its residents' burial space needs. This is a concern because the current / existing cemeteries in the Town will soon reach its full capacity in approximately 2 to

3 years. The existing Cemetery Site 1, for instance no longer has space, because the available space is already reserved by some families. The cemetery development would also mean creation of jobs to local people to work at the cemetery and continued provision of community and social services by the Town Council to its residents.

If the proposed project is to be discontinued, the current land use for the proposed site will remain unchanged and the Town Council will not be able to meet the residents' basic services such as this (availability of cemetery in the Town). In considering the proposed project, the 'no-go' option is not considered the preferred alternative.

Considering the above losses, the "no-action/go" alternative was not considered a viable option for this project.

3.1.2 Cemetery Location

The site was selected because it is a viable land considering that there are already similar land uses such as old cemetery sites (to its immediate west and south) and the dumpsite to the northwest. Therefore, the site can be used for this type of activity. Given the fact that the Town is fast growing to cater for the much-needed development, the availability of land is decreasing, and it would be suitable to site the cemetery at this specific area.

The site area is also suitable because the area is already open, with no vegetation (no need to disturb vegetation). Therefore, the site is a perfect option for its location.

3.1.3 Supporting Services, and Infrastructures

The site is within proximity of the electricity line, water supply and road. For this reason, this location and its proximity to services is the preferred option.

The above provided Project description, associated activities and considered alternatives thereto are governed by specific legal framework. The presentation of these legal requirements is provided under Chapter 4.

4 LEGAL FRAMEWORK: LEGISLATION, POLICIES AND GUIDELINES

A review of applicable and relevant Namibian legislation, policies, and guidelines to the project is given in this section. This review serves to inform the project Proponent, Interested and Affected Parties, and the decision-makers at the DEAF of the requirements and expectations, as laid out in terms of these instruments, to be fulfilled throughout the various stages of the cemetery establishment and operation.

4.1 The Environmental Management Act No. 7 of 2007 and 2012 EIA Regulations

The Environmental Management Act No.7 of 2007 and its 2012 EIA Regulations aims to ensure that the potential impacts of the project on the environment are considered carefully and in good time; that all interested and affected parties have a chance to participate in the environmental assessments and that the findings of the environmental assessments are fully considered before any decisions are made about activities which might affect the environment.

The Act aims at promoting sustainable management of the environment and use of natural resources. The Environmental Management Act (EMA) is broad; it regulates land use development through environmental clearance certification and/or Environmental Impact Assessments. The listed activities in the Regulations that are relevant to the project and its associated activities are as follows***:***

''11. OTHER ACTIVITIES:

- *11.2 Construction of cemeteries, camping, leisure and recreation sites."*

Implication and applicability for the project: The Proponent should carry out an assessment of the impact on the receiving environment and obtain an ECC for the activities.

The (EIA) Regulations detail requirements for public consultation within a given environmental assessment process (GN 30 Section (S) 21). The EIA regulations also outline the required details of a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).

4.2 Other Legal Requirements (Legislation, Acts, Policies, etc.)

The legal obligations that are relevant to the project activities are presented in Table 4-1.

Table 4-1: Applicable local, national and international standards, policies and guidelines governing the Cemetery establishment and operational activities

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
The Constitution of the Republic of Namibia, 1990 as amended	The Constitution of the Republic of Namibia (1990 as amended) addresses matters relating to environmental protection and sustainable development. Article 91(c) defines the functions of the Ombudsman to include: *"…the duty to investigate complaints concerning the over-utilisation of living natural resources, the irrational exploitation of non-renewable resources, the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia…"* *Article 95(l) commits the state to actively promoting and maintaining the welfare of the people by adopting policies aimed at the:* *"…Natural resources situated in the soil and on the subsoil, the internal waters, in the sea, in the continental shelf, and in the exclusive economic zone are property of the State."*	By implementing the environmental management plan, the establishment will be in conformant to the constitution in terms of environmental management and sustainability. Ecological sustainability will be main priority for the proposed development.
The Regional Councils Act (No. 22 of 1992)	This Act sets out the conditions under which Regional Councils must be elected and administer each delineated region. From a land use and project planning point of view, their duties include, as described in section 28 "to undertake the planning of the development of the region for which it has been established with a view to physical, social and economic characteristics, urbanisation patterns, natural resources, economic development potential, infrastructure, land utilisation pattern and sensitivity of the natural environment. The main objective of this Act is to initiate, supervise, manage and evaluate development.	The relevant Regional Councils are I&APs and must be consulted during the Environmental Assessment (EA) process. The project site falls under the //Karas Regional Council, therefore they should be consulted.

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Local Authorities Act No. 23 of 1992	To provide for the determination, for purposes of local government, of local authority councils; the establishment of such local authority councils; and to define the powers, duties and functions of local authority councils; and to provide for incidental matters. This includes the existing Regulations on Cemeteries.	The Oranjemund Town Council is the responsible Local Authority of the area, and the project Proponent. Regardless, they should ensure that the cemetery activities follow the Act and its Regulations, as relevant to the project.
Water Act 54 of 1956	The Water Resources Management Act 11 of 2013 is presently without regulations; therefore, the Water Act No 54 of 1956 is still in force: • Prohibits the pollution of water and implements the principle that a person disposing of effluent or waste has a duly of care to prevent pollution (S3 (k)). • Provides for control and protection of groundwater (S66 (1), (d (ii)). Liability of clean-up costs after closure/abandonment of an activity (S3 (l)).	The protection (both quality and quantity/abstraction) of water resources should be a priority.
Water Resources Management Act (No 11 of 2013)	The Act provides for the management, protection, development, use and conservation of water resources; and provides for the regulation and monitoring of water services and to provide for incidental matters. The objects of this Act are to: Ensure that the water resources of Namibia are managed, developed, used, conserved and protected in a manner consistent with, or conducive to, the fundamental principles set out in Section 66 - protection of aquifers, Subsection 1 (d) (iii) provide for preventing the contamination of the aquifer and water pollution control (Section 68).	

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
National Heritage Act No. 27 of 2004	To provide for the protection and conservation of places and objects of heritage significance and the registration of such places and objects; to establish a National Heritage Council; to establish a National Heritage Register; and to provide for incidental matters	The Proponent should ensure compliance with this Acts' requirements, particularly during site activities where earthworks are carried out. The necessary management measures and related permitting requirements must be taken. This done by consulting with the National Heritage Council (NHC) of Namibia. The management measures should be incorporated into the Draft EMP.
The National Monuments Act (No. 28 of 1969)	The Act enables the proclamation of national monuments and protects archaeological sites.	
Pollution Control and Waste Management Bill (Guideline only)	The relevant parts of this Bill to the project are part 7 and 8. Part 7 states that any person who sells, stores, transports or uses any hazardous substances or products containing hazardous substances shall notify the competent authority, in accordance with sub-section (2), of the presence and quantity of those substances. The competent authority for the purposes of section 74 shall maintain a register of substances notified in accordance with that section and the register shall be maintained in accordance with the provisions. Part 8 provides for emergency preparedness by the person handling hazardous substances, through emergency response plans.	The Proponent should ensure compliance with the Bill requirements throughout the project cycle.
Soil Conservation Act (No 76 of 1969)	The Act makes provision for the prevention and control of soil erosion and the protection, improvement and conservation of soil, vegetation and water supply sources and resources, through directives declared by the Minister.	Duty of care must be applied to soil conservation and management measures must be included in the EMP.

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Public Health Act (No. 36 of 1919)	Section 119 states that "no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health."	The Proponent and all its employees should ensure compliance with the provisions of these legal instruments.
Health and Safety Regulations GN 156/1997 (GG 1617)	Details various requirements regarding health and safety of labourers.	
Public and Environmental Health Act No. 1 of 2015	The Act serves to protect the public from nuisance and states that no person shall cause a nuisance or shall suffer to exist on any land or premises owned or occupied by him or of which he is in charge any nuisance or other condition liable to be injurious or dangerous to health.	The Proponent should ensure that the project infrastructure, vehicles, equipment, and machinery are designed and operated in a way that is safe, or not injurious or dangerous to public health and that the noise and dust emissions which could be considered a nuisance remain at acceptable levels. The public and environmental health should be preserved and remain uncompromised.
Atmospheric Pollution Prevention Ordinance (1976)	This ordinance provides for the prevention of air pollution and is affected by the Health Act 21 of 1988. Under this ordinance, the entire area of Namibia, apart from East Caprivi, is proclaimed as a controlled area for the purposes of section 4(1) (a) of the ordinance.	The project and related activities should be undertaken in such a way that they do not pollute or compromise the surrounding air quality.
Hazardous Substance Ordinance, No. 14 of 1974	The ordinance provides for the control of toxic substances. It covers manufacture, sale, use, disposal and dumping as well as import and export. Although the environmental aspects are not explicitly stated, the ordinance provides for the importing, storage, and handling.	The Proponent should handle and manage the storage and use of hazardous substances on site so that they do not harm or compromise the site environment

Legislation/Policy/ Guideline	Relevant Provisions	Implications for this project
Road Traffic and Transport Act, No. 22 of 1999	The Act provides for the establishment of the Transportation Commission of Namibia; for the control of traffic on public roads, the licensing of drivers, the registration and licensing of vehicles, the control and regulation of road transport across Namibia's borders; and for matters incidental thereto. Should the Proponent wish to undertake activities involving road transportation or access onto existing roads, the relevant permits will be required.	Mitigation measures should be provided for if the roads and traffic impact cannot be avoided. The relevant permits must therefore be applied for.
Labour Act (No. 6 of 1992)	Ministry of Labour, Industrial Relations and Employment Creation is aimed at ensuring harmonious labour relations through promoting social justice, occupational health and safety and enhanced labour market services for the benefit of all Namibians. This ministry insures effective implementation of the Labour Act No. 6 of 1992.	The Proponent should ensure that the project activities do not compromise the safety and welfare of workers.

The Project activities provided above will be undertaken in a specific environment, i.e., physical, biological and social environmental features as presented under the next chapter.

5 ENVIRONMENTAL AND SOCIAL BASELINE

The project activities are undertaken in specific environmental and social conditions. The understanding of these conditions helps in identifying the sensitive environmental features that may need to be protected through the implementation of certain management and mitigation measures. The summary of selected physical, biological and social baseline information of the project area is provided below as per reports of studies conducted in the Oranjemund Town, //Karas Region and site visit conducted by the Environmental Consultant on the 12th of July 2022.

The climatic conditions of the Town (project site area) are described using the available nearest data for Oranjemund obtained from World Weather Online and Meteoblue websites (2022).

5.1 Climate

5.1.1 Temperatures

According to the World Weather Online (2022), the average temperature for Oranjemund is 21°C experienced in March and April and minimum of 10°C in August as shown in Figure 5-1.

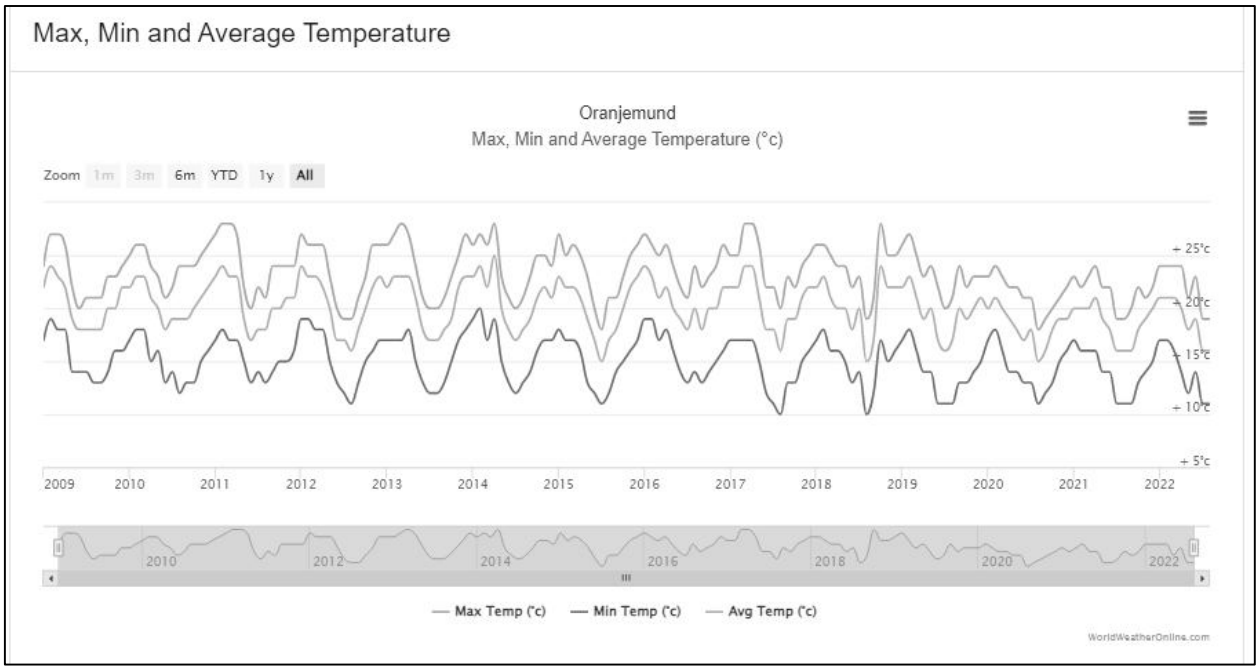


Figure 5-1: The maximum, minimum, and average temperatures for Oranjemund (World Weather Online, 2022)

The average monthly high and low temperatures (of 26°C and 12°C, respectively) are shown in Figure 5-2.

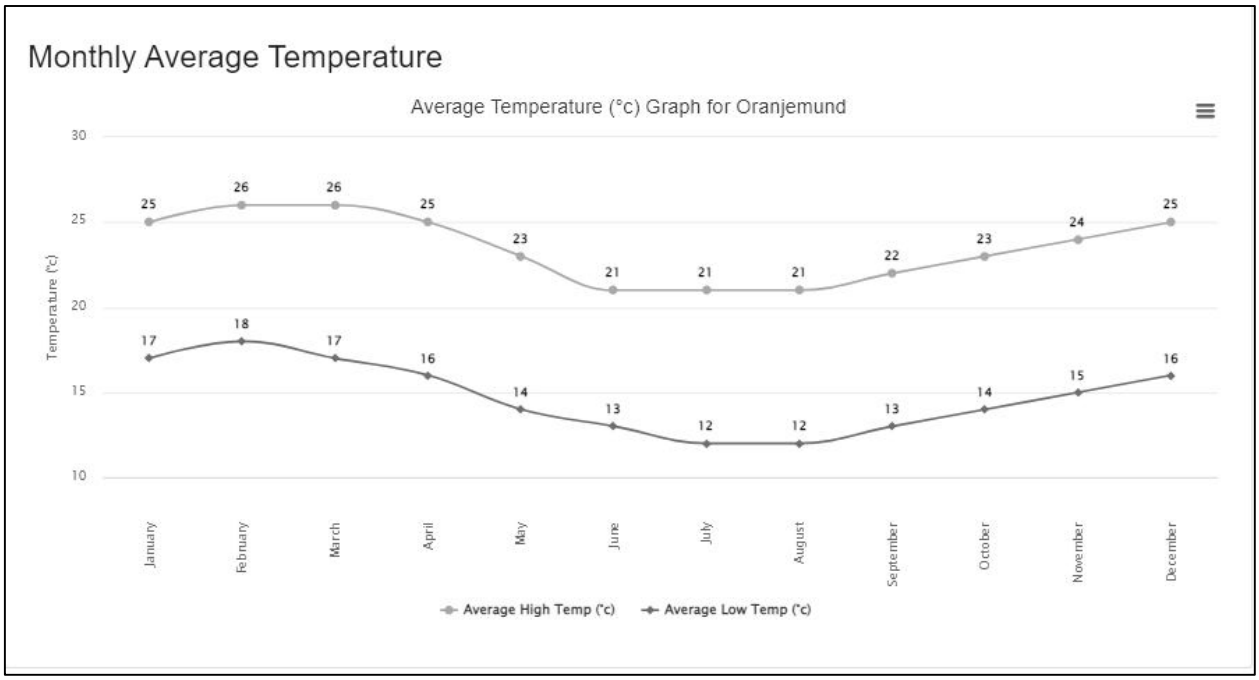


Figure 5-2: The monthly average temperatures for Oranjemund (World Weather Online, 2022)

5.1.2 Rainfall

The Oranjemund's average rainfall for a thirteen (13) year-period, i.e., from 2009 to 2022 are shown in Figure 5-3.

According to World Weather Online (2022) average rainfall graph, the highest rainfall received for the Town was 37mm in August 2013 (rained for 2 days), followed by 35.65mm in March 2012 (rained for 1 day), and 36mm in November 2017. The highest monthly average rainfall is 9mm in February and August.

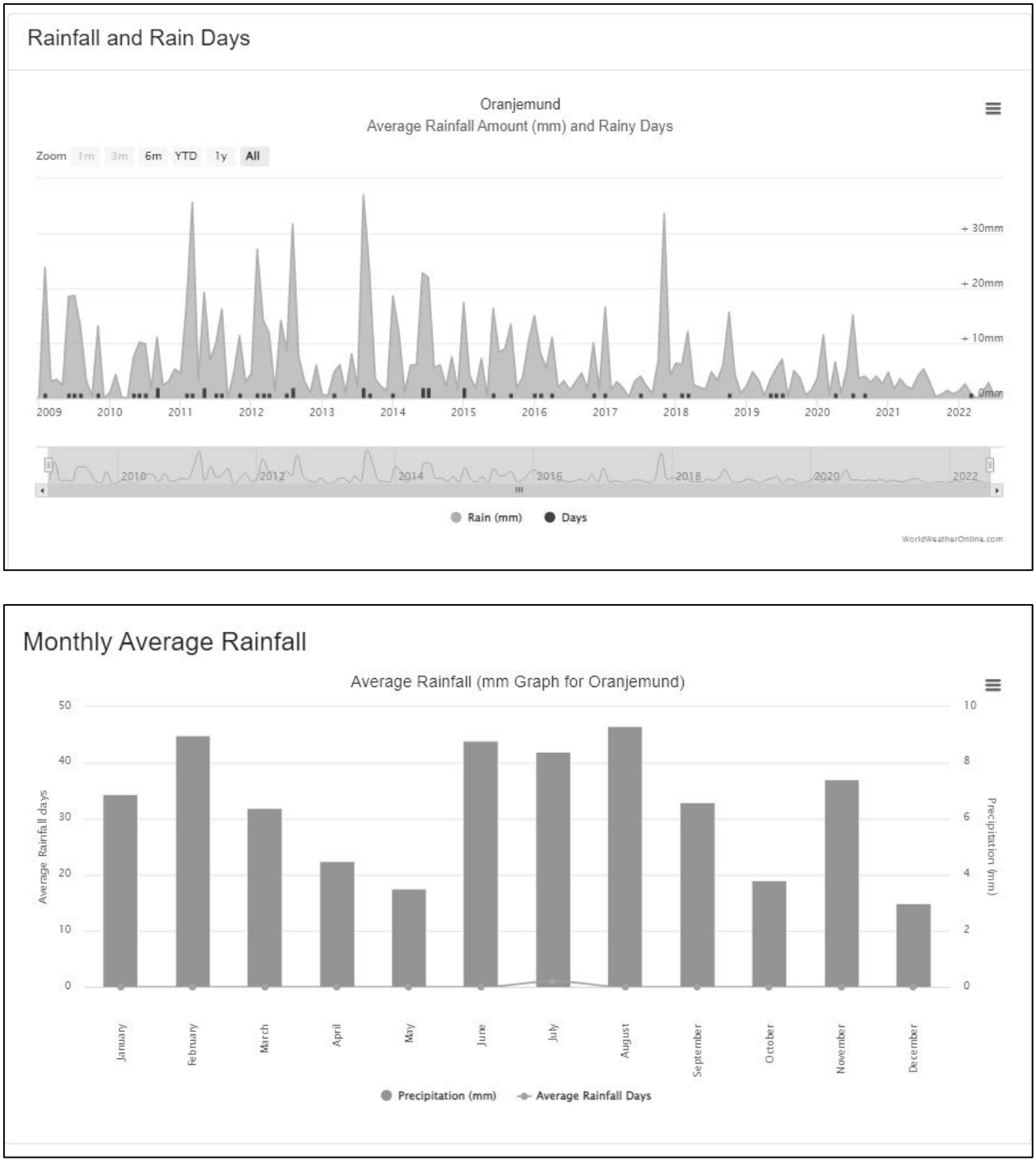


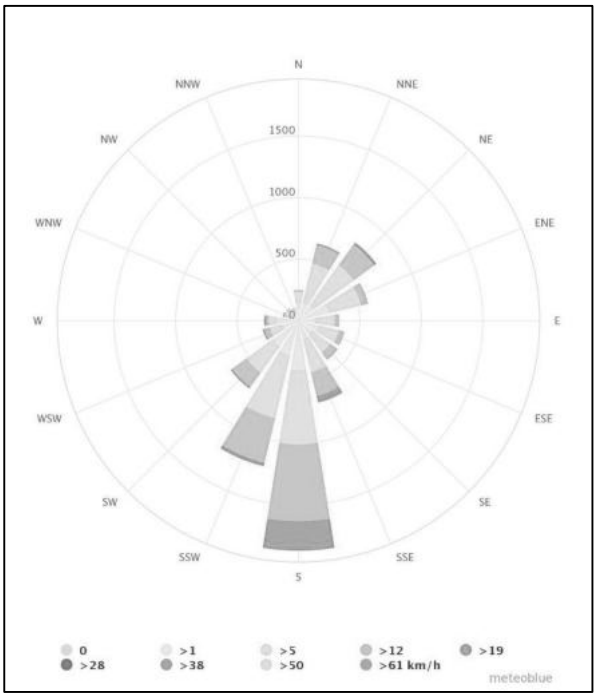
Figure 5-3: The rainfall & rainy days and monthly average rainfall for Oranjemund (World Weather Online, 2022)

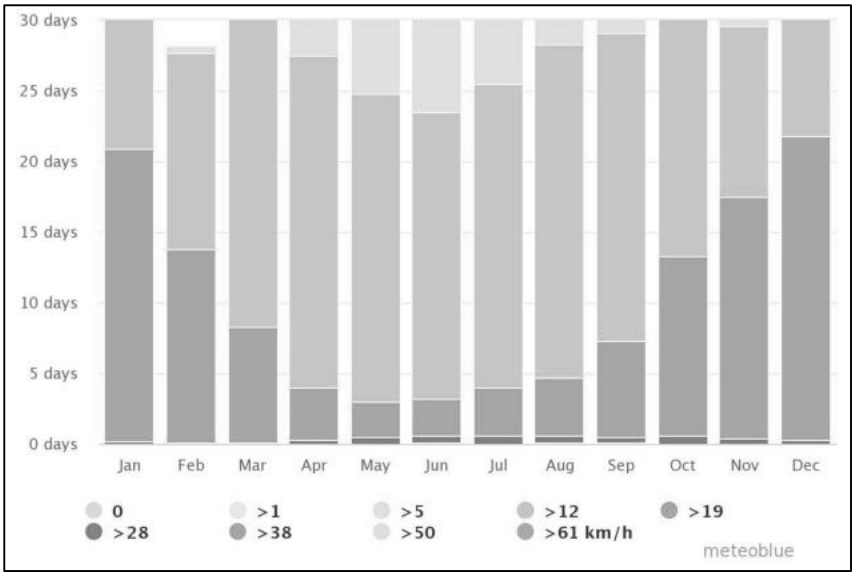
5.1.3 Air and Wind

Air: the current known sources of air pollution in the area are dust from unpaved access roads within the project site area open and unvegetated areas, particularly in dry and windy months.

According to the Air Quality Index (2022)[1], the air quality of Oranjemund as indicated by the Particulate matter (PM) 2.5 concentration is 3.1µg/m³. This is considered good and meets the World Health Organization (WHO)'s annual air quality guideline value.

Wind: The wind rose for Oranjemund from the Meteoblue modelled climate is shown in Figure 5-4 and indicates that the wind is dominantly blowing from South/Southwest to Northeast with the speed of 12km/h and greater than 19km/h.





[1] Air Quality Index. (2022). World Air Quality: Air Quality in Oranjemund. https://www.iqair.com/namibia/karas/oranjemund

Figure 5-4: The wind rose and speed chart for Oranjemund (Meteoblue, 2022)

5.2 Geology, Soil and Topography

The project (study) area is overlain by Namib sediments (Aeolian Sand) as shown on the geology map of the project site in Figure 5-5. According to Lohe *et al*., (2021), the geology of the Naukluft area under which the Oranjemund area falls, in the broader area, Sand is underlain by area consists of fractured and karstified dolomites and limestones of the Damara Sequence representing a so-called nappe complex. The nappes, tectonically rather complex features, have been overthrown onto the older, low permeable Schwarzrand and Schwarzkalk layers of the Nama Sequence.

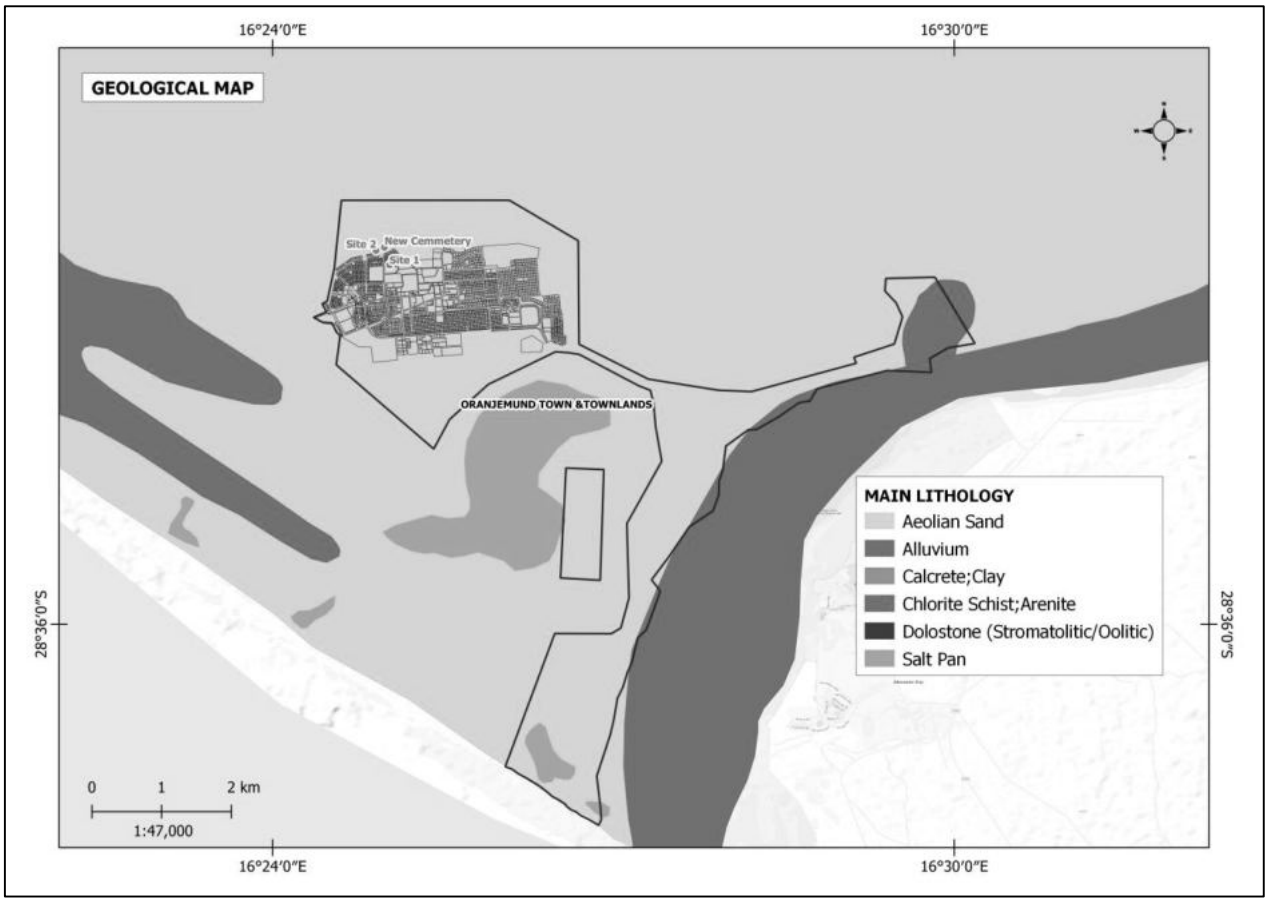


Figure 5-5: The geology of the site and surrounding areas

In terms of soil, the Oranjemund area is dominated by the Coastal Salt Pans sandy on the north-eastern side of the Townland boundaries, while the rest of the Town is overlain by Dune sand. The Dune Sand soils also cover the cemetery site. Figure 5-6 is the dominant soil map.

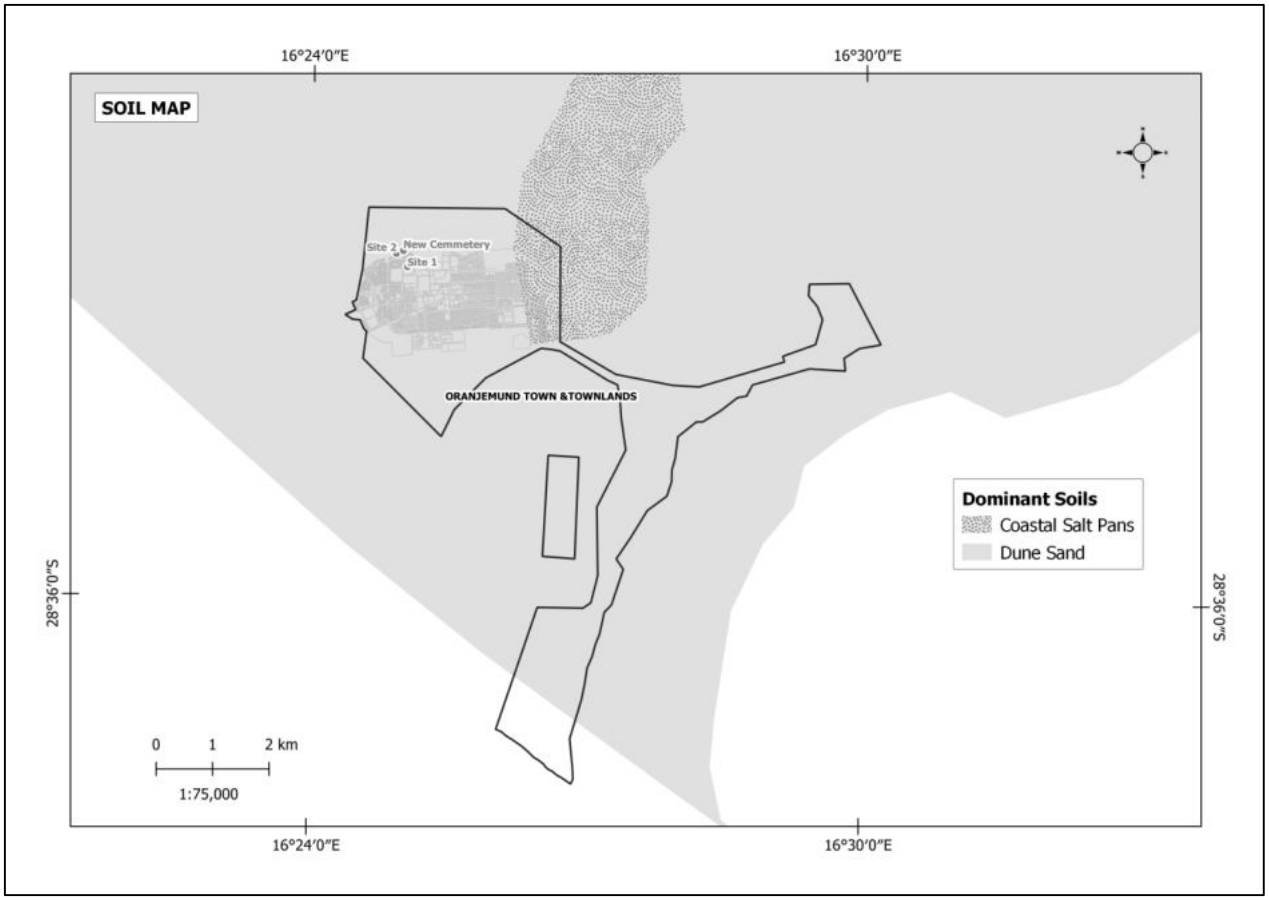


Figure 5-6: The dominant soil map of the project site and surrounding

Typical soil found onsite comprises of light brown sandy soils - in Figure 5-7.

Figure 5-7: The sand soils observed onsite

Topographically, the Oranjemund Town is located merely 20m above sea level on a virtually flat piece of terrain rock type found in the area is the Kalahari and Namib Sands which is largely dominated by sands (Africa Planning Forum, 2019).

5.3 Water Resources: Groundwater and Surface Water

The only surface water resource near the Oranjemund is the Orange River.

In terms of groundwater, the site area falls within the Southern Namib and Naukluft Groundwater Basin. According to Lohe *et al*, (2021), Limited water availability in the Namib Desert presents the single largest constraint to any form of development. Mean annual rainfall is less than 100 mm/a, which means that aquifer recharge is intermittent. The occurrence of exploitable groundwater resources in the Namib Desert is closely linked to the existence of alluvial aquifers created by perennial, ephemeral or even fossil rivers. The only abundant source of groundwater in the Sperrgebiet is the alluvial aquifer along the Orange River, which provides a secure water supply to Oranjemund (Lohe *et al*, 2021). The groundwater map of the Town is shown in Figure 5-8. The map indicates that the area has rock bodies with little groundwater potential.

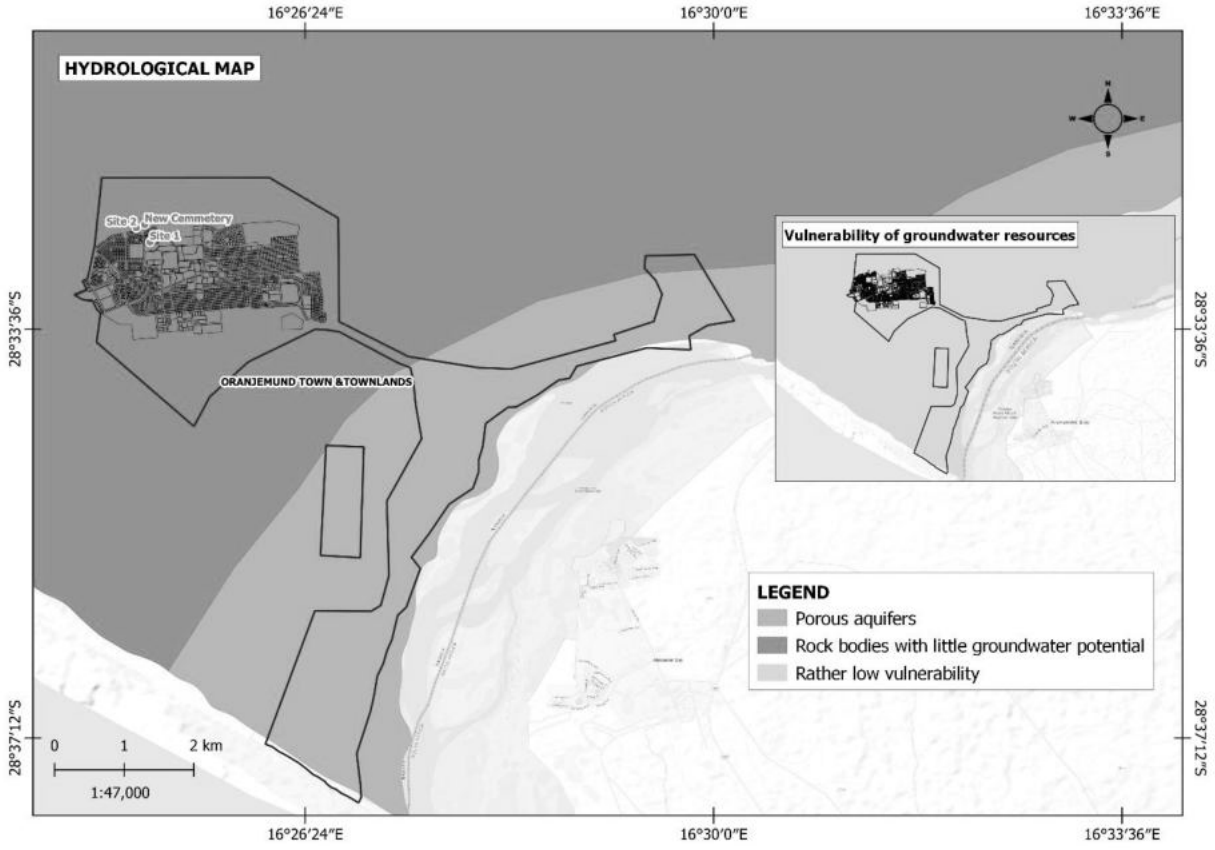


Figure 5-8: The hydrology and groundwater of the Project area

5.3.1 Groundwater Vulnerability to Pollution

The vulnerability of groundwater to pollution in Oranjemund is considered rather low as shown on the Groundwater Resources Vulnerability Map of Namibia by Van Wyk et.al (2001) in Figure 5-9. The Oranjmeund area is enclosed by the red ellipse on the lower left part of the map below. This is also shown on the hydrological / groundwater map under previous section (5.3) above.

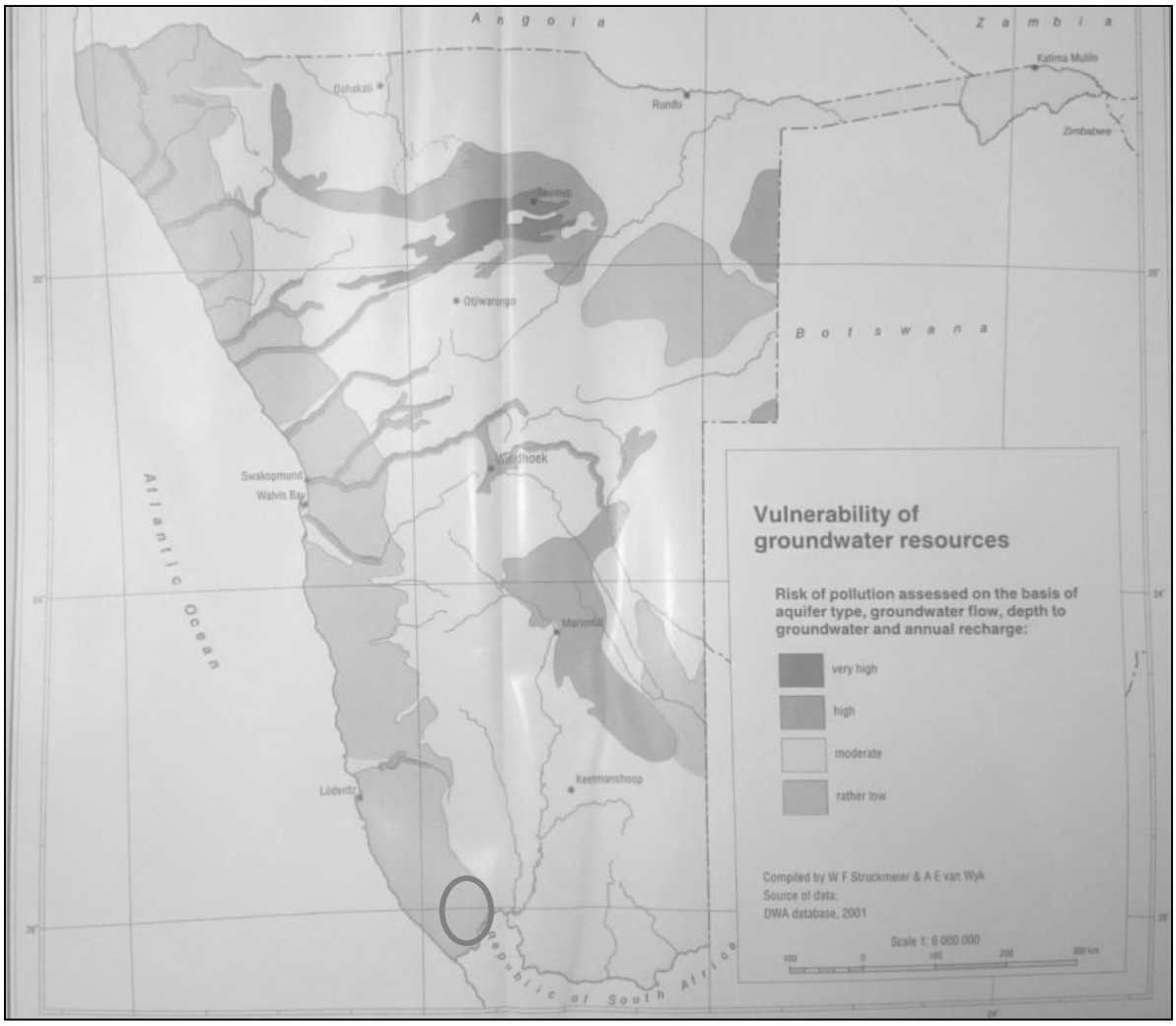


Figure 5-9: The general vulnerability of groundwater resources to Pollution in Namibia (source: Van Wyk et.al, 2001)

5.4 Biodiversity: Fauna and Flora

5.4.1 Fauna

The project site is situated in a Town that has been cleared to pave way for development in in the past. The establishment of structures and constant movement of people and vehicles would been a nuisance to mammals to inhabit the site area. Therefore, there are no mammals were observed onsite. There is a possibility of small animals such as reptiles in the site soils.

The site is located within a town set up, that is already developed and still under development. In urban areas, usually faunal and floral habitats are absent due to initial site clearance to prepare for development, if there was any vegetation at all.

The Oranjemund Town is a home to some resident stray gemsboks that roam the Town. Some of these gemsboks were seen in the Town, specifically at the soccer field during the site visit.

The only faunal presence noticed on the site at a distance was some birds flying over the site (Figure 5-11). There are indications of alleged jackal footprints on the existing cemeteries' sand as well as birds' footprints as shown in Figure 5-11.

Figure 5-10: Some of the birds observed flying around Cemetery Site 1

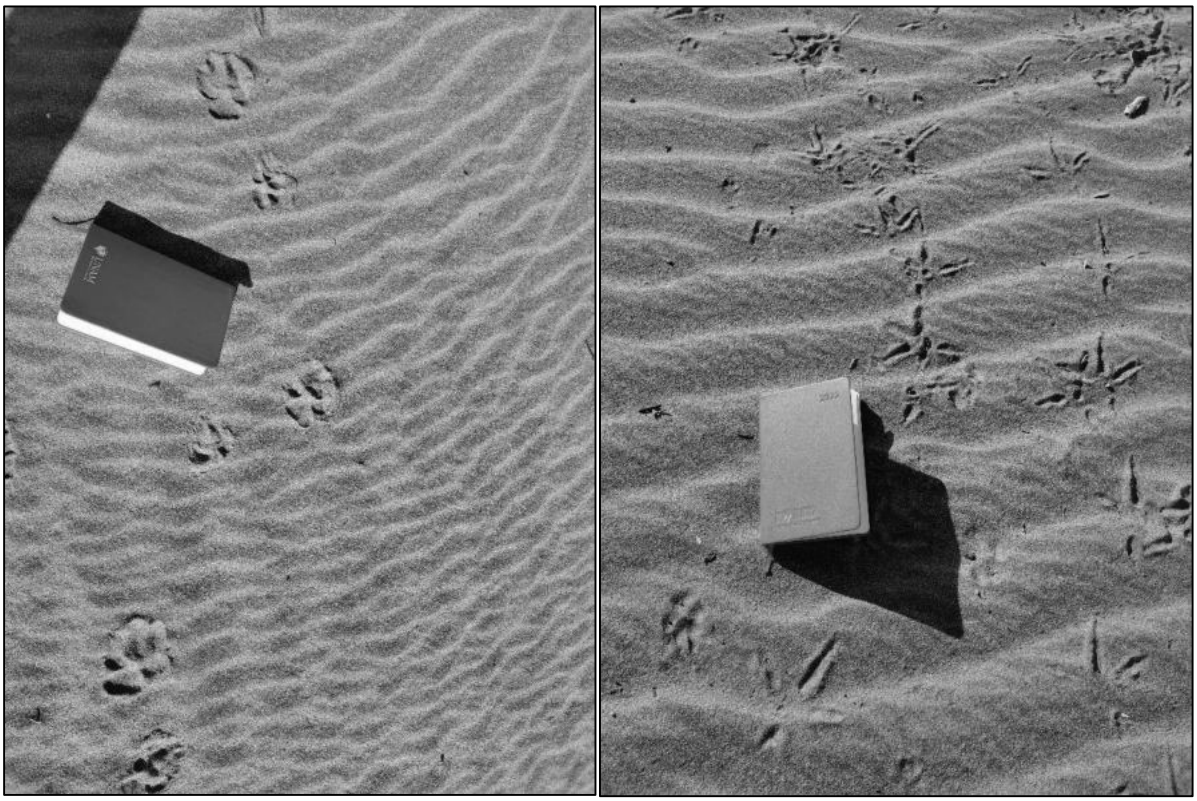


Figure 5-11: The footprints of jackals at the existing cemeteries

5.4.2 Flora

Given the arid nature of the project area, the site is quite bare. However, naturally and prior to the establishment of Oranjemund Town (vegetation removal to pave way for development), the Town vegetation is defined by plain dwarf shrub as shown in the vegetation below (Figure 5-12).

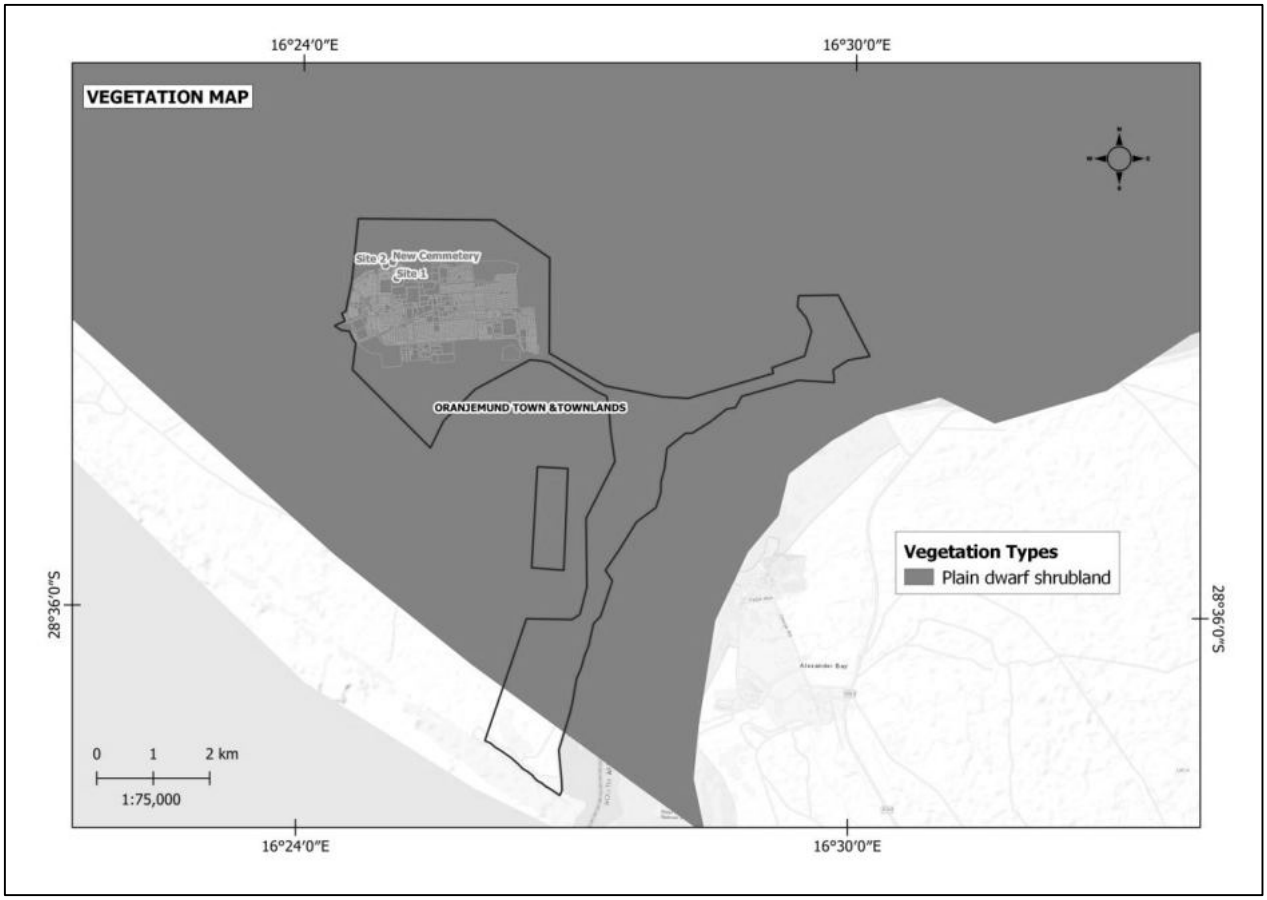


Figure 5-12: The vegetation map of Oramjemund Town and surrounding

The only vegetation seen on there was a small group of seemingly artificial planted trees to the immediate northeast of the proposed site on a private establishment and some trees at the existing cemetery sites - Figure 5-13. These however will not be removed nor affected by the cemetery establishment.

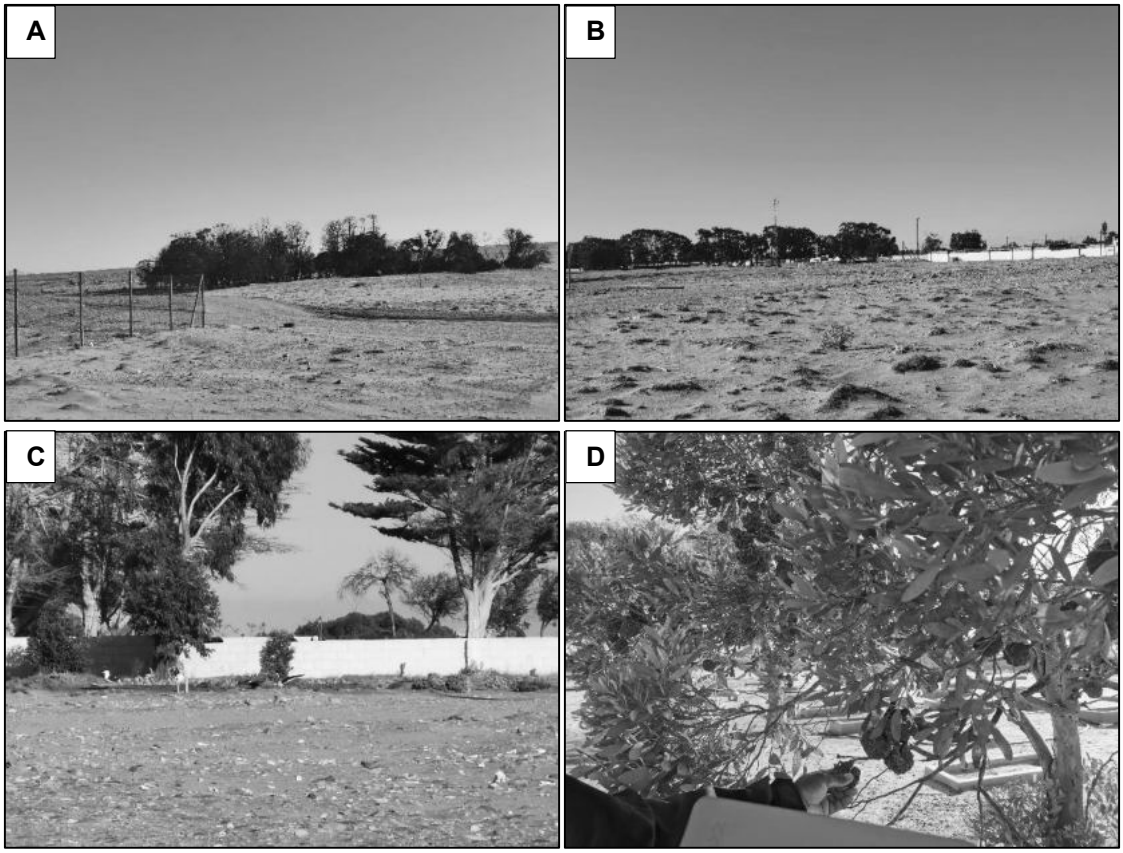


Figure 5-13: Some of the offsite and nearest vegetation (A- Optima Lodge vegetation, B-Town vegetation near Cemetery Site 1, C - Cemetery Site 1 beautification vegetation, and D- Cemetery Site 2 beautification vegetation)

5.5 Social Conditions

5.5.1 Demography

According to the Namibia Statistics Agency (2014), the //Karas Region had a population of 77,421 (38,014 females and 39,407 males). The population density of the Region was 0.5 people per square kilometer.

The project site is located with the Oranjemund Constituency, which had a total population of 9,837 in 2011 (3,908 in the urban and 5,929 in the rural part of the Constituency). Of the total constituency population 4,460 were females and 5,377 were males.

5.6 Economic Activities

Keetmanshoop Town as the capital town of the //Karas Region offers airport facilities which can accommodate long distance aircraft has also a training venue for Namibia's only flying School. It

is also an important national railway junction with a Trans-Namib Train Station, linking the town via Tses with the north of the country, to the west it links via Aus the coastal town Lüderitz, and to the south-east it links via Grünau, Karasburg and Ariamsvlei to the neighbouring country, South Africa. The Mining towns of Oranjemund and Rosh Pinah, both private urban developments and Lüderitz fishing activities, forms important economic centres within the Region (//Karas Regional Council, 2022).

The main sources of income in the Oranjemund Constituency were wages & salaries (87%), cash remittance (4%), business, non-farming (5%), and 1% from pension and 0% from farming (Namibia Statistics Agency, 2014).

Oranjemund has a long and rich history of successful diamond mining. Until end of 2017, the Town has been under the leadership of NAMDEB and access to the Town has been limited (it was entered on an access permit for all travellers). Therefore, the main economy of the Town has been centred around mining. The Town is also one of the main tourists' destinations in the Region. Therefore, tourism contributes to the Town's economy. According to the Town Council (2022), there is several banks, privately owned restaurants, bars and takeaways operate in Oranjemund, including modern supermarkets & retail stores that cater for the daily needs of residents & visitors, thus creating jobs and income.

5.6.1 Deaths, and Religion and Aspects

According to the NSA (2014) Census, the Oranjemund Constituency statistics of death registration by status at 33 and 30 for the number of reported deaths and total registered deaths, respectively. The Census also indicated that the rates of registration were higher in urban areas (97.6%) than in rural areas (96.8%). At constituency level, more than 95 percent of deaths were registered in almost all the constituencies, apart from Lüderitz (94.6 %) and Oranjemund, which had the lowest percentage of registered deaths (91%).

In terms of religions aspects in the Town of Oranjemund, the Town Council indicated that the town's religion mainly comprises of the Evangelical Lutheran Churches in Namibia (ELCIN), Catholicans, Muslims, Full Gospel, Anglican, Optima / Free Masaan.

5.7 Archaeology, Cultural and Heritage Resources

The existing graves on the two existing cemeteries already fall under heritage sites as they date back to the early 1930s (older than 50 years as the National Heritage Act No. 27 of 2004). The

Town and is surroundings have other sites that are considered of heritage significance, including the Oranjemund Shipwreck and historical buildings in the Town.

To confirm and verify these resources (sites), a detailed Archaeological Study which includes a Geophysical Survey needs to be commissioned for the Town. This will also include a detailed survey on the old cemetery sites, especially Cemetery Site 2 to detect buried objects and old graves that cannot be seen from the surface.

5.7.1 Infrastructure and Services

The Oranjemund Town is well-serviced with roads, tarred and local sandy/gravel roads. There are also good social services such as health care centers, schools and other services.

In terms of services and infrastructure in for the site area, the following are available:

- Water supply: NamWater supplies the Town with water from boreholes. The Town Council then supplies the residents, institutions, and businesses.
- Energy (power supply): South Africa's electricity public utility, ESKOM supplies electricity to the Town Council and then to houses and businesses alike. The existing cemeteries are not equipped with electricity (for lighting). This will be considered for their upgrading and the new (proposed) one will be electrified. There are powerlines passing on the immediate north of Cemetery Site 2 and the new cemetery site.
- Site roads: The site is accessible from the Town via a well-maintained unpaved access road.
- Sanitation: The Town is serviced with water borne system sewerage for serviced plots and formal houses.
- Health facilities: The Town a State Clinic, NAMDEB Hospital, some private doctor practices, and pharmacies as well as a Veterinary Clinic.
- Telecommunication Network: Telecommunication and delivery services providers include MTC Namibia, Telecom Namibia, and NamPost services, respectively.

The services and infrastructure map of the Town is shown in Figure 5-14.

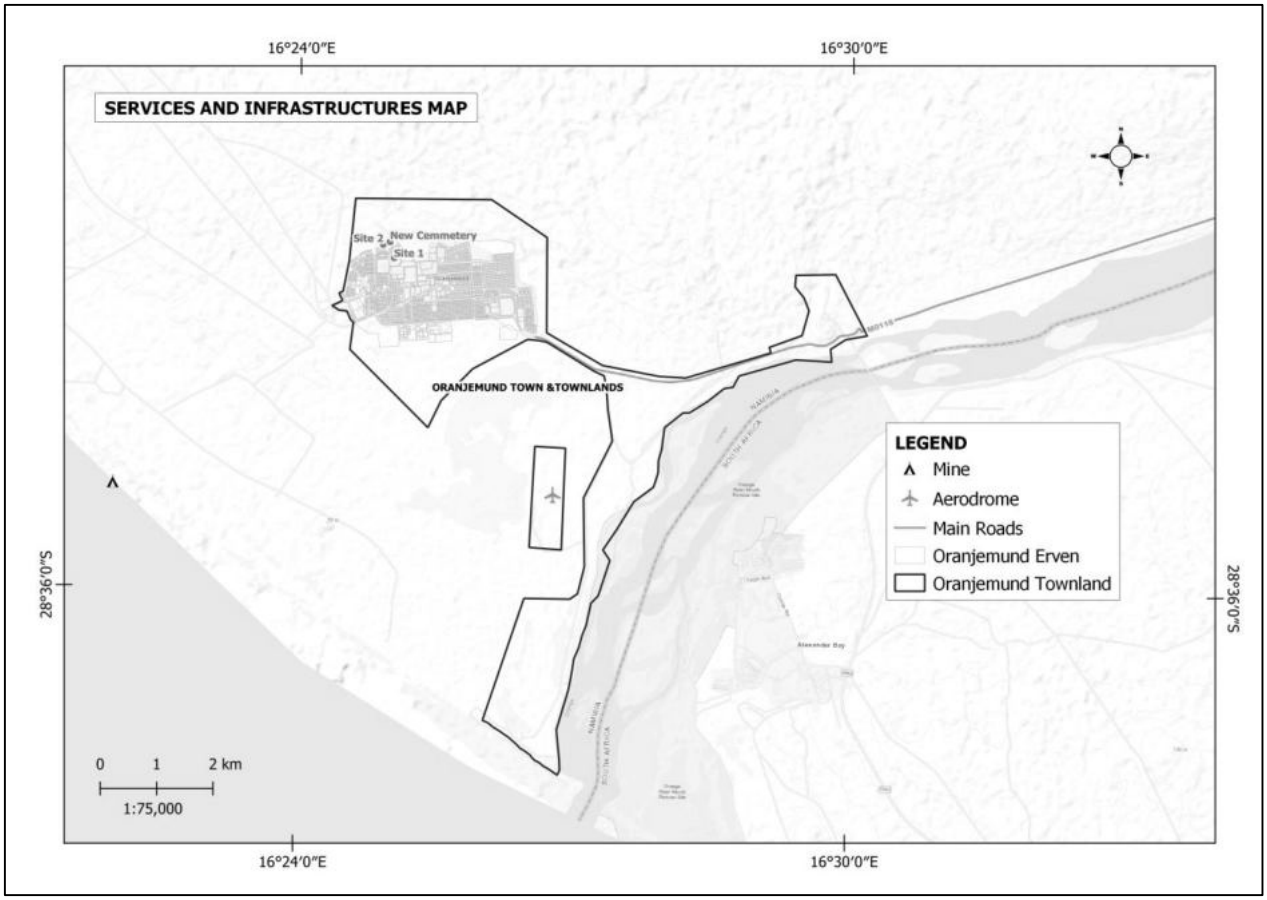


Figure 5-14: The services and infrastructure map in Oranjemund

5.8 Surrounding Land Uses

The new cemetery site is bordered to the south by Cemetery Site 1, further to the south is a soccer field, and Town Council Business Park buildings. To the southeast are the local shops and further to the east is a community garden and informal settlement (container-structured houses). To the immediate west is Cemetery Site 2 and houses behind Cemetery Site 2. To the north, the site is bordered by the old dumpsite (being decommissioned, while the new dumpsite under construction is located to the northwestern side of the old dumpsite) and to the immediate northeast is the Optima Lodge.

The open space between the site and informal settlement (to the east) is undetermined. The space located to the northwestern side of the site planned for Go-carting (recreational purposes). Some of these land uses around the new cemetery site are shown in Figure 5-15.

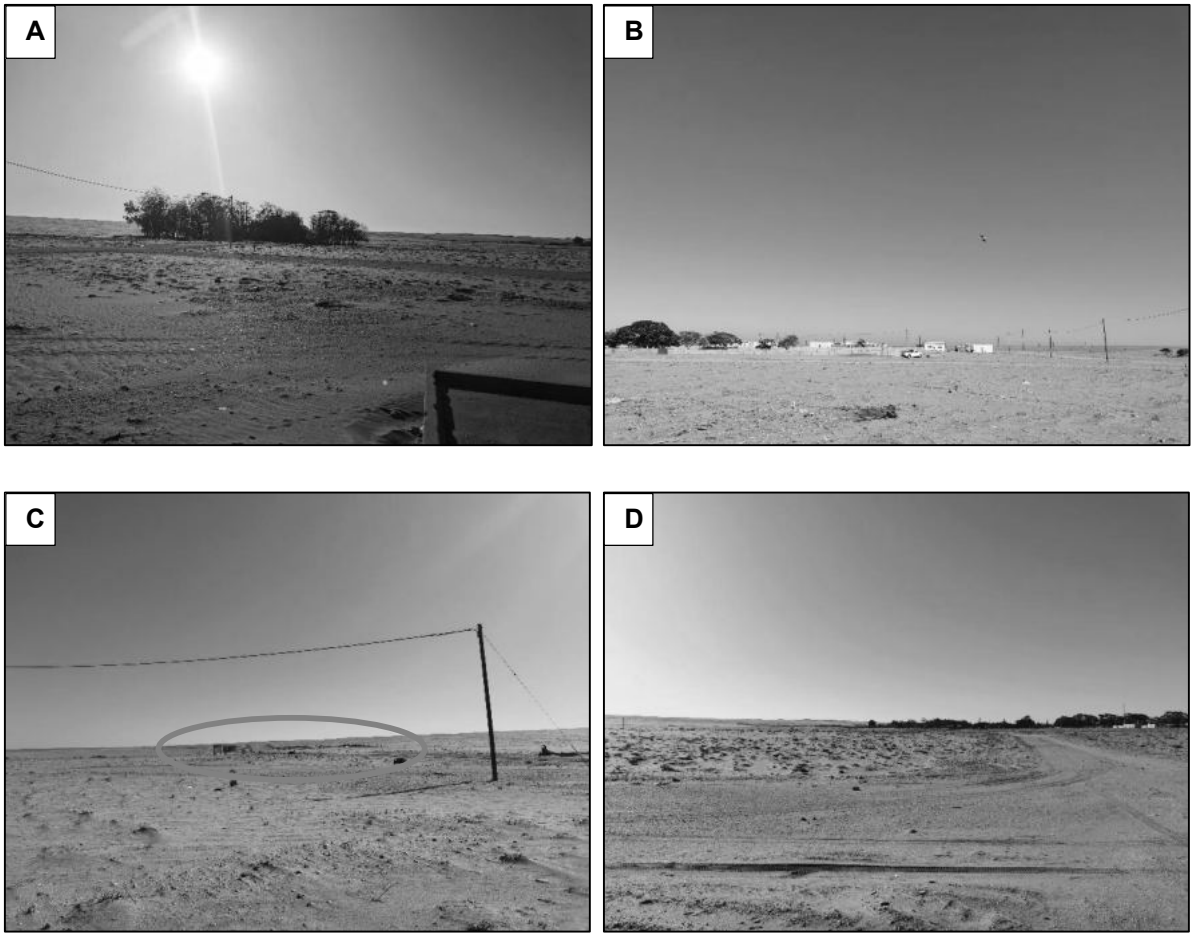


Figure 5-15: some of the surrounding uses near the new cemetery site (A- Optima Lodge, B - Cemetery Site 1, C - Old Town Dumpsite area and D - community garden and some informal settlement (container-structured houses))

To fulfil the requirements of the EMA and its 2012 EIA Regulations (Public Consultation: Section 21 to 24), the EDS Consultants consulted and engaged the stakeholders (interested and affected parties) as presented under the next chapter.

6 PUBLIC CONSULTATION PROCESS

Public consultation forms an important component of an Environmental Assessment (EA) process. It provides potential Interested and Affected Parties (I&APs) with an opportunity to comment on and raise any issues relevant to the project for consideration as part of the assessment process, thus assisting the Environmental Assessment Practitioner (EAP) in identifying all potential impacts and to what extent further investigations are necessary. Public consultation can also aid in the process of identifying possible mitigation measures. Public consultation for this project has been done under the EMA and its EIA Regulations.

6.1 Pre-identified and Registered Interested and Affected Parties (I&APs)

Relevant and applicable national, regional, and local authorities, and other interested members of the public were identified. Pre-identified I&APs were contacted directly, while other parties who contacted the Consultant after project advertisement notices in the newspapers, were registered as I&APs upon their request. Newspaper advertisements of the project activities were placed in two widely read national newspapers in the Region (*The Namibian* and *New Era* Newspapers). The project advertisement/announcement ran for two consecutive weeks inviting members of the public to register as I&APs and submit their comments.

6.2 Communication with Stakeholders (Interested and Affected Parties)

Regulation 21 of the EIA Regulations details the steps to be taken during a public consultation process and these have been used in guiding this process. Communication with I&APs with regards to the project was facilitated through the following means and in this order:

6.2.1 Compilation of the Background Information Document (BID)

A non-technical summary of the Project activities (background information document (BID)) containing brief information about the project activities was compiled and hand delivered to the competent authorities (for ECC application and Project registration) and circulated to all pre-identified and all new registered I&APs (upon request).

6.2.2 Newspaper Advertising (Public Notification)

Project Environmental Assessment notices were published in *The Namibian* and *New Era* Newspapers dated 19 & 26 April 2022 – Appendix C. The adverts briefly provided information on

the project activities, location, inviting the public to the consultation meeting, to register as I&APs and submit their comments/concerns.

6.2.3 Consultation Meetings

A consultation meeting was scheduled for the 12th of July 2022 in Oranjemund's Zacharias Lewala Community Hall at 09h30. Despite the notices placed in the Town by the responsible department of the Town Council, the public did not come to the meeting – **Error! Reference source not found.**. However, one health worker from the Oranjemund Clinic who was at the Community Hall provided some comments provided under Table 6-1.

Figure 6-1: The display of the Zacharias Lewala Community Hall on the 12th of July 2022 (EDS Consultant and Oranjemund Town Council representative from the Cemeteries Department)

The Possible reasons of a No-Show Public Consultation Meeting

The Town Council representatives also informed the Environmental Consultants that the residents of the Town are known to be selective to the type of meetings they attend. According to the Town Council personnel, from experience with public meetings in the Town, the public only attend meetings that directly affect them such as services tariff increments. There was a meeting where the Town Council invited the public to attend. The meeting was on plot allocation and budgeting. The public only stayed to listen to the plot allocation and left as soon as the budget agenda point was being discussed, as they do not apparently see the importance of this nor does it directly affect them.

6.2.4 Public Notices (Posters) and Public Comments Period

A3 size printed posters were placed in Oranjemund for a period of 2 weeks before the consultation meeting date. The notices were placed at the Town Council offices (Head Office and Technical Offices) notice boards. Some of the notices were also placed at the Spar Groceries Store in the Town for public notification. Photos of the public notices as pasted in the Town are shown in Figure 6-2.

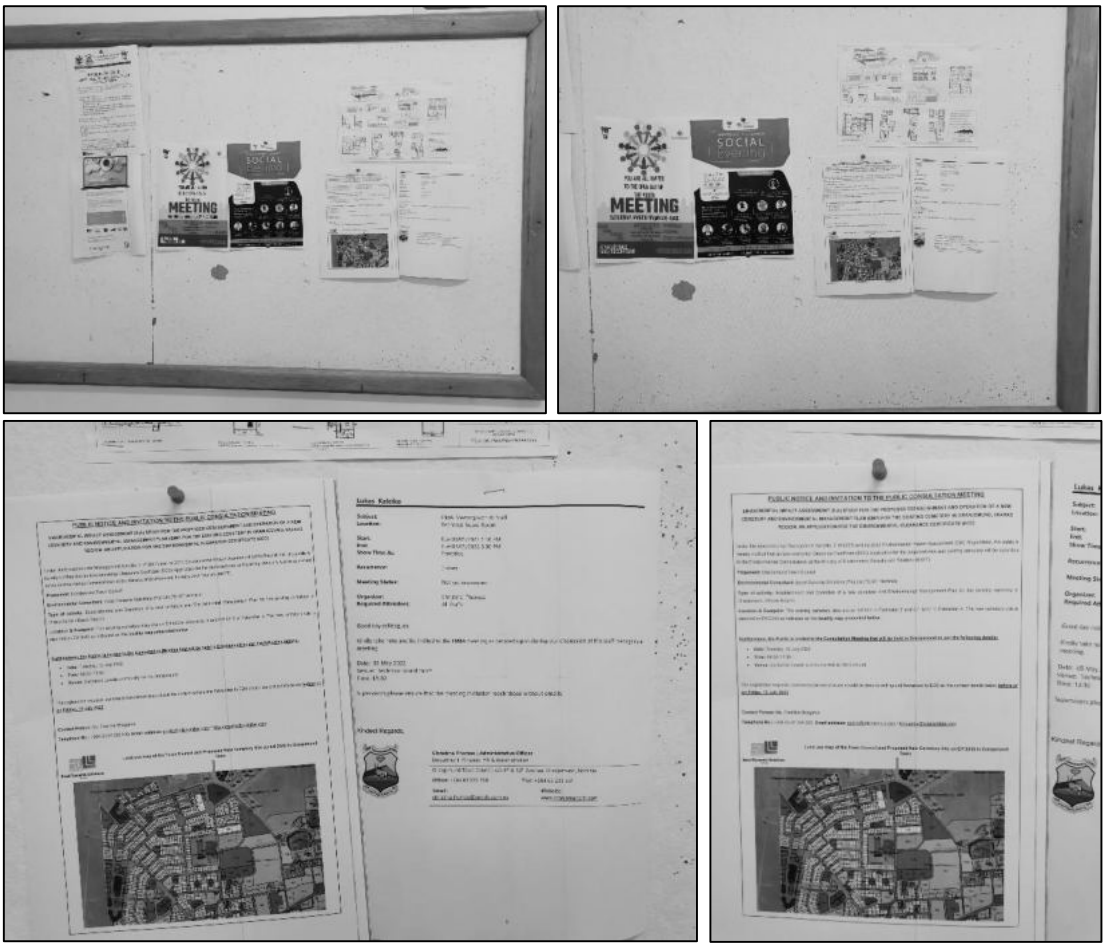


Figure 6-2: Public Notices in Oranjemund Town

The comments and registration request period ran from 12 August to 02 September 2022 with an extension after the consultation meeting to 09 September 2022.

6.3 Feedback from Interested and Affected Parties

Issues were raised by I&APs from BID response as part of the consultation process. These issues have been recorded and incorporated in the Scoping Report and EMP. The summary these key issues are presented in Table 6-1 below.

Table 6-1: Summary of main comments received during the EIA process

Aspects	Summary of the Concern / Issue or comment
The burying of people out of Oranjemund (comments by one of the local Health workers at the Clinic)	-There are few burials taking place in Oranjemund because most people in the Town are only there for work, that when they die, their families arrange for burials in the places of origins outside Oranjemund (elsewhere in Namibia), and possibly in other countries for foreigners.
Vandalism and theft (by the Town Council Representative/cemetery Foreman)	The vandalism of graves by some of the residents and stealing of grave markings such as metals tags.

7 IMPACT IDENTIFICATION, ASSESSMENT AND MITIGATION MEASURES

7.1 Key Impact Identification

Some of the key potential impacts associated with the cemetery construction and operations have been identified. These are listed below and assessed under the impact assessment section of this chapter.

Positive impacts:

- Social: gathering of families to give their loved ones a respectful and dignified burial process in a comfortable place.
- Employment and business opportunities: creation of jobs to the locals (temporary work for the construction phase, and permanent / contractual work for cemetery maintenance and security).

Potential Negative impacts:

- Physical land (soil) disturbance
- Impact on water resources (groundwater pollution)
- Environmental pollution (waste generation)
- Accidental fire outbreaks
- Site safety and security
- Occupation and community health and safety risks
- Vehicular traffic safety
- Noise
- Archaeological resources impact through inadvertent unearthing onsite
- Visual impact.

The above-listed impacts have been assessed, and mitigation measures provided thereto (in the Draft EMP).

7.2 Impact Assessment Methodology and Criteria

The Environmental Assessment process primarily ensures that potential impacts that may occur from project activity are identified and addressed with environmentally cautious approaches and legal compliance. The impact assessment method used for this project is in accordance with Namibia's Environmental Management Act (No. 7 of 2007) and its Regulations of 2012, as well as the International Finance Corporation (IFC) Performance Standards.

The identified impacts were assessed in terms of scale/extent (spatial scale), duration (temporal scale), magnitude (severity) and probability (likelihood of occurring), as presented in Table 7-1.

To enable a scientific approach to the determination of the environmental significance, a numerical value is linked to each rating scale. This methodology ensures uniformity and that potential impacts can be addressed in a standard manner so that a wide range of impacts are comparable. It is assumed that an assessment of the significance of a potential impact is a good indicator of the risk associated with such an impact. The following process will be applied to each potential impact:

- Provision of a brief explanation of the impact.
- Assessment of the pre-mitigation significance of the impact; and
- Description of recommended mitigation measures.

The recommended mitigation measures prescribed for each of the potential impacts contribute towards the attainment of environmentally sustainable operational conditions of the Project for various features of the biophysical and social environment. The following criteria were applied in this impact assessment:

Table 7-1: Criteria used for impact assessment (extent, duration, intensity and probability)

The Criteria used to assess the potential impacts				
Extent or (spatial scale) - extent is an indication of the physical and spatial scale of the impact.				
Low (1)	**Low/Medium (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**
Impact is localised within the site boundary: Site only	Impact is beyond the site boundary: Local	Impacts felt within adjacent biophysical and social environments: Regional	Impact widespread far beyond site boundary: Regional	Impact extend National or over international boundaries
Duration- Duration refers to the timeframe over which the impact is expected to occur, measured in relation to the lifetime of the project				

The Criteria used to assess the potential impacts				
Low (1)	**Low/Medium (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**
Immediate mitigating measures, immediate progress	Impact is quickly reversible, short-term impacts (0-5 years)	Reversible over time; medium term (5-15 years)	Impact is long-term	Long term; beyond closure; permanent; irreplaceable or irretrievable commitment of resources
Intensity, Magnitude / severity - Intensity refers to the degree or magnitude to which the impact alters the functioning of an element of the environment. This a qualitative type of criteria				
H-(10)	**M/H-(8)**	**M-(6)**	**M/L-(4)**	**L-(2)**
Very high deterioration, high quantity of deaths, injury of illness / total loss of habitat, total alteration of ecological processes, extinction of rare species	Substantial deterioration, death, illness or injury, loss of habitat / diversity or resource, severe alteration, or disturbance of important processes	Moderate deterioration, discomfort, partial loss of habitat / biodiversity or resource, moderate alteration	Low deterioration, slight noticeable alteration in habitat and biodiversity. Little loss in species numbers	Minor deterioration, nuisance or irritation, minor change in species / habitat / diversity or resource, no or very little quality deterioration.
Probability of occurrence - Probability describes the likelihood of the impacts occurring. This determination is based on previous experience with similar projects and/or based on professional judgment				
Low (1)	**Medium/Low (2)**	**Medium (3)**	**Medium/High (4)**	**High (5)**
Improbable; low likelihood; seldom. No known risk or vulnerability to natural or induced hazards.	Likely to occur from time to time. Low risk or vulnerability to natural or induced hazards	Possible, distinct possibility, frequent. Low to medium risk or vulnerability to natural or induced hazards.	Probable if mitigating measures are not implemented. Medium risk of vulnerability to natural or induced hazards.	Definite (regardless of preventative measures), highly likely, continuous. High risk or vulnerability to natural or induced hazards.

7.3 Impact Significance

Impact significance is determined through a synthesis of the above impact characteristics. The significance of the impact “without mitigation” is the main determinant of the nature and degree of mitigation required. As stated in the introduction to this section, for this assessment, the significance of the impact without prescribed mitigation actions is measured.

Once the above factors (Table 7-1) have been ranked for each potential impact, the impact significance of each is assessed using the following formula:

SIGNIFICANCE POINTS (SP) = (MAGNITUDE + DURATION + SCALE) X PROBABILITY

The maximum value per potential impact is 100 significance points (SP). Potential impacts were rated as high, moderate or low significance, based on the following significance rating scale (Table 7-2).

Table 7-2: Significance rating scale

Significance	***Environmental Significance Points***	***Colour Code***
High (positive)	>60	H
Medium (positive)	30 to 60	M
Low (positive)	1 to 30	L
Neutral	0	N
Low (negative)	-1 to -30	L
Medium (negative)	-30 to -60	M
High (negative)	<-60	H

Positive (+) – Beneficial impact

Negative (-) – Deleterious/ adverse Impact

Neutral – Impacts are neither beneficial nor adverse

For a potential negative impact with a significance rating of high (-ve), mitigation measures are recommended to reduce the impact to a medium (-ve) or low (-ve) significance rating, provided that the impact with a medium significance rating can be sufficiently controlled with the recommended mitigation measures. To maintain a low or medium significance rating, monitoring is recommended for a period to enable the confirmation of the significance of the impact as low or medium and under control.

For a potential positive impact with a significance rating of a medium (-ve) or low (-ve), mitigation measures are recommended to enhance the impact to a high (+ve) significance rating.

This assessment is based on the operational and maintenance phase. The potential impacts stemming from the project activities onsite are described, assessed and mitigation measures provided under the sections below. Further mitigation measures in a form of management action plans are provided in the Draft EMP.

7.4 Assessment of Potential Positive Impacts

The potential positive impacts of the project activities are described and assessed as follows.

7.4.1 The Cemetery Availability and Convenience

The presence of the cemetery in Town would ensure that the residents will have a place to bury their loved ones and the Town Council will continue to cater social services to its residents, as part of their mandate. The impact is assessed in Table 7-3 below.

Table 7-3: Assessment of Cemetery space availability convenience

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre mitigation	L/M- 2	L/M - 2	L/M - 4	L - 1	L – 8
Measures to maximize the impact -Ensure that there is timely provision of grave spaces for new burials. -The rates and taxes charged from the residents should be fair and not too expensive to aggravate their mourning process when requiring the Town Council services. -Ensure that the cemetery is well maintained and that the graves are protected from vandalism and theft. -The wall of the cemetery should be high enough to ensure that the issue of sand accumulating on the current low cemetery walls and inside the cemeteries is avoided.					
Post mitigation	M - 3	M/H - 4	L/M - 4	M/H - 4	H - 44

7.5 Provision of Goods and Services for the Project

The project will need the provision of different services and goods procured from different suppliers on services such as civil and earthmoving contractors during the planned site work phase, as well as services such as cleaning and external maintenance, if necessary.

The required services would also include possible business opportunities such as in the areas of cleaning services and external maintenance. The unfairness and discrimination in procurement opportunities of overlooking locals for outsiders would bring conflicts. This can be improved by implementing the measures provided in the assessment Table 7-4 below.

Table 7-4: Assessment of the project activities on procurement of services and goods

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre mitigation	L/M- 2	L/M - 2	L/M - 4	L - 1	L – 8
Measures to maximize the impact -The procurement of works for site works should follow a fair and transparent process. -Procurements for goods and services should be open only to local and Namibian companies with strong local participation of Small-Medium Enterprise (SME) contractors. -The business opportunities such as cleaning services and site maintenance should be given to local companies					
Post mitigation	M - 3	M/H - 4	L/M - 4	M/H - 4	H - 44

7.6 Assessment of Potential Negative (Adverse) Impacts

The significant negative impacts potentially associated with the project are assessed below. The management and mitigation measures to be implemented onsite are provided in the Draft EMP. The impacts are mitigated to ensure that their significance is brought under control, while maximizing the benefits of the project.

7.6.1 Physical Disturbance to Soils

The project activities will involve the movement of heavy vehicles and equipment onsite during construction (compaction of soils) and digging during operational phase will potentially result in soil disturbance. Activities such as stockpiling the soils during construction and operational phase for longer periods would leave the already exposed Namib Desert soils vulnerable to erosion. This impact is probable because the proposed cemetery site is vacant (bare), i.e., no vegetation cover. The impact can be rated as medium if no mitigation measures are implemented. However, with the implementation of mitigation measures, the impact significance will reduce to low. The impact is assessed in Table 7-5 below.

Table 7-5: Assessment of the project impact on soils (physical disturbance) during construction

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M - 6	M/H - 4	M – 48
Post-mitigation	L - 1	L - 1	L - 2	L/M - 2	L - 8

7.6.2 Soil and Water Resources Pollution

A. <u>Construction</u>

The mishandling and storage of hydrocarbon products (fuels) used during construction would pollute the soils. The anticipated potential source of pollution to water resources from the project activities would be hydrocarbons (oil) from the leaking tanks and project vehicles such as delivery trucks. The spills and leakages from these machinery, vehicles and equipment and fuel tanks, respectively could infiltrate into the ground and pollute soils. However, the pollution significance would also depend on the volumes of spilled or leaked fuels (major spills and leaks would mean significant pollution). Therefore, the impact will be moderately low as assessed Table 7-6 below.

Table 7-6: Assessment of the project impact on soils and water resources (pollution) during construction

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M/L - 4	M/H - 4	M - 40
Post-mitigation	L - 1	L - 1	L - 2	L/M - 2	L - 8

B. Operational Phase

Cemeteries are known to be one of the contributing sources to groundwater pollution. This is likely to happen if the site selection, planning and designing are not properly done, especially their location in the environment. The burial methods may vary due to the regional differences, habits and customs of communities and according to religious beliefs. They may consist of inauspicious burials, burying the dead or cremation. In terms of groundwater pollution potential, however, inhumation and water burial are believed to be the two most serious methods with the highest risk of contamination. The common burial depth in Namibia is 1.8 meters below ground level (as the standard burial guideline). The practice of burying the dead using coffins or by burying corpses directly into the ground, may hasten the spread of contaminants into aquifers. The pollution of water resources can be caused by the biological decomposition process of a corpse after a period following burial in a grave caused by the leachate and ground-absorption processes - Figure 7-1. The potential risk to groundwater pollution occurs when the buried corpses start to decay (degrade) and release disease agents, bacteria, organic and inorganic decomposition compounds such as nitrogen and phosphorus.

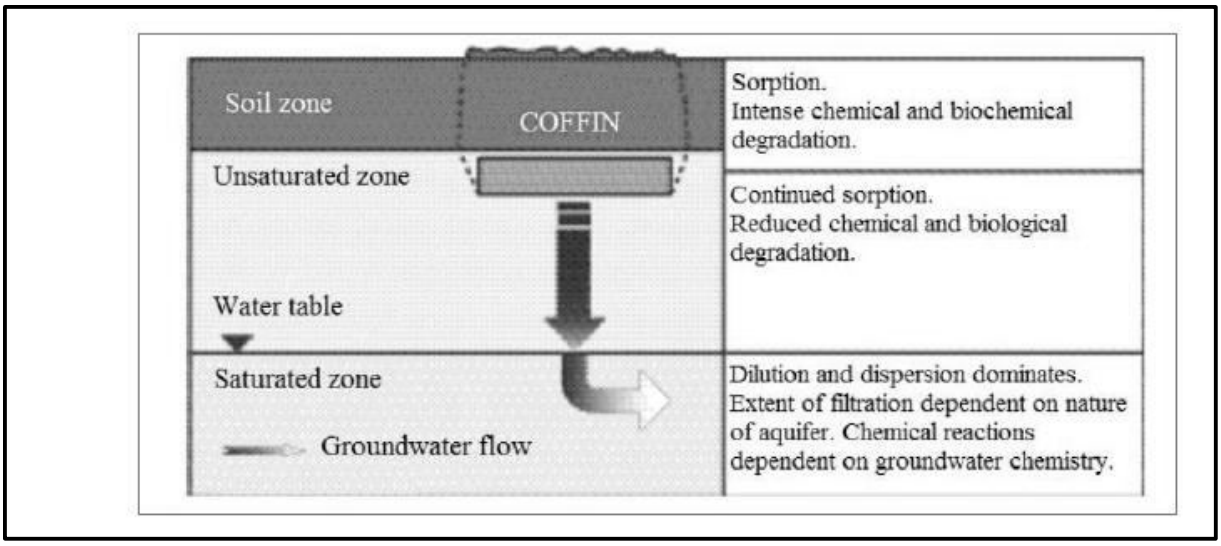
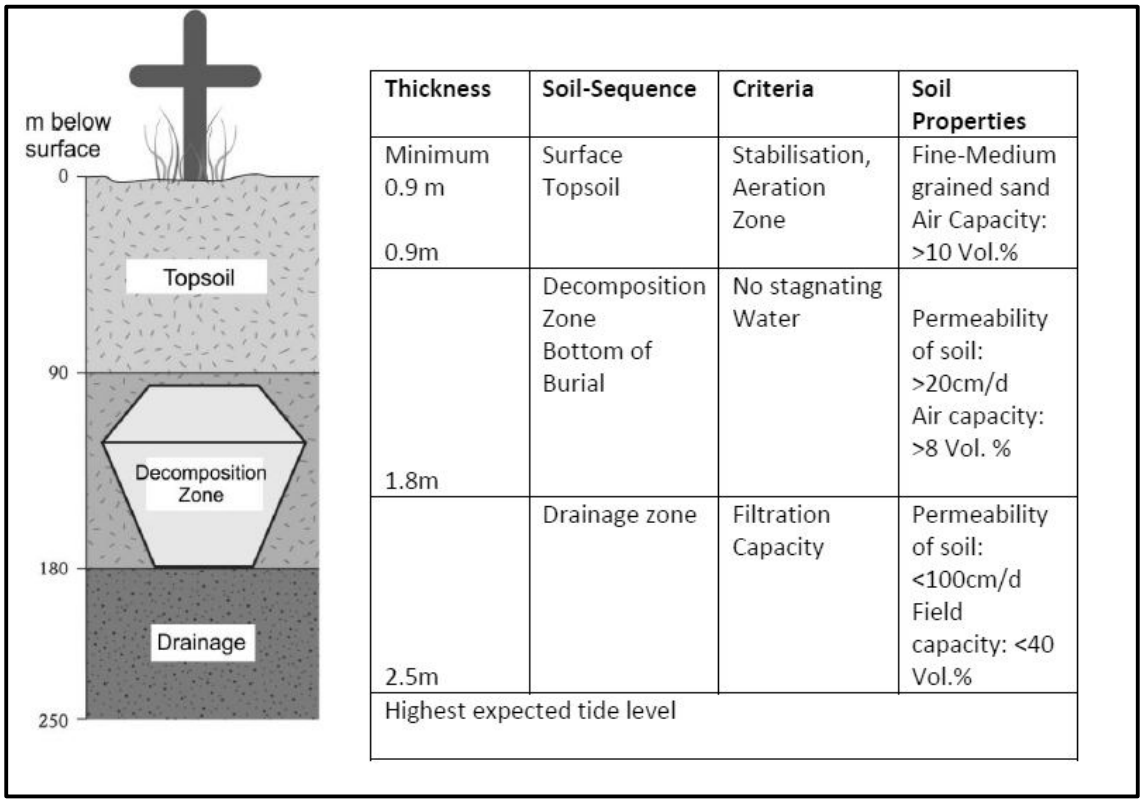


Figure 7-1: Natural attenuation processes of leachates exuding from landfill of human body corpses (edited by Water Associates Namibia, 2019 after Nguyen, T., Nguyen, L, 2018)

In terms of soils, the following depths and characteristics of soils (as shown in Figure 7-2) are recommended for the proposed site. The mitigation measures are provided in the Draft EMP.



Thickness	Soil-Sequence	Criteria	Soil Properties
Minimum 0.9 m 0.9m	Surface Topsoil	Stabilisation, Aeration Zone	Fine-Medium grained sand Air Capacity: >10 Vol.%
1.8m	Decomposition Zone Bottom of Burial	No stagnating Water	Permeability of soil: >20cm/d Air capacity: >8 Vol. %
2.5m	Drainage zone	Filtration Capacity	Permeability of soil: <100cm/d Field capacity: <40 Vol.%
Highest expected tide level			

Figure 7-2: Recommended soil replacement profile for the new cemetery (Water Associates Namibia, 2019 edited after Sabel (2007))

The underlying geology of the site and Oranjemund Town in general (apart from riverbed or valleys) provides favorable conditions for anti-pollution transport. This is because the rock units on and around the site are intact, i.e., they are not faulted nor fractured to provide ready pathways for potential pollution. This is also proven by the groundwater vulnerability map under section 5.3.1 (rather low). The groundwater scheme (boreholes) that supplies the Town is also limited to the Orange River (alluvial aquifers). Therefore, with this said, the impact of the cemetery on the water quality is of medium to low significance. Nonetheless, mitigation measures will need to be implemented to maintain this rating. The impact is assessed in Table 7-7.

Table 7-7: Assessment of the project impact on soils and water resources (pollution) during operation

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M - 6	M/H - 4	M – 48
Post-mitigation	L/M - 2	L/M - 2	L - 2	L/M - 2	L - 12

7.6.3 Generation of Dust and Fumes (Air Quality)

The potential dust emanating from site access roads and fumes from heavy vehicles when transporting materials to and from site may compromise the air quality in the area. Vehicular movements from heavy vehicles such as trucks would potentially create dust given that the access roads are not tarred. Since construction works will only be done for few weeks and materials are only transported on a time-to-time basis, the generation of dust by can be considered moderate, and therefore of low to medium significance without any mitigation measures. The medium significance of this impact can be reduced to a low significance rating by properly implementing mitigation measures. The impact is assessed in Table 7-8.

Table 7-8: Assessment of the impacts of project activities on air quality

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 2	L/M - 2	M - 6	M - 3	M – 30
Post-mitigation	L - 1	L - 1	L - 2	L - 1	L - 4

7.6.4 Water Resources Use

Water resources is impacted by project activities in two ways, namely through pollution (water quality) or over-abstraction (water quantity) or at times both.

For this project, the water supplied to the site will be from the municipal supply line, therefore, direct impact on the water resources through supply (quantity) by the project is none.

The assessment of this impact is presented in the Table 7-9 below.

Table 7-9: Assessment of the project impact on water resource use and availability

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 2	L/M - 2	L - 2	L/M- 2	L – 12
Post-mitigation	L - 1	L - 1	L - 1	L/M - 2	L - 6

7.6.5 Waste Generation

Domestic and general (solid) waste is produced on site. If the generated waste is not disposed of in a responsible way, solid waste would be scattered in the area resulting in environmental pollution (land degradation) and visual nuisance on or around the site. Improper handling, storage and disposal of hydrocarbon products and hazardous waste at the site may lead to soil and groundwater resources, in case of major spills and leakages. The assessment of this impact is given in Table 7-10.

Table 7-10: Assessment of waste generation impact

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	L/M - 2	L/M - 2	M - 6	M - 3	M – 30
Post-mitigation	L - 1	L - 1	L - 2	L/M - 2	L - 8

7.6.6 Accidental Fire Outbreaks

The use of heavy machinery and equipment may result in accidental fire outbreaks which could pose a safety risk to the project personnel, vehicles, and properties. Another fire outbreak could result from community members using an unsecured cemetery to smoke and use drugs (the present case with existing cemeteries in the Town). Fire sparks from cigarettes that had not been put out may encounter flammable materials such as dry leaves and result in fires. Without any measures in place, the impact is of medium significance. To reduce the rating to low, the measures will need to be effectively implemented. This impact is assessed in Table 7-11 below.

Table 7-11: Assessment of the impacts of accidental fire outbreaks

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M - 6	M/H - 4	M – 44
Post-mitigation	L - 1	L - 1	L - 1	L/M - 2	L - 2

7.6.7 Site Safety and Security

If the site security is not properly planned and ensured, the cemetery will be at risk of vandalism and theft, as it is the case with the incidents happening at the existing cemetery sites. The site safety and security would entail a proper and well-maintained high concrete wall, entrance control gate with security guard(s) always. Therefore, this will need to be considered and implemented onsite.

An up-to-standard cemetery wall (concrete/brick) would not only protect the graves against unauthorized access, vandalism and theft, but also from the accumulation of sand from outside into the cemetery, resulting in grave damage and covering.

The rating of the impact significance of site security with no measures, is considered medium to slightly high. The assessment of this impact is presented in the Table below.

Table 7-12: Assessment of the impacts of site safety and security

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M - 6	M/H - 4	M – 48
Post-mitigation	L - 1	L - 1	L - 1	L/M - 2	L - 6

7.6.8 Occupational and Community Health and Safety

The site personnel (workers) especially during construction phase may be exposed to health and safety risks, arising from mishandling of heavy equipment and machinery. This would occur if the heavy vehicle, equipment and machinery are not properly handled and secured while undertaking works. This may not only impact the project personnel but also the community members that may pass near the site during construction, therefore, impact mitigation measures will need to be implemented to avoid and or minimize the risk on both project personnel and residents and site neighbours. This impact is assessed in Table 7-13 below.

Table 7-13: Assessment of the impacts of project activities on occupational and community health and safety

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M - 3	M - 6	M/H - 4	M – 48
Post-mitigation	L - 1	L/M - 2	L - 2	L/M -2	L - 10

7.6.9 Vehicular Traffic Use and Safety

Depending on the project needs, the frequent travelling to site to deliver materials and during burial ceremonies (funeral convoys), would mean the presence of slow-moving heavy vehicles and increase traffic on the access roads which would be felt by the local road users. However, only so many times in the weeks of construction that trucks move in the area (from and to site). Therefore, the risk is anticipated to be short-term, not frequent, and therefore of medium significance, if not measures are implemented. The impact is assessed in Table 7-14 below.

Table 7-14: Assessment of the impacts of project activities on road use (vehicular traffic)

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre-mitigation	M - 3	M/H - 4	L/M - 4	M/H - 4	M - 44
Post-mitigation	L - 1	L/M - 2	L - 2	L/M -2	L - 10

7.6.10 Noise

The potential noise onsite will be from the offloading and loading of construction materials during construction as well as during operations (during burials from undertakers and burial related vehicles). The noise would be a nuisance to the neighboring properties. The noise level is bound to be limited to the site only and short-term, therefore, currently, the impact significance is minor. Regardless, without any measures in place, the impact significance would be medium and with the implementation of provided measures, the significance will be reduced to low. This impact is assessed in Table 7-15 below.

Table 7-15: Assessment of the impacts of noise from the project

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre mitigation	L/M - 2	L/M - 2	M - 6	M/H - 3	M – 30
Post mitigation	L - 1	L/M - 2	L - 2	L/M -2	L - 10

7.6.11 Disturbance to Archaeological and Heritage resources

The site is on a bare area and there was no presence of archaeological resources. However, during construction where earthworks will be carried out, there is a potential of discovering such resources such as unmarked old graves through inadvertent destruction during trenching onsite. The impact is assessed in Table 7-16.

Table 7-16: Assessment of project activities impact on archaeological & heritage resources

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre mitigation	M/H - 4	M - 3	M - 6	M - 3	M – 39
Post mitigation	L/M - 2	L/M - 2	L - 2	L/M - 2	L - 12

7.6.12 Visual Impact

Cemeteries are known to be a visual nuisance to locals or visitors in a place. This is however only a case if the cemetery planning and design are not done properly to make provisions for visual enhancement of the cemetery to be appealing to the community. The cemetery will be established in an area with similar land uses (two existing cemeteries). However, if not planned properly, the cemetery presence will contrast the surrounding landscape and thus potentially become a visual nuisance. The Proponent is planning to plant trees around the cemetery in additional to the security wall to minimize the appearance of the site. Therefore, the impact will be of minimal concern. Nonetheless, it is vital to acknowledge that the cemetery's presence has a visual impact, and that necessary measure will need to be taken into consideration, regarding the visual aspect. Without any measures implemented, the visual impact can be rated as of medium significance. However, upon effectively implementing the measures, it will be significantly reduced to low. The impact is assessed in Table 7-17 below.

Table 7-17: Assessment of the impacts of project on the visual

Mitigation Status	Extent	Duration	Intensity	Probability	Significance
Pre mitigation	M - 3	M - 3	M - 6	M - 3	M – 36
Post mitigation	L/M - 2	L/M - 2	L - 2	L/M - 2	L - 12

8 RECOMMENDATIONS AND CONCLUSIONS

The potential impacts that are anticipated from the proposed project activities were identified, described, and assessed. For the significant adverse (negative) impacts with medium rating, appropriate management and mitigation measures were recommended for implementation by the Proponent.

The interested and affected parties (I&APs) and stakeholders were consulted as per the EMA and its 2012 EIA Regulations (Section 21 to 24). This was done via the two newspapers used for this environmental assessment, i.e., *New Era* and *The Namibian*. A consultation meeting was scheduled in Oranjemund on the 12th of July 2022. The meeting was no-show. The no-show situation was explained by the Oranjemund Town Council that residents only attend meetings that directly affect them such as services tariff increment or plot/housing allocation meetings. Despite, the no-show at the meeting, some comments were collected from one of the residents (a health worker from the clinic). These were noted down for incorporation in this Report.

8.1 Recommendations

The potential impacts and issues identified during the EIA process were incorporated into this Scoping Report, have been addressed and mitigation measures provided thereto to avoid and/or minimize their significance on the environmental and social components. The potential adverse impacts were found to be of low to medium rating significance. With the effective implementation the recommended management and mitigation measures, significance of these impacts will be reduced to low rating. Monitoring should be done to ensure that the EMP implementation achieve the desirable objective of avoiding and or minimizing the adverse impacts, and that the adverse impacts might arise during project implementation are properly and timely identified and addressed accordingly.

The Scoping assessment is deemed sufficient and conclude that no further detailed assessments are required for the ECC application.

8.2 Conclusions

Based on the assessment done for the proposed cemetery establishment, the project and its associated activities do not pose a significant risk to the environment that would prompt the no-go option. Therefore, EDS Consultants are confident that the potential negative impacts associated with the project activities can be managed and mitigated by the effective

implementation of the recommended management and mitigation measures. This would also be improved by more effort and commitment towards monitoring the implementation of these measures.

It is therefore, recommended that the project activities be granted an Environmental Clearance Certificate. The recommendation is set alongside high priority on effective and correct implementation of the mitigation measures provided in the Draft EMP. The monitoring of this implementation is recommended to ensure compliance, thus protecting the biophysical and social environment throughout the project duration.

9 LIST OF REFERENCES

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