ENVIRONMENTAL IMPACT ASSESSMENT RENEWAL FOR THE REZONING OF PORTION 387 OF PORTION 70 OF FARM BRAKWATER No. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' AND FOR THE ALIGNMENT AND CONSTRUCTION OF THE ARTERIAL ROAD

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October 2023

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Project Name:	ENVIRONMENTAL IMPACT ASSESSMENT RENEWAL FOR THE REZONING OF PORTION 387 OF PORTION 70 OF FARM BRAKWATER No. 48 FROM 'RESIDENTIAL' TO 'INDUSTRIAL' AND FOR THE ALIGNMENT AND CONSTRUCTION OF THE ARTERIAL ROAD
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EXECUTIVE SUMMARY

Green Earth Environmental Consultants were appointed by the proponent, BV Investments 732 CC, to apply for the renewal of the Environmental Clearance Certificate to allow the completion of the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' to 'Industrial' and for the alignment and construction of the arterial road.

An Environmental Impact Assessment was conducted, and an Environmental Clearance Certificate was obtained 28 September 2012. This ECC expired and must be renewed to complete the rezoning of the Portion.

In accordance with the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the activities listed below, which forms part of the proposed operations, may not be undertaken without an Environmental Clearance Renewal:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from residential use to industrial or commercial use;

INFRASTRUCTURE

10.1 The construction of(b) public roads;
10.2 The route determination of roads and design of associated physical infrastructure where (a) It is a public road
(b) the road reserve is more than 30m wide, or

(c) the road caters for more than one lane of traffic in both directions

The type of activities that will be carried out on the site will not negatively affect the amenity of the locality and the activities will not adversely affect the environmental quality of the area. None of the potential impacts identified are regarded as having a significant impact to the extent that the proposed project should not be allowed. However, the operational activities further on need to be controlled and monitored by the assigned managers and the proponent. Mitigation measures will be provided that can control the extent, intensity, and frequency of these named impacts in order not to have substantial negative effects or results. It is believed that the overall cumulative impact on the biophysical environment.

The Environmental Impact Assessment Renewal which follows upon this paragraph was conducted in accordance with the guidelines and stipulations of the Environmental Management Act (No 7 of 2007) meaning that all possible impacts have been considered and the details are presented in the report.

Based upon the conclusions and recommendations of the renewed Environmental Impact Assessment Report and Environmental Management Plan, the Environmental Commissioner of the Ministry of Environment, Forestry and Tourism is herewith requested to:

- 1. Accept and approve the renewed Environmental Impact Assessment.
- 2. Accept and approve the renewed Environmental Management Plan.
- 3. Issue a renewed Environmental Clearance for the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' to 'Industrial' and for the alignment and construction of the arterial road and for the following listed activities:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from residential use to industrial or commercial use;

INFRASTRUCTURE

10.1 The construction of-

(b) public roads;

10.2 The route determination of roads and design of associated physical infrastructure where -

(a) It is a public road

(b) the road reserve is more than 30m wide, or

(c) the road caters for more than one lane of traffic in both directions

TABLE OF CONTENTS

EXEC	CUTIVE SUMMARY	3
LIST	OF FIGURES	7
LIST	OF TABLES	7
LIST	OF ABBREVIATIONS	8
1.	INTRODUCTION	9
2.	TERMS OF REFERENCE	9
3.	PROJECT DESCRIPTION/SITE INFORMATION	.10
3.1.	LOCALITY OF PROJECT SITE	.10
3.2.	TOPOGRAPHY	.13
3.3.	THE PROPOSED PROJECT	
4.	APPROVALS OBTAINED	.14
4.1.	MUNICIPAL APPROVAL TO REZONE THE ERF	.14
4.2.	ENVIRONMENTAL CLEARANCE OBTAINED	.17
5.	BULK SERVICES AND INFRASTRUCTURE PROVISION	.18
5.1.	ACCESS ROAD	.18
5.2.	WATER SUPPLY	.18
5.3.	ELECTRICITY RETICULATION	.19
5.4.	SEWAGE DISPOSAL	.19
5.5.	STORM WATER AND DRAINAGE	
5.6.	SOLID WASTE	.21
5.7.	FIRE PROTECTION	
6.	ASSUMPTIONS AND LIMITATIONS	.21
7.	ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS	.21
8.	AFFECTED NATURAL AND SOCIAL ENVIRONMENT	.33
8.1.	CLIMATE	.33
8.2.	GEOLOGY, SOILS AND GEOHYDROLOGY	.34
8.3.	BIODIVERSITY AND VEGETATION	.34
8.4.	SOCIAL-ECONOMIC COMPONENT	.35
8.5.	CULTURAL HERITAGE	.36
8.6.	SENSE OF PLACE	.36
8.7.	HEALTH	.36
9.	IMPACT ASSESSMENT AND EVALUATION	.37

9.1. IMPACTS DURING THE OPERATIONAL PHASE	38
9.1.1. ECOLOGICAL IMPACTS	38
9.1.2. DUST POLLUTION AND AIR QUALITY	38
9.1.3. CONTAMINATION OF GROUNDWATER	38
9.1.4. GENERATION OF WASTE	39
9.1.5. FAILURE IN RETICULATION PIPELINES	39
9.1.6. FIRES AND EXPLOSIONS	39
9.1.7. HEALTH, SAFETY AND SECURITY	40
9.2. CUMULATIVE IMPACTS	40
10. CONCLUSION	41
11. RECOMMENDATION	41
APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT	43
APPENDIX B: CURRICULUM VITAE OF CARIEN VAN DER WALT	45
APPENDIX C: ENVIRONMENTAL MANAGEMENT PLAN	46

LIST OF FIGURES

Locality Plan of Portion 387, Brakwater	11
Photo showing the locality of the Portion	12
Map showing the Portion required by COW for Road building purposes	12
Right of Way to be registered on boundary of Portion 387, Brakwater	13
Zoning Map showing the proposed new zoning of Portion 387, Brakwater	24
Flowchart of the assessment Process	32
Average temperatures (Atlas of Namibia Project, 2002)	33
Geology of Namibia (Atlas of Namibia Project, 2002)	34
Biomes in Namibia (Atlas of Namibia, 2002)	35
	Locality Plan of Portion 387, Brakwater Photo showing the locality of the Portion Map showing the Portion required by COW for Road building purposes Right of Way to be registered on boundary of Portion 387, Brakwater Zoning Map showing the proposed new zoning of Portion 387, Brakwater Flowchart of the assessment Process Average temperatures (Atlas of Namibia Project, 2002) Geology of Namibia (Atlas of Namibia Project, 2002) Biomes in Namibia (Atlas of Namibia, 2002)

LIST OF TABLES

Table 1:	Other laws, acts, regulations and po	olicies 25
Table 2:	Impact Evaluation Criterion (DEAT	2006)

LIST OF ABBREVIATIONS

EC	Environmental Clearance
ECO	Environment Control Officer
EIA	Environmental Impact Assessment
EMP	Environmental Management Plan
I&APs	Interested and Affected Parties
MAWLR	Ministry of Agriculture, Water and Land Reform
MEFT	Ministry of Environment, Forestry and Tourism

1. INTRODUCTION

Green Earth Environmental Consultants were appointed by the proponent, BV Investments 732 CC, to apply for the renewal of the Environmental Clearance Certificate for the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' to 'Industrial' and for the alignment and construction of the arterial road which is required by City of Windhoek for future road extension and construction.

An Environmental Impact Assessment was conducted, and an Environmental Clearance Certificate was obtained 28 September 2012. This ECC expired and must be renewed to complete the rezoning of the Portion.

In accordance with the Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007), the activities listed below, which forms part of the proposed operations, may not be undertaken without an Environmental Clearance Renewal:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from residential use to industrial or commercial use;

INFRASTRUCTURE

10.1 The construction of(b) public roads;
10.2 The route determination of roads and design of associated physical infrastructure where (a) It is a public road
(b) the road reserve is more than 30m wide, or
(c) the road caters for more than one lane of traffic in both directions

The following Environmental Impact Assessment Renewal contains information on the project and the surrounding areas and activities.

2. TERMS OF REFERENCE

To be able to finalise the rezoning of Portion 387 as well as to align and create a road portion which is a condition set by City of Windhoek, the Environmental Clearance Certificate must be renewed. For this environmental impact exercise, *Green Earth Environmental Consultants* followed the terms of reference as stipulated under the Environmental Management Act.

The aim of the environmental impact assessment is:

- To comply with Namibia's Environmental Management Act (2007) and its regulations (2012).
- To ascertain existing environmental conditions on the site to determine its environmental sensitivity.

- To inform I&APs and relevant authorities of the details of the proposed activities and to provide them with an opportunity to raise issues and concerns.
- To assess the significance of issues and concerns raised.
- To compile a report detailing all identified issues and possible impacts, stipulating the way forward and identify specialist investigations required.
- To adhere to the National Solid Waste Management Strategy of the Ministry of Environment, Forestry and Tourism
- To outline management guidelines in an Environmental Management Plan (EMP) to minimize and/or mitigate potentially negative impacts.

The tasks that will be undertaken for the Environmental Impact Assessment Renewal include the evaluation of the following: climate, water (hydrology), vegetation, geology, soils, social, cultural heritage, groundwater, sedimentation, erosion, biodiversity, sense of place, socio-economic environment, health, safety and traffic.

The renewed EIA and EMP from the assessment will be submitted to the Environmental Commissioner for consideration. A renewed Environmental Clearance will only be obtained (from the DEA) once the renewed EIA and EMP has been examined and approved for the listed activities.

The public consultation process as per the guidelines of the Act has been followed. The methods that were used to assess the environmental issues and alternatives included the collection of data on the project site and area from the proponent and identified stakeholders. All other permits, licenses or certificates that are further on required for the operation of the proposed project still needs to be applied for by the proponent.

3. PROJECT DESCRIPTION/SITE INFORMATION

3.1. LOCALITY OF PROJECT SITE

Portion 387 of Portion 70 of Farm Brakwater No. 48 is located in the northern peri-urban area of Brakwater. It is the intention of the Proponent to rezone Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' with a desity of 1:5 ha to 'Industrial' with a bulk of 0.1 ha to be used for industrial purposes. City of Windhoek (COW) conditionally approved the rezoning of Portion 387 on condition that a portion of Portion 387, Brakwater be cut off to be used for future road building purposes. It will be used to align and construct the arterial road. Portion 387 of Portion 70 of Farm Brakwater No. 48 (5, 0037 hectares in extent) will be subdivided into Portion A (\pm 7 950 m² in extent) for the arterial road to the northern boundary of Portion 387, Brakwater and no building should be constructed on it. Enough parking, as is required in terms of the Town Planning Scheme will be provided. See below locality of project site:

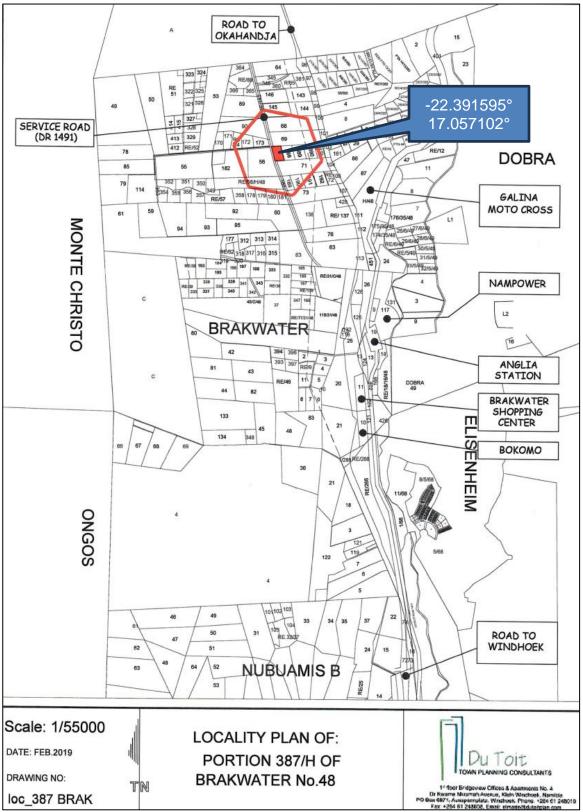


Figure 1: Locality Plan of Portion 387, Brakwater



Figure 2: Photo showing the locality of the Portion



Figure 3: Map showing the Portion required by COW for Road building purposes

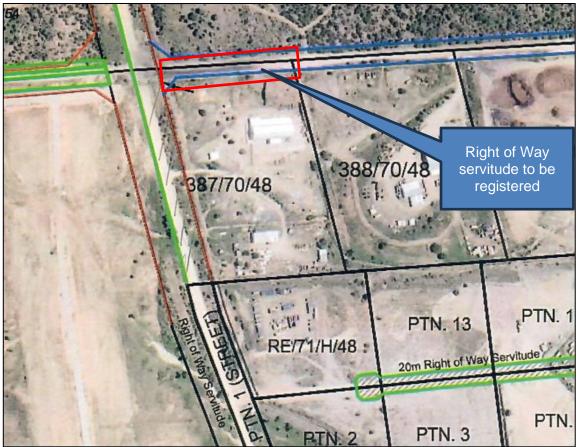


Figure 4: Right of Way to be registered on boundary of Portion 387, Brakwater

3.2. TOPOGRAPHY

The entire plot lends itself to the proposed development because of the fairly flat terrain, good access and strategic locality with regard to the trunk road which links Windhoek with the rest of Namibia.

3.3. THE PROPOSED PROJECT

It is the intention of the Proponent to use Portion 387, Brakwater for warehousing for the storage of building materials, construction equipment and vehicles. The current zoning of 'residential' 1:5ha does not allow the proposed uses. To be able to use the portion for the intended purposes, it has to be rezoned to 'industrial'. The rezoning of land from 'residential' use to 'industrial' use is a listed activity for which an environmental clearance is required. City of Windhoek (COW) approved the rezoning of Portion 387, Brakwater on condition that a portion of \pm 7950m² be cut off from the portion and transferred to the City for future street widening and construction purposes. See Paragraph 1 and 2 of Council's Resolution and Letter below. COW also requires that a 13m wide right of way servitude be registered along the northern boundary of Portion 387 to be used as access road to the Portion and neighbouring portions. See Paragraph 3 of Council's Resolution and Letter.

The construction and alignment of public roads are also listed activities for which the renewed environmental clearance certificate must be obtained.

4. APPROVALS OBTAINED

The following approvals have been obtained:

4.1. MUNICIPAL APPROVAL TO REZONE THE ERF

City of Windhoek approved the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 per Council Resolution 410/11/2012 and 190/09/2017. See below a copy of the Municipal approval letter and Resolution stipulating the conditions to the rezoning as well as creation of the road portion and right of way servitude:

De	partn	nent of Urban & 1	Transport Planning	2 The
5	9			Mar Mar
		ence Avenue NAMIBIA		
		4) 61 290 2073 • Fax: (+264)	61 290 2060 • www.cityofwindhoek.org.na	che cravindazoin
		: Mr. H Rust : 290 2378	Ref : L/387/BW Date : 6 February 2018	
	P. O.	rie Du Toit Town Planning Box 6871 pannplatz	Consultant	
	Dear	Madam,		
			PORTION 387 BRAKWATER FROM "RESIDEN FO "INDUSTRIAL" WITH A BULK OF 0.1.	TIAL"
	per C Braky appro	Council Resolution No. 410, water from "Residential" with	of authority applicable to the rezoning of Erven (as r /11/2012 and CR 190/9/2017), the rezoning of Porti th a density of 1:5 ha to "Industrial" with a bulk of mibia Planning Advisory Board subject to the fo	on 387 f 0.1 is
	1		n 70 of the Farm Brakwater No. 48 be subdivided into r the arterial road to the west of the portion.	Portion
	2.		the co-ordinates from the Strategic Executive: Urb portions to be subdivided for road building purposes be ent Scheme.	
	3		t of way servitude be registered on the northern bounter and that no buildings be constructed on it.	dary of
$\left(\begin{array}{c} \\ \end{array} \right)$	4	No. 48 from 'residential' w	e rezoning of Portion 387 of Portion 70 of the Farm Br with a density of 1:5 hectare to 'industrial' with a bulk of potential large floor area and insufficient supply of t	f 0.4, be
	5		tion 70 of the Farm Brakwater No. 48 be rezone of 1:5 hectare to 'industrial' with a bulk of 0.1.	d from
	6	That the conditions registe No. 48 as per the Deed of T	ered against Portion 387 of Portion 70 of the Farm Br Fransfer T 5196/2009 and Diagram No. 103/2009 be ret	akwater ained.
	7	the increase in value of the incorporation of the rezoni	viting to pay a betterment fee of N\$360 000.00 being e rezoned property, subject to Ministerial approval, prior ing in an Amendment Scheme and submission for app Advisory Board (NAMPAB).	or to the
				1
-		All official corresponden	nce must be addressed to the Chief Executive Offic	er

8	That a deposit equivalent to the proposed betterment fee as per paragraph 7 above, be paid into Account 5000132050425, created by the Strategic Executive: Finance for this purpose.
9	That it be noted that no municipal water or sewer services is available.
10	That any sewer or water requirements be for the applicant's account, and they have to comply with the standard conditions to large subdivisions in respect of services.
11	That the applicant therefore appoint a professionally registered Engineer to propose an acceptable waste water disposal system subject to the following conditions:
11.1	That no pollution of the groundwater occur.
11.2	That there be no health risks to the users and surrounding residents.
12	That the applicant also appoint a professionally registered Engineer to propose how on- site water storage would be catered for.
12.1	That water consumption not be more than 1.5 m ³ /day/household.
12.2	That storage tanks with a storage capacity of 48 hours be made available for each household by the applicant.
13	That the City of Windhoek not be held responsible for the provision of water if the groundwater supply deteriorate.
14	That the proposed treatment of waste water, as well as the proposed water storage system, be submitted by the applicant and approved by the Strategic Executive: Infrastructure, Water and Technical Services.
15	That the design criteria be in accordance with the 'The Guidelines for human settlement, planning and design' as published by the Council of Scientific and Industrial Research (CSIR), available on-line at http://www.csir.co.za/Built_environment/RedBook/.
16	That the operation and maintenance of all water and sewer infrastructure be the responsibility of the applicant.
17	That the full costs of all water and sewer infrastructure, including the professional fees for planning, design and supervision costs and the construction costs, be for the applicant's account.
18	That the possibility to re-use the purified effluent be addressed by the owner.
19	That the costs related thereto be for the applicant's own account.
20	That detail on a proposed sewer system and treatment of waste water be submitted and approved by the Strategic Executive: Infrastructure, Water and Technical Services before approval of any building plans.
21	That it further be noted that the City of Windhoek is subject to the issuing of a Waste Water Discharge Permit and that the applicant have to observe all conditions applicable to the application of such permit.
	2

- 22 That it be noted that as of current, there is no electrical network in Brakwater that belong to the City.
- 22.1 That the applicant approach NamPower for a possible power supply.
- 22.2 That all electrical reticulation designs be designed as per Council's standard and be submitted to the Strategic Executive: Electricity for approval before commencement of construction.
- 23 That all electrical reticulation designs be designed as per Council's standard and be submitted to the Strategic Executive: Electricity, for approval before commencement of construction.
- 24 That the applicant contact Telecom for all new telephone connections and requirements in this area.
- 25 That the applicant, if satisfied, accepts this Delegated Authority approval in writing.

Yours faithfully

STRATEGIC EXECUTIVE: Pierre Van Rensburg

4.2. ENVIRONMENTAL CLEARANCE OBTAINED

The Office of the Environmental Commissioner on 28 September 2012 issued an Environmental Clearance Certificate for the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48. See below a copy of the ECC:



Obtaining the final approval for the rezoning of the Portion was delayed due to financial constraints experienced by the proponent. The proponent is now ready to finalize the rezoning for which the ECC must be renewed.

5. BULK SERVICES AND INFRASTRUCTURE PROVISION

The land is generally flat consisting of a few scattered shrubs as it was already debussed and landscaped and the surface area is covered with loose stones. The site is connected to the following bulk services:

5.1. ACCESS ROAD

The project site will obtain access from the northern side of the site where the right of way servitude will be registered.

5.2. WATER SUPPLY

The project site will obtain water from the existing NamWater water reticulation system of Brakwater which is directly linked to the NamWater line linking Windhoek with Von Bach Dam. Water should be used sparingly in the construction and operational phase. See below the water conditions from the City of Windhoek:

That it be noted that no municipal water or sewer services is available.

That any sewer or water requirements be for the applicant's account, and they have to comply with the standard conditions to large subdivisions in respect of services.

That the applicant therefore appoint a professionally registered Engineer to propose an acceptable waste water disposal system subject to the following conditions:

That no pollution of the groundwater occur.

That there be no health risks to the users and surrounding residents.

That the applicant also appoint a professionally registered Engineer to propose how onsite water storage would be catered for.

That water consumption not be more than 1.5 m³/day/household.

That storage tanks with a storage capacity of 48 hours be made available for each household by the applicant.

That the City of Windhoek not be held responsible for the provision of water if the groundwater supply deteriorate.

That the proposed treatment of waste water, as well as the proposed water storage system, be submitted by the applicant and approved by the Strategic Executive: Infrastructure, Water and Technical Services.

That the design criteria be in accordance with the 'The Guidelines for human settlement, planning and design' as published by the Council of Scientific and Industrial Research (CSIR), available on-line at http://www.csir.co.za/Built environment/RedBook/.

That the operation and maintenance of all water and sewer infrastructure be the responsibility of the applicant.

That the full costs of all water and sewer infrastructure, including the professional fees for planning, design and supervision costs and the construction costs, be for the applicant's account.

That the possibility to re-use the purified effluent be addressed by the owner.

That the costs related thereto be for the applicant's own account.

That detail on a proposed sewer system and treatment of waste water be submitted and approved by the Strategic Executive: Infrastructure, Water and Technical Services before approval of any building plans.

That it further be noted that the City of Windhoek is subject to the issuing of a Waste Water Discharge Permit and that the applicant have to observe all conditions applicable to the application of such permit.

5.3. ELECTRICITY RETICULATION

The project site is already linked to the existing NamPower electrical grid in this area of Brakwater. See below the electricity conditions from the City of Windhoek:

That it be noted that as of current, there is no electrical network in Brakwater that belong to the City.

That the applicant approach NamPower for a possible power supply.

That all electrical reticulation designs be designed as per Council's standard and be submitted to the Strategic Executive: Electricity for approval before commencement of construction.

5.4. SEWAGE DISPOSAL

Only household sewer will be generated on site from the toilet facilities for the staff and clients. The proponent will develop a dedicated sewer system to support the proposed development. See below the sewer conditions from the City of Windhoek:

That it be noted that no municipal water or sewer services is available.

That any sewer or water requirements be for the applicant's account, and they have to comply with the standard conditions to large subdivisions in respect of services.

That the applicant therefore appoint a professionally registered Engineer to propose an acceptable waste water disposal system subject to the following conditions:

That no pollution of the groundwater occur.

That there be no health risks to the users and surrounding residents.

That the applicant also appoint a professionally registered Engineer to propose how onsite water storage would be catered for.

That water consumption not be more than 1.5 m3/day/household.

That storage tanks with a storage capacity of 48 hours be made available for each household by the applicant.

That the City of Windhoek not be held responsible for the provision of water if the groundwater supply deteriorate.

That the proposed treatment of waste water, as well as the proposed water storage system, be submitted by the applicant and approved by the Strategic Executive: Infrastructure, Water and Technical Services.

That the design criteria be in accordance with the 'The Guidelines for human settlement, planning and design' as published by the Council of Scientific and Industrial Research (CSIR), available on-line at http://www.csir.co.za/Built_environment/RedBook/.

That the operation and maintenance of all water and sewer infrastructure be the responsibility of the applicant.

That the full costs of all water and sewer infrastructure, including the professional fees for planning, design and supervision costs and the construction costs, be for the applicant's account.

That the possibility to re-use the purified effluent be addressed by the owner.

That the costs related thereto be for the applicant's own account.

That detail on a proposed sewer system and treatment of waste water be submitted and approved by the Strategic Executive: Infrastructure, Water and Technical Services before approval of any building plans.

That it further be noted that the City of Windhoek is subject to the issuing of a Waste Water Discharge Permit and that the applicant have to observe all conditions applicable to the application of such permit.

5.5. STORM WATER AND DRAINAGE

The stormwater management system will be accommodated in the building plans.

5.6. SOLID WASTE

The solid waste generated on the site will be collected by the proponent and be disposed of at an approved landfill site. Hazardous waste which might be generated on the site will be dealt with in accordance with the municipal waste procedures for hazardous waste.

5.7. FIRE PROTECTION

The Proponent will install the necessary fire protection infrastructure / extinguishers as per the requirements.

6. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the Proponent (BV Investments 732 CC) is accurate. The assessment is based on the prevailing environmental conditions and not on future happenings on the site. No alternative sites were investigated as Portion 387 belongs to the Proponent. However, it is assumed that there will be no significant changes to the proposed project, and the environment will not adversely be affected between the compilation of the assessment and the implementation of the proposed construction activities.

7. ADMINISTRATIVE, LEGAL AND POLICY REQUIREMENTS

To protect the environment and achieve sustainable development, all projects, plans, programs and policies deemed to have adverse impacts on the environment require an EIA according to Namibian legislation. The administrative, legal and policy requirements to be considered during the Environmental Assessment for the proposed project are the following:

- The Namibian Constitution
- The Environmental Management Act (No. 7 of 2007)
- The Windhoek Town Planning Scheme
- Other Laws, Acts, Regulations and Policies

THE NAMIBIAN CONSTITUTION

Article 95 of Namibia's constitution provides that:

"The State shall actively promote and maintain the welfare of the people by adopting, inter alia, policies aimed at the following:

Management of ecosystems, essential ecological processes and biological diversity of Namibia and utilization of living natural resources on a sustainable basis for the benefit of

all Namibians, both present and future; in particular, the Government shall provide measures against the dumping or recycling of foreign nuclear and toxic waste on Namibian territory." This article recommends that a relatively high level of environmental protection is called for in respect of pollution control and waste management.

Article 144 of the Namibian Constitution deals with environmental law and it states:

"Unless otherwise provided by this Constitution or Act of Parliament, the general rules of public international agreements binding upon Namibia under this Constitution shall form part of the law of Namibia". This article incorporates international law, if it conforms to the Constitution, automatically as "law of the land". These include international agreements, conventions, protocols, covenants, charters, statutes, acts, declarations, concords, exchanges of notes, agreed minutes, memoranda of understanding, and agreements (*Ruppel & Ruppel-Schlichting, 2013*).

CONCLUSION AND IMPACT

In considering the environmental rights, BV Investments 732 CC should consider the following in devising an action plan in response to the articles:

- Implement a "zero-harm" policy that would guide decisions.
- Ensure that no management practice or decision result in the degradation of future natural resources.
- Take a decision on how this part of the Constitution will be implemented as part of BV Investments 732 CC's Environmental Control System (ECS).

ENVIRONMENTAL MANAGEMENT ACT (NO. 7 OF 2007)

The Environmental Impact Assessment Regulations (GN 30 in GG 4878 of 6 February 2012) of the Environmental Management Act (No. 7 of 2007) that came into effect in 2012 requires/recommends that an Environmental Impact Assessment Renewal and an Environmental Management Plan Renewal be conducted for the following listed activities in order to obtain an Environmental Clearance Certificate:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from residential use to industrial or commercial use;

INFRASTRUCTURE

10.1 The construction of-

(b) public roads;

10.2 The route determination of roads and design of associated physical infrastructure where -

- (a) It is a public road
- (b) the road reserve is more than 30m wide, or
- (c) the road caters for more than one lane of traffic in both directions

Cumulative impacts associated with the development must be included as well as public consultation. The Act further requires all major industries to prepare waste management plans and present these to the local authorities for approval.

The Act, Regulations, Procedures and Guidelines have integrated the following sustainability principles. They need to be given due consideration, particularly to achieve proper waste management and pollution control:

Cradle to Grave Responsibility

This principle provides that those who handle or manufacture potentially harmful products must be liable for their safe production, use and disposal and that those who initiate potentially polluting activities must be liable for their commissioning, operation and decommissioning.

Precautionary Principle

If there is any doubt about the effects of a potentially polluting activity, a cautious approach must be adopted.

The Polluter Pays Principle

A person who generates waste or causes pollution must, in theory, pay the full costs of its treatment or of the harm, which it causes to the environment.

CONCLUSION AND IMPACT

The proposed project site has been assessed in terms of the Environmental Management Act (No. 7 of 2007) and the Regulations (2012). From the assessment, it can be concluded that the activities will have impacts on the prevailing environment but that the negative impacts can be sufficiently mitigated and managed by following the Environmental Management Plan which is part of this document.

THE WINDHOEK TOWN PLANNING SCHEME AND COUNCIL'S POLICIES

The Windhoek Town Planning Scheme (as amended in Windhoek Amendment Scheme No. 95 – promulgated 30 June 2017) applies to the area as indicated on the scheme maps and corresponds with the Townlands Diagram for Windhoek Town and Townlands. Portion 387 of Portion 70 of Farm Brakwater No. 48 falls within the area proposed in the Scheme.

The general purpose of this Scheme is the coordinated and harmonious development of the area of Windhoek (including, where necessary, the reconstruction and redevelopment of any part which has already been subdivided whether there are buildings on it or not) in such a way as will most effectively tend to promote health, safety, order, amenity, convenience and general welfare as well as efficiency and economy in the process of development and improvement of communications, and where it is expedient in order to promote proper planning or development, may provide for the suspending the operation of any provision of law or any bylaw or regulation made under such law, in so far as such provision is similar to or inconsistent with any of the provisions so the Scheme.

According to the Town Planning Scheme, Portion 387 of Portion 70 of Farm Brakwater No. 48 is zoned 'residential' with a density of 1 dwelling per 5ha. In terms of the Town Planning Scheme's provisions as well as other supporting Policies, the City of Windhoek supports the rezoning of land portions to 'industrial' with a bulk ranging from 0.1 - 0.5 as well as the subdivision of portions into smaller portions. Council has also various Policies guiding the development in Brakwater/Dobra which will be consulted in the assessment process. See zoning map below:

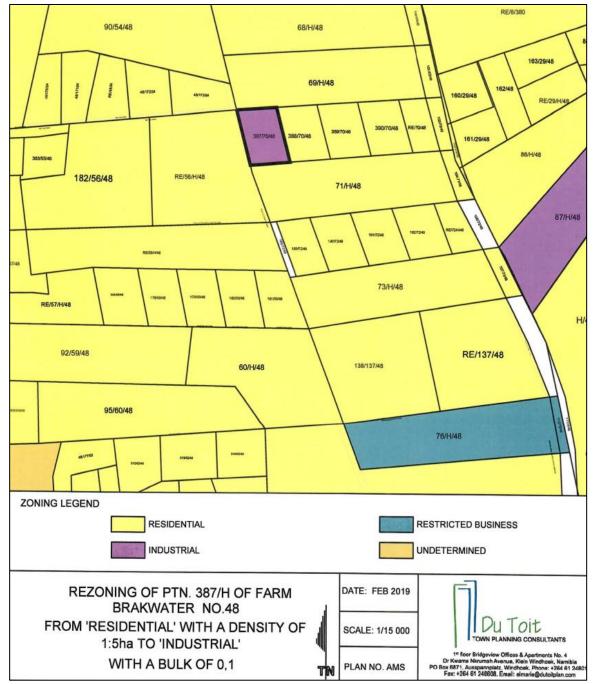


Figure 5: Zoning Map showing the proposed new zoning of Portion 387, Brakwater

CONCLUSION AND IMPACT

The proposed rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'residential' to 'industrial' has been considered and approved under the stipulations of the Windhoek Town Planning Scheme and the Local Authorities Act. The rezoning of the Portion and the proposed use thereof will not have a negative impact on the public.

Laws, Acts, Regulations & Policies consulted:			
Electricity Act	In accordance with the Electricity	The Proponent must abide to	
(No. 4 of 2007)	Act (No. 4 of 2007) which provides	the Electricity Act.	
	for the establishment of the		
	Electricity Control Board and		
	provide for its powers and		
	functions; to provide for the		
	requirements and conditions for		
	obtaining licenses for the provision		
	of electricity; to provide for the		
	powers and obligations of licenses;		
	and to provide for incidental		
	matters: the necessary permits and		
	licenses will be obtained.		
Pollution	The Pollution Control and Waste	The Proponent must adhere to	
Control and	Management Bill is currently in	the Pollution Control and	
Waste	preparation and is therefore	Waste Management Bill.	
Management	included as a guideline only. Of		
Bill (guideline	reference to the mining, Parts 2, 7		
only)	and 8 apply. Part 2 provides that		
	no person shall discharge or cause		
	to be discharged, any pollutant to		
	the air from a process except		
	under and in accordance with the		
	provisions of an air pollution		
	license issued under section 23.		
	Part 2 also further provides for		
	procedures to be followed in		
	license application, fees to be paid and required terms of conditions		
	for air pollution licenses. 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-		
	authority, in accordance with sub-		

Table 1: Other laws, acts, regulations and policies

	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	
Matar	response plans.	
Water	The Water Resources	The Act must be consulted.
Resources	Management Act (No. 11 of 2013)	Fresh water abstraction and
Management	stipulates conditions that ensure	waste-water discharge permits
Act	effluent that is produced to be of a	should be obtained when
	certain standard. There should	required.
	also be controls on the disposal of	
	sewage, the purification of effluent,	
	measures should be taken to	
	ensure the prevention of surface	
	and groundwater pollution and	
	water resources should be used in	
	a sustainable manner.	
Solid and	Provides for management and	The Proponent must abide to
Hazardous	handling of industrial, business and	the solid waste management
Waste	domestic waste.	provisions.
Management		
Regulations:		
Local		
Authorities		
1992		
1992 Hazardous	The Ordinance applies to the	The Proponent must abide to
	The Ordinance applies to the manufacture, sale, use, disposal	The Proponent must abide to the Ordinance's provisions.
Hazardous	manufacture, sale, use, disposal	
Hazardous Substances Ordinance	manufacture, sale, use, disposal and dumping of hazardous	
Hazardous Substances Ordinance (No. 14 of	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import	
Hazardous Substances Ordinance	manufacture, sale, use, disposal and dumping of hazardous	
Hazardous Substances Ordinance (No. 14 of	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social	
Hazardous Substances Ordinance (No. 14 of	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to	
Hazardous Substances Ordinance (No. 14 of	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances	
Hazardous Substances Ordinance (No. 14 of	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the	•
Hazardous Substances Ordinance (No. 14 of 1974)	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings.	the Ordinance's provisions.
Hazardous Substances Ordinance (No. 14 of 1974) Atmospheric	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings. Part 2 of the Ordinance governs	the Ordinance's provisions.
Hazardous Substances Ordinance (No. 14 of 1974) Atmospheric Pollution	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings. Part 2 of the Ordinance governs the control of noxious or offensive	the Ordinance's provisions.
Hazardous Substances Ordinance (No. 14 of 1974) Atmospheric Pollution Prevention	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings. Part 2 of the Ordinance governs the control of noxious or offensive gases. The Ordinance prohibits	the Ordinance's provisions. The proponent should adhere to the stipulations of the Atmospheric Pollution
Hazardous Substances Ordinance (No. 14 of 1974) Atmospheric Pollution	manufacture, sale, use, disposal and dumping of hazardous substances, as well as their import and export and is administered by the Minister of Health and Social Welfare. Its primary purpose is to prevent hazardous substances from causing injury, ill-health or the death of human beings. Part 2 of the Ordinance governs the control of noxious or offensive	the Ordinance's provisions. The proponent should adhere to the stipulations of the

Nomihia (No	registration contificate in a	
Namibia (No.	registration certificate in a	
11 of 1976)	controlled area. The registration	
	certificate must be issued if it can	
	be demonstrated that the best	
	practical means are being adopted	
	for preventing or reducing the	
	escape into the atmosphere of	
	noxious or offensive gases	
	produced by the scheduled	
	process.	
Nature	The Nature Conservation	The proposed project
Conservation	Ordinance (No. 4 of 1975) covers	implementation is not located
Ordinance	game parks and nature reserves,	in a demarcated conservation
	the hunting and protection of wild	area, national park or unique
	animals, problem animals, fish and	environments.
	indigenous plant species. The	
	Ministry of Environment, Forestry	
	and Tourism (MEFT) administer it	
	and provides for the establishment	
Forestry Ast	of the Nature Conservation Board.	
Forestry Act	The Forestry Act (No. 12 of 2001)	No removal of protected tree
	specifies that there be a general	species or removal of mature
	protection of the receiving and	trees should happen. The
	surrounding environment. The	Ministry of Environment,
	protection of natural vegetation is	Forestry and Tourism should
	of great importance, the Forestry	be consulted when required.
	Act especially stipulates that no	
	living tree, bush, shrub or	
	indigenous plants within 100m from	
	any river, stream or watercourse,	
	may be removed without the	
	necessary license.	
EU Timber	Forest Stewardship Council (FSC)	The Proponent is advised to
Regulation:	came into effect in March 2013,	adhere to the regulation.
FSC (2013)	with the aim of preventing sales of	
	illegal timber and timber products	
	in the EU market. Now, any actor	
	who places timber or timber	
	products on the market for the first	
	time must ensure that the timber	
	used has been legally harvested	
	and, where applicable, exported	
Labour Act	legally from the country of harvest.	The proper and contractor
	The Labour Act (No. 11 of 2007)	The proponent and contractor
	contains regulations relating to the	should adhere to the Labour
	Health, Safety and Welfare of	Act.
	employees at work. These	
	regulations are prescribed for	

	among others sofety relating to	
	among others safety relating to	
	hazardous substances, exposure	
	limits and physical hazards.	
	Regulations relating to the Health	
	and Safety of Employees at Work	
	are promulgated in terms of the	
	Labour Act 6 of 1992 (GN156,	
	GG1617 of 1 August 1997).	
Communal	Communal land is land that	Consent should be obtained
Land Rights	belongs to the State and is held in	from Traditional Authorities,
•	trust for the benefit of the	Communal Boards, Chiefs,
	traditional communities living in	Kings, Queens etc. if required.
	those areas. Communal land	
	cannot be bought or sold, but one	
	can be given a customary land	
	o ,	
	right or right of leasehold to a part	
	of communal land in accordance	
	with the provisions of the	
	Communal Land Reform Act	
	(No. 5 of 2002) and Communal	
	Land Reform Amendment Act	
	(No. 13 of 2013). The Communal	
	Land Reform Act provide for the	
	allocation of rights in respect of	
	communal land to establish	
	Communal Land Boards to provide	
	for the powers of Chiefs and	
	Traditional Authorities and boards	
	in relation to communal land and to	
	make provision for incidental	
	matters. Consent and access to	
	land for the proposed project	
	should be requested from the	
	relevant traditional authority	
	through the Regional Council and	
Treditional	Regional Communal Land Boards.	
Traditional	The Traditional Authorities Act	Traditional Authorities should
Authorities	(No. 17 of 1995) provide for the	be consulted when required.
Act (No. 17 of	establishment of traditional	
1995)	authorities, the designation and	
	recognition of traditional leaders; to	
	define their functions, duties and	
	powers; and to provide for matters	
	incidental thereto.	
Public and	The Public and Environmental	The proponent and contractor
Environmental	Health Act (No. 1 of 2015) provides	should adhere to the Public
Health Act	with respect to matters of public	and Environmental Health Act.
	health in Namibia. The objects of	

Coronavirus (Covid-19) Pandemic	this Act are to: (a) promote public health and wellbeing; (b) prevent injuries, diseases and disabilities; (c) protect individuals and communities from public health risks; (d) encourage community participation in order to create a healthy environment; and (e) provide for early detection of diseases and public health risks. The current global Coronavirus (Covid-19) pandemic and the associated State of Emergency and health restrictions globally may result in some delays and logistic disruptions. The pandemic might have an impact on obtaining equipment, specialist workforce mobilisation and implementation of the project. The health restrictions may have an impact on campsite set-up, traveling of personal/workers and building of the infrastructure. The proponent, contractor and subcontractors should adhere to all the international, regional and local Covid-19 health restrictions and protocols.	The proponent, contractor and workforce should adhere to the restrictions and regulations.
National Heritage Act (No. 27 of 2004)	All protected heritage resources discovered need to be reported immediately to the National Heritage Council (NHC) and require a permit from the NHC before it may be relocated. This should be applied from the NHC.	The National Heritage Council should be consulted when required.
National Monuments Act of Namibia (No. 28 of 1969) as amended until 1979	No person shall destroy, damage, excavate, alter, remove from its original site or export from Namibia: (a) any meteorite or fossil; or (b) any drawing or painting on stone or a petroglyph known or commonly believed to have been executed by any people who inhabited or visited Namibia before the year 1900 AD; or	The proposed site for development is not within any known monument site both movable or immovable as specified in the Act, however in such an instance that any material or sites or archeologic importance are identified, it will be the responsibility of the developer to take the required route and notify the relevant commission.

	(c) any implement, ornament or	
	structure known or commonly	
	believed to have been used as a	
	mace, used or erected by people	
	referred to in paragraph; or	
	(d) the anthropological or	
	archaeological contents of graves,	
	caves, rock shelters, middens,	
	shell mounds or other sites used	
	by such people; or	
	(e) any other archaeological or	
	palaeontological finds, material or	
	object; except under the authority of and in accordance with a permit	
	· ·	
Public Health	issued under this section.	The propenent will ensure that
	Under this act, in section 119: "No	The proponent will ensure that
Act (No. 36 of	person shall cause a nuisance or	all legal requirements of the
1919)	shall suffer to exist on any land or	project in relation to protection
	premises owned or occupied by him	of the health of their
	or of which he is in charge any	employees and surrounding
	nuisance or other condition liable to	residents is protected and will
	be injurious or dangerous to health."	be included in the EMP.
		Relevant protective equipment
		shall be provided for
		employees in construction.
		The development shall follow
		requirements and
		specifications in relation to
		water supply and sewerage
		handling and solid waste
		management so as not to
		threaten public health of future
		residents on this piece of land.
Soil	The objectives of this Act are to:	Only the area required for the
Conservation	Make provisions for the combating	operations should be cleared
Act (No. 76 of	and prevention of soil erosion;	from vegetation to ensure the
1969)	Promote the conservation,	minimum impact on the soil
	protection and improvement of the	through clearance for
	soil, vegetation, sources and	construction.
	resources of the Republic;	
Air Quality Act	The Air Quality Act (No. 39 of	The proponent and contractor
(N0. 39 of	2004) intends to provide for	should adhere to the Air
2004)	national norms and standards	Quality Act.
	regulating air quality monitoring,	
	management and control by all	
	spheres of government; for specific	
	air quality measures; and for	
	matters incidental thereto.	

Vision 2030	Namibia's overall development	The proposed project is an
and National	ambitions are articulated in the	important element in
Development	Nation's Vision 2030. At the	employment creation.
Plans	operational level, five-yearly	
	national development plans	
	(NDP's) are prepared in extensive	
	consultations led by the National	
	Planning Commission in the Office	
	of the President. Currently the	
	Government has so far launched a	
	4th NDP which pursues three	
	overarching goals for the Namibian	
	nation: high and sustained	
	economic growth; increased	
	income equality; and employment	
	creation.	

CONCLUSION AND IMPACT

It is believed the above administrative, legal and policy requirements which specifically guide and governs development will be followed and complied with in the planning, implementation and operations of the activity.

A flowchart indicating the entire EIA process is shown in the Figure below:

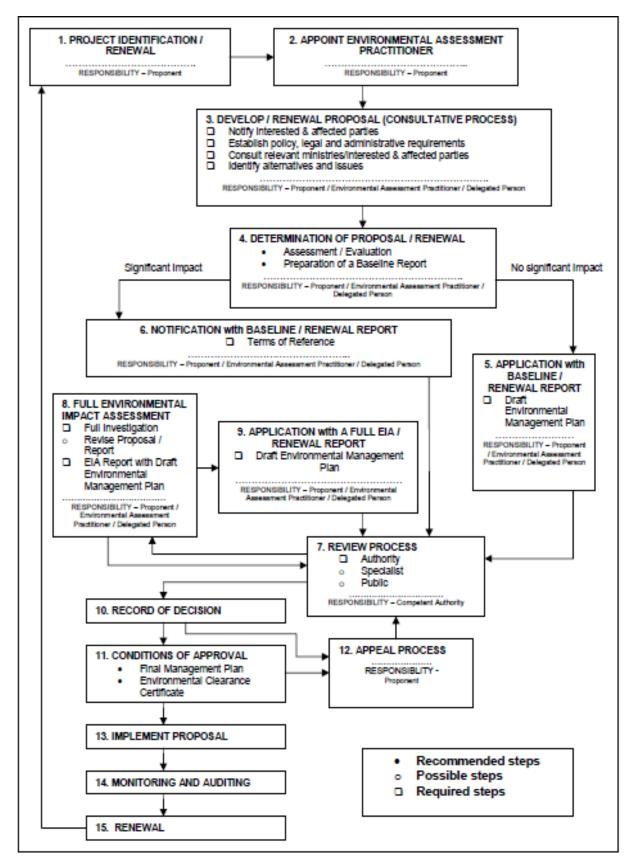


Figure 6: Flowchart of the assessment Process

8. AFFECTED NATURAL AND SOCIAL ENVIRONMENT

8.1. CLIMATE

In broad terms the climate can be described as semi-arid, with summer rainfalls and highest temperatures occurring during October and February. Maximum temperatures recorded in the area vary just under 40 degrees Celsius with an average annual temperature of more than 22 degrees Celsius (*Weather - the Climate in Namibia*, 1998 – 2012).

Rainfall in the form of thunderstorms is experienced in the area during the summer months between October and April. It is further characterised by an average annual rainfall of 400mm in comparison to 250mm for the entire country. Over 70% of the rainfall occurs in the period between November and March with mean annual gross evaporation of 2600-2800mm (*Weather - the Climate in Namibia*, 1998 – 2012).

The prevailing wind direction is expected to prevent the spread of any nuisance namely noise and smell.

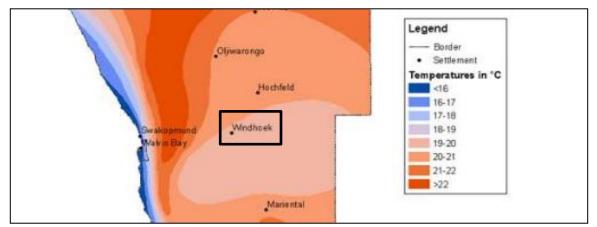


Figure 7: Average temperatures (Atlas of Namibia Project, 2002)

CONCLUSION AND IMPACT

The project will not have an impact on the climate.

8.2. GEOLOGY, SOILS AND GEOHYDROLOGY

Portion 387 of Portion 70 of Farm Brakwater No. 48 is located in the Khomas Trough on a geological area classified as Damara Supergroup and Gariep Complex. See Map below:

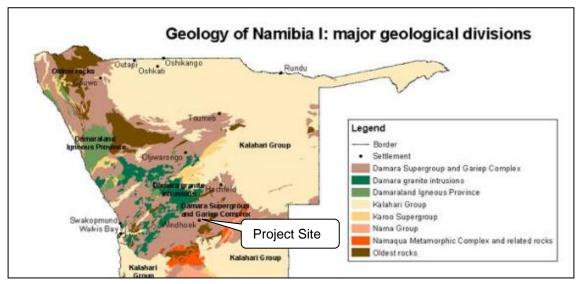


Figure 8: Geology of Namibia (Atlas of Namibia Project, 2002)

The project site is generally even with some higher areas at places. Natural slopes are seen near natural drainage courses on the project site. The soil is suitable for development however the soil is also erodible and should not be cleared unnecessarily from vegetation if not required for the placement of buildings or roads. Unnecessary clearing of soil will lead to erosion.

CONCLUSION AND IMPACT

The development will not impact on the geology, soils and geohydrology of the area. The surface drainage canals will be kept open in order that water can flow through.

8.3. BIODIVERSITY AND VEGETATION

The project site is located in the Tree and Scrub Savanna and Nama Karoo Biome. The Windhoek area in general contains a large diversity of annual and perennial grass, it is estimated that there are up to 101 grass species. Four of these species are endemic namely *Eragrostis omahekensis, Eragrostis scopelophila, Pennisetum foermeranum* and *Setaria finite (Mannheimer & Curtis, 2009)*. However, these species are not present on the specific site as it has been mostly cleared from vegetation. The natural characteristics of the site, namely the vegetation clearance and the destruction of habitats is expected to further on have a low impact on the environment. See map below:

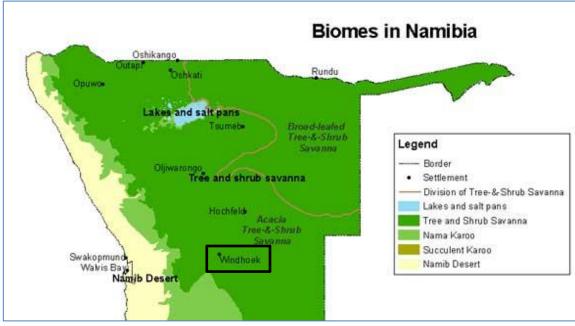


Figure 9: Biomes in Namibia (Atlas of Namibia, 2002)

CONCLUSION AND IMPACT

The development will have a low impact on vegetation, shrubs and trees.

8.4. SOCIAL-ECONOMIC COMPONENT

The area of Brakwater / Dobra where the Project Site is located is characterised by various mixed uses although the bulk of the uses are industrial / commercial which mean that the development will not have a negative impact on the environment.

The proposed rezoning of the land will have a positive impact on the socio-economic environment because additional industrial / business portions will be created upon which supporting infrastructure will be constructed. This will create additional employment during construction and after construction for workers. The services will be built with little disturbance to the environment and towards the individuals that are residing in the area. People residing in the area will benefit from employment created during planning, construction and operation of the process. The construction impacts will be little if mitigated by the Environmental Management Plan.

CONCLUSION AND IMPACT

The activities will have a positive impact on the community since employment will be created.

8.5. CULTURAL HERITAGE

The proposed project site is not known to have any historical significance prior to or after Independence in 1990. The specific area does not have any National Monuments and the specific site has no record of any cultural or historical importance or on-site resemblance of any nature. No graveyard or related article was found in the area. However, the Namibian National Heritage Act (No. 27 of 2004) provides for the protection and conservation of places and objects of heritage significance and the registration of such places and objects and to provide for incidental matters.

CONCLUSION AND IMPACT

No heritage resources or graveyards were observed on the site and in the area.

8.6. SENSE OF PLACE

The proposed development will not have a large/negative impact on the sense of place in the area. An untidy or badly managed site can detract from the ecological well-being and individuality of the area. Unnecessary disturbance to the surroundings could be caused by poorly planned or poorly managed operational activities. The project site should be kept neat and clean where possible. Vegetation should not be removed or harmed if not necessary since it covers topsoil which prevents erosion. Noise and dust should be limited in the construction phase because of the neighbouring activities.

CONCLUSION AND IMPACT

The impact on the sense of place will be low.

8.7. HEALTH

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). A health and safety officer should be employed to manage, coordinate and monitor risk and hazard and report all health and safety related issues in the workplace. The introduction of external workers into the area is sometimes accompanied with criminal activities posing security risks for neighbours. However, the proponent will take certain measures to prevent any activity of this sort. The welfare and quality of life of the neighbours and workforce needs to be considered for the project to be a success on its environmental performance. Conversely, the process should not affect the overall health of persons related to the project including the neighbours.

CONCLUSION AND IMPACT

The activity will have a low impact on the health of the affected community.

9. IMPACT ASSESSMENT AND EVALUATION

The Environmental Impact Assessment Renewal sets out potential positive and negative environmental impacts associated with the project site. The following assessment methodology will be used to examine each impact identified, see *Table* below:

Criteria	Rating (Severity)			
Impact Type	+	Positive		
	0	No Impact		
	-	Negative		
Significance of impact being either	L	Low (Little or no impact)		
	М	Medium (Manageable impacts)		
	н	High (Adverse impact)		

Table 2: Impact Evaluation Criterion (DEAT 2006)

Probability:	Duration:
5 – Definite/don't know	5 - Permanent
4 – Highly probable	4 – Long-term (impact ceases)
3 – Medium probability	3 – Medium term (5 – 15 years)
2 – Low probability	2 – Short-term (0 – 5 years)
1 – Improbable	1 - Immediate
0 - None	
Scale:	Magnitude:
5 – International	10 – Very high/don't know
4 – National	8 - High
3 – Regional	6 - Moderate
2 – Local	4 - Low

1 – Site only	2 - Minor
	0 - None

The impacts on the receiving environment are discussed in the paragraphs below:

9.1. IMPACTS DURING THE OPERATIONAL PHASE

9.1.1.ECOLOGICAL IMPACTS

Staff and visitors should only make use of walkways and existing roads to minimise the impact on vegetation. Minimise the area of disturbance by restricting movement to the designated working areas during maintenance and drives.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Ecology Impacts	-	1	2	4	2	М	L

9.1.2. DUST POLLUTION AND AIR QUALITY

Vehicles transporting goods and staff will contribute to the release of hydrocarbon vapours, carbon monoxide and sulphur oxides into the air. Possible release of sewer odour, due to sewer system failure of maintenance might also occur. All maintenance of bulk services and infrastructure at the project site has to be designed to enable environmental protection.

Impact Evaluation

Aspect Impact Type		Scale	Duration Mag	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	4	4	М	L

9.1.3. CONTAMINATION OF GROUNDWATER

Spillages might also occur during maintenance of the sewer system. This could have impacts on groundwater especially in cases of large sewer spills. Proper containment should be used in cases of sewerage system maintenance to avoid any possible leakages. Oil and chemical spillages may have a heath impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exits.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Groundwater contamination	-	2	2	4	2	М	L

9.1.4. GENERATION OF WASTE

Household waste from the activities at the site and from the staff working at the site will be generated. This waste will be collected, sorted to be recycled and stored in on site for transportation and disposal at an approved landfill site.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Waste Generation	-	1	2	2	2	М	L

9.1.5. FAILURE IN RETICULATION PIPELINES

There may be a potential release of sewage, stormwater or water into the environment due to pipeline/system failure. As a result, the spillage could be released into the environment and could potentially be health hazard to surface and groundwater. Proper reticulation pipelines and drainage systems should be installed. Regular bulk services infrastructure and system inspection should be conducted.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					Unmitigated	Mitigated
Failure of Reticulation Pipeline	-	1	1	4	2	Μ	L

9.1.6. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all firefighting devices are in good working order and are serviced. All personnel have to be trained about responsible fire protection measures and good housekeeping such as the removal of flammable materials on site. Regular inspections should be carried out to inspect and test firefighting equipment by the contractor. Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Fires and Explosions	-	2	1	4	2	М	L

9.1.7. HEALTH, SAFETY AND SECURITY

The safety, security and health of the labour force, employees and neighbours are of great importance, workers should be orientated with the maintenance of safety and health procedures and they should be provided with PPE (Personal Protective Equipment). Workers should be warned not to approach or chase any wild animals occurring on the site. No open flames, smoking or any potential sources of ignition should be allowed at the project location. Signs such as 'NO SMOKING' must be prominently displayed in parts where inflammable materials are stored on the premises.

Impact Evaluation

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Safety & Security	-	1	2	4	2	М	L

9.2. CUMULATIVE IMPACTS

These are impacts on the environment, which results from the incremental impacts of the construction and operation of the development when added to other past, present, and reasonably foreseeable future actions regardless of which person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. In relation to an activity, it means the impact of an activity that in it may not become significant when added to the existing and potential impacts resulting from similar or diverse activities or undertakings in the area.

Possible cumulative impacts associated with the proposed construction include: sewer damages/maintenance, uncontrolled traffic and destruction of the vegetation or the environment. These impacts could become significant especially if it is not properly supervised and controlled. This could collectively impact on the environmental conditions in the area. Cumulative impacts could occur in both the operational and the construction phase.

Aspect	Impact Type	Scale	Duration	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Cumulative Impacts	-	2	3	4	2	М	L

Impact Evaluation

10. CONCLUSION

In line with the Environmental Management Act (No 7 of 2007), *Green Earth Environmental Consultants* have been appointed to conduct an Environmental Impact Assessment Renewal for the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' to 'Industrial' and for the alignment and construction of the arterial road.

Negative impacts that can be associated with the development are most likely to include: production of solid waste, dust emissions, atmospheric emissions, noise pollution, movement of soils, increased wastewater generation, the disruption of groundwater from the foundation or other structures, can result in an increase in traffic on the nearby roads and there can be an impact on the occupational health and safety of workers. However, this project is believed to be an asset to this area. Facilities and employment will be made available for which there is a need.

After assessing all information available on this project, *Green Earth Environmental Consultants* believe that the development is required.

11. RECOMMENDATION

It is therefore recommended that the Ministry of Environment, Forestry and Tourism through the Environmental Commissioner support and approve the Environmental Clearance Renewal for the rezoning of Portion 387 of Portion 70 of Farm Brakwater No. 48 from 'Residential' to 'Industrial' and for the alignment and construction of the arterial road and for the following listed activities:

LAND USE AND DEVELOPMENT ACTIVITIES

5.1 The rezoning of land from residential use to industrial or commercial use;

INFRASTRUCTURE

10.1 The construction of(b) public roads;
10.2 The route determination of roads and design of associated physical infrastructure where (a) It is a public road

(b) the road reserve is more than 30m wide, or

(c) the road caters for more than one lane of traffic in both directions

LIST OF REFERENCES

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APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT

AP	PENDIX A: CURRIC	CULUM VITA	E OF C	HARLIE D	U TOIT	
1. 2. 3. 4.	Position: Name/Surname: Date of Birth: Nationality:	Environmenta Charl du Toit 29 October 19 Namibian		ner		
5.	Education:	Name of Instit				osch, South Africa
		Degree/Qualit	fication	Hons B (B - Administrati		
		Date Obtaine	d	1985-1987		
		Name of Instit	tution	University o	f Stellenbo	osch, South Africa
		Degree/Qualit	fication	BSc Agric Hons (Chemistry, Agronomy and Soil Science)		
		Date Obtaine	d	1979-1982		
		Name of Instit	tution	on Boland Agricultural High School, Paarl, South Africa		
		Degree/Qualit	fication	Grade 12		
		Date Obtaine		1974-1978		
6.	Membership of	EAPAN Mem	ber (Meml	bership Num	ber: 112)	
	Professional					
	Association:					
7.	Languages:		<u>S</u>	peaking	<u>Reading</u>	Writing
		English	G	bood	Good	Good
		Afrikaans	G	lood	Good	Good
8.	Employment	<u>From</u>	<u>To</u>	<u>Employer</u>		Position(s) held
	Record:	2009	Present	Green Earth Environmental		
				Environme	ental	Practitioner
				Consultan	ts	
		2005	2008	Elmarie Du		Manager
				Town Plan	ining	

GREEN EARTH Environmental Consultants

1995

2005

2003

2003

1995

1989

Consultants

Pupkewitz

Megabuild

Limited

Agra Cooperative

General Manager

Manager Trade

Chief Agricultural

Consultant

Namibia Development Agricultural 1985 1988 Corporation Researcher Ministry of Agriculture

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.

1hht

Charl du Toit

APPENDIX B: CURRICULUM VITAE OF CARIEN VAN DER WALT

- 1. Position: Environmental Consultant
- 2. Name/Surname: Carien van der Walt
- 3. Date of Birth: 6 August 1990
- 4. Nationality: Namibian
- 5. Education:

Institution	Degree/Diploma	Years
University of Stellenbosch	B.A. (Degree) Environment and	2009 to 2011
	Development	
University of South Africa	B.A. (Honours) Environmental	2012 to 2013
	Management	

6. Membership of Professional Associations:

EAPAN Member (Membership Number: 113)

7. Languages:

Language	Speaking	Reading	Writing
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. Employment Record:

From	То	Employer	Positions Held
07/2013	Present	Green Earth Environmental Consultants	Environmental
			Consultant
06/2012	03/2013	Enviro Management Consultants Namibia	Environmental
			Consultant
12/2011	05/2012	Green Earth Environmental Consultants	Environmental
			Consultant

9. Detailed Tasks Assigned:

Conducting the Environmental Impact Assessment, Environmental Management Plan, Public Participation, Environmental Compliance and Environmental Control Officer

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engage.

Carien van der Walt

APPENDIX C: ENVIRONMENTAL MANAGEMENT PLAN