




***RENEWAL OF THE ENVIRONMENTAL
CLEARANCE FOR THE REZONING OF
PORTION 30 OF FARM DOBRA FROM
'RESIDENTIAL' TO 'RESTRICTED
BUSINESS'***

May 2023

App - 230601001527

Project Name:	<p align="center"><i>RENEWAL OF THE ENVIRONMENTAL CLEARANCE FOR THE REZONING OF PORTION 30 OF FARM DOBRA FROM 'RESIDENTIAL' TO 'RESTRICTED BUSINESS'</i></p>
Proponent:	<p align="center">A.S.S. Investments Sixty-Three CC John Pearson P O Box 86527 Eros</p>
Prepared by:	<div data-bbox="657 909 1357 1178" style="border: 1px solid black; padding: 10px; text-align: center;">  <p>1st floor Bridgeview Offices & Apartments, No. 4 Dr Kwame Nkrumah Avenue, Klein Windhoek, Namibia PO Box 6871, Ausspannplatz, Windhoek</p> </div>
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Consultant:	<p align="center">C. Du Toit C. Van Der Walt Cell: 081 127 3145 Email: charlie@greenearthnamibia.com</p>

EXECUTIVE SUMMARY

Green Earth Environmental Consultants were appointed by the proponent, A.S.S. Investments Sixty-Three CC, to apply for the renewal of the Environmental Clearance Certificate for the rezoning of Portion 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5 and for the alignment and construction of public roads as per City of Windhoek's requirements.

An Environmental Impact Assessment was conducted, and an Environmental Clearance Certificate was obtained 10 November 2017. This ECC expired on 10 November 2020 and must be renewed to complete the rezoning of the erf and for the alignment and construction of public roads.

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 environmental impacts during the operational phase of the proposed project:

IMPACTS DURING OPERATIONAL PHASE			
Aspect	Impact Type	Significance of impacts Unmitigated	Significance of impacts Mitigated
Ecology Impacts	-	M	L
Dust and Air Quality	-	M	L
Groundwater Contamination	-	M	L
Waste Generation	-	M	L
Failure of Reticulation Pipeline	-	M	L
Fires and Explosions	-	M	L
Safety and Security	-	M	L

IMPACT EVALUATION CRITERION (DEAT 2006):		
Criteria	Rating (Severity)	
Impact Type	+	Positive
	O	No Impact
	-	Negative
Significance of impacts	L	Low (Little or no impact)
	M	Medium (Manageable impacts)
	H	High (Adverse impact)

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 will be low and there will be a positive impact on the socio-economic 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 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5 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 -

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

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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, A.S.S. Investments Sixty-Three CC, to apply for the renewal of the Environmental Clearance Certificate for the rezoning of Portion 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5 and for the alignment and construction of public roads as per City of Windhoek's requirements.

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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;

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10.1 The construction of-

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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 implement the project, an Environmental Impact Assessment Renewal and Environmental Clearance Renewal is required. 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 30 of Farm Döbra No. 49 is located to the east of the Klein Windhoek River, east of the railway line linking Windhoek and directly west of District Road D1512 which link up with the Trunk Road B1 Windhoek – Okahandja at the Döbra intersection, approximately 25km north of the Windhoek CBD. It is the intension of the Proponent to rezone Portion 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5. The locality of the Portion is shown on the plans below:

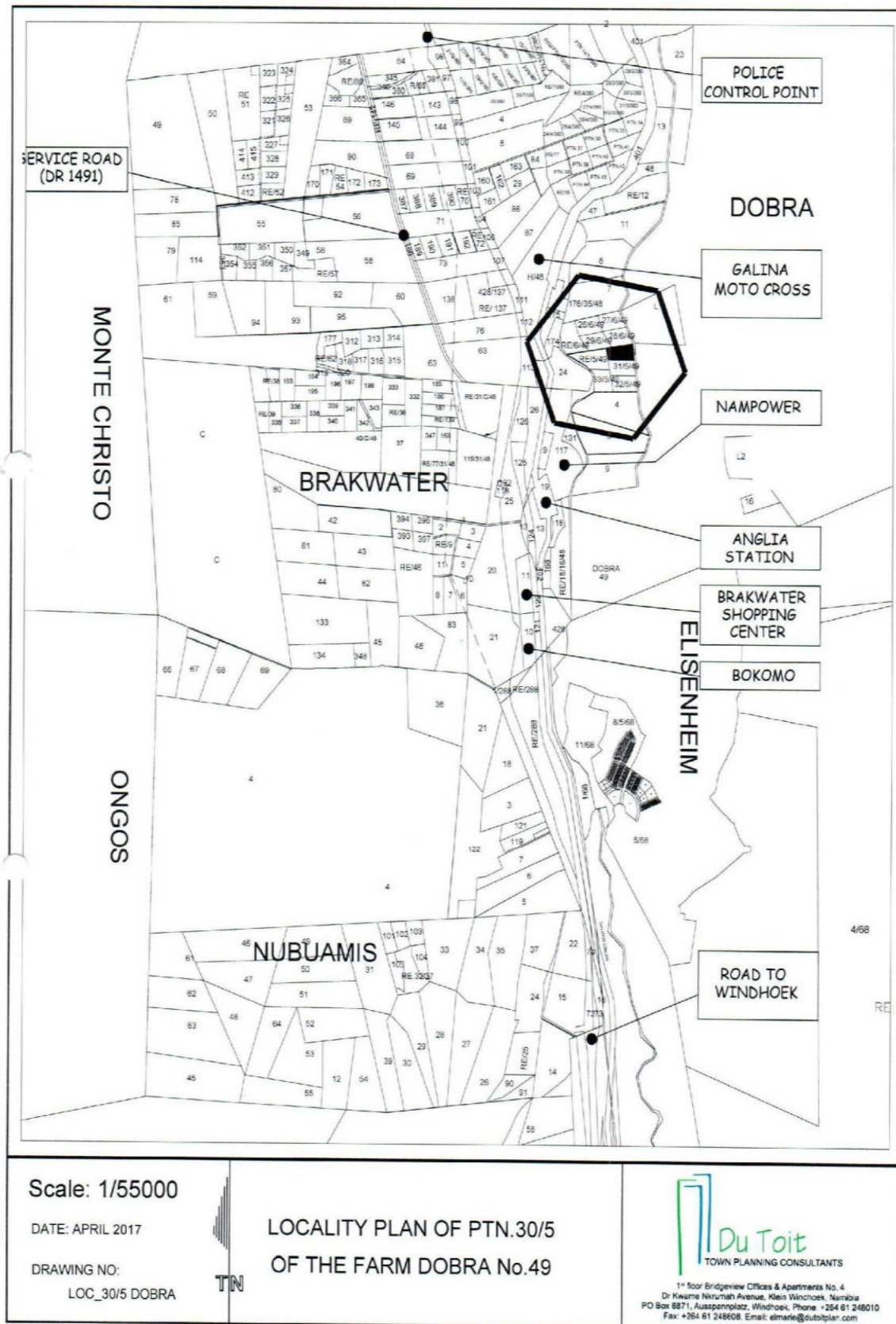


Figure 1: Locality Map of Project Site

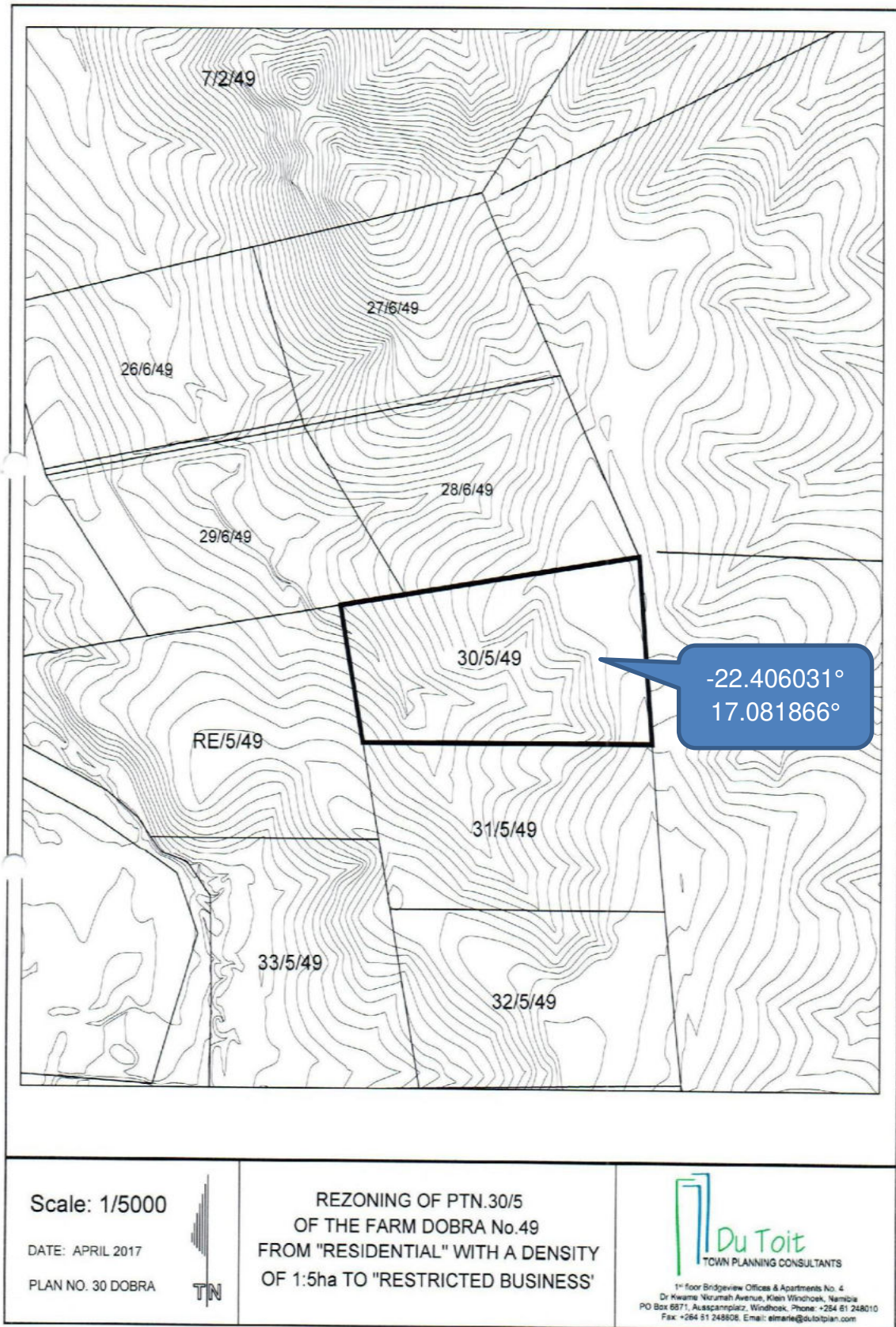


Figure 2: Project Site boundaries

Portion 30 of Farm Döbra No. 49 is zoned 'residential' with a density of 1 dwelling per 5ha and the Portion is 5,1044ha in extent. In accordance with this zoning, the Portion may only be used for residential purposes.

3.2. TOPOGRAPHY

The natural terrain is gradually sloping in a westerly direction with 2 smaller surface drainage systems which originates on the portion as can be seen from the contours on the plan above. However, the entire plot lends itself to the proposed commercial 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

The portion is currently vacant. The Portion had been cleared of all vegetation some time ago. See photo below:



Figure 3: Locality Map with Photo

The owner intends to use the Portion for the construction and operation of business buildings like warehouses and for light industrial purposes. It is the intention to use these warehouses for bulk storage for various consumer goods. Some of it will also be used as distribution warehouses for transport companies who need to break down freight into smaller parcels for distribution to the various destinations in Namibia. The proposed project will also provide parking for vehicles supporting the warehouse activities.

The current zoning of 'residential' 1:5ha does not allow these uses. To be able to use the portion for the intended purposes, it has to be rezoned to 'restricted business'. The rezoning of land from 'residential' use to a 'commercial' use for instance 'restricted business' is a listed activity for which an environmental clearance is required. City of Windhoek has also indicated that the approval of the rezoning of Portion 30 will be subject of transferring portions of Portion 30 to City of Windhoek which is required for future road building purposes. The construction and alignment of public roads are also listed activities for which an environmental clearance has to 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 30 of Farm Dobra No. 49 on 28 June 2019. See below a copy of the Municipal approval letter and Resolution:



80 Independence Avenue

WINDHOEK, NAMIBIA

Tel: (+264) 61 290 2073 • Fax: (+264) 61 290 2060 • www.cityofwindhoek.org.na



Enq : Mrs. S. Bachler

Tel : 290 2332

Ref : L/30-5-49/DO

Date : 26 June 2019

Du Toit Planning Consultants

P. O. Box 6871

Ausspanplatz,

Windhoek

Dear Madam,

REZONING OF PORTION 30 (A PORTION OF PORTION 5) OF FARM DÖBRA NO.49, FROM 'RESIDENTIAL' WITH A DENSITY OF 1 DWELLING PER 5HA TO RESTRICTED BUSINESS WITH A BULK OF 0.5

Your application dated 26 July 2017 in the above regard refers.

In accordance with the delegation of authority applicable to the rezoning and subdivision of land as resolved per Council Resolutions No. 190/09/2017 and 283/11/2017 it is recommended as follows:

1. That Portion 30 of Farm Dobra No. 49 be rezoned from 'Residential' with a density of 1:5 hectare to 'Restricted Business' with a bulk of 0.5.
2. That Portion 30 (a portion of Portion 5) of the farm Dobra No 49 be subdivided into Portion A (1930m²) free of conditions for street purposes, and the Remainder.
3. That Portion A be transferred to the City of Windhoek free of charge in lieu of betterment fee. The value of Portion A to be calculated upon submission of diagram and deducted from betterment fee as per paragraph 5.
4. That a 12,7 meter Right of Way servitude be registered on the western boundary of Portion 30 for street purposes
5. That the owner agree in writing to pay a betterment fee of N\$ 1,136,000.00-00 being 40 % of the increase in value of the rezoned property less the value of Portion A, subject to Ministerial approval, prior to the incorporation of the rezoning in an amendment scheme and submission for approval of NAMPAB.

All official correspondence must be addressed to the Chief Executive Officer

6. That a deposit equivalent to the proposed betterment fee be paid to the City.
7. That the invoice for the betterment fee as per paragraph 5 be requested from the Strategic Executive: Urban and Transport Planning.
8. That once a betterment fee has been determined by the Minister of Urban and Rural Development, this amount be taken from the account and any excess be repaid to the applicant and owner or, in the event of a refusal of the Amendment Scheme or the rezoning, the deposit be refunded.
9. That the payment of the deposit for the betterment fee not be seen as approval of the Amendment Scheme and that the Minister of Urban and Rural Development retains the right under the Town Planning Ordinance 18 of 1954 to approve or not to approve the Amendment Scheme.
10. That the rezoning of portion 30, Farm Dobra 49 from residential to restricted business and consent is supported provided that the industries (if the activity is listed under the Environmental Management Act) operating on Portion 5 have obtained Environmental Clearance Certificates and submit a copy of both the certificate and environmental management plan to the Health and Environment Services Division.
11. That the applicant should obtain from Health and Environment Services Division an Environmental Clearance Exemption for the “rezoning” from residential to business once application is approved by Council.
12. That the applicant be informed that the existing electrical reticulations in the area belong to and is operated by NamPower, therefore the applicant is advised to approach NamPower for power supply connection.
13. That the applicant or electrical Engineering representative should approach the Strategic Executive: Electricity for advice and approval prior to design of internal reticulations and all other related design drawings.
14. That all cost for the provision of bulk and internal services for the development shall be borne by the Developer. This shall include the cost of bulk infrastructure upstream and downstream from the development.
15. That the developer has to provide its own water storage (reservoir) for the development with a storage capacity of 48 hours. The City of Windhoek will not be held responsible for the provision of water if the groundwater supply deteriorates in case of boreholes.

16. That the developer must appoint a registered professional engineer to propose an acceptable waste water disposal system subject to the condition that no pollution of the ground water occurs and further provide that there will be no health risks to the users and surrounding residents.
17. That the possibility to re-use the purified effluent should be addressed. All costs involved will be for the applicant's account. Final effluent shall at all times comply with applicable legislation. All costs involved will be for the Developer's account.
18. That the sewer system and proposed treatment of waste water must be submitted to the Strategic Executive: Infrastructure, Water and Technical Services for approval prior to approval of any building plans.
19. That the issuing of the waste water discharge permit must be subject to the adherence of all conditions pertaining to such permit.
20. That only full waterborne waste systems should be utilized and all Windhoek service standards should apply.
21. That final effluent from any treatment facilities shall comply with the Special Discharge Standards as prescribed by the Directorate of Water Affairs.
22. That final designs for water and waste water infrastructure should be submitted by the appointed Engineer to the Strategic Executive: Infrastructure, Water and Technical Services for approval before construction commences.
23. That the applicant if aggrieved may lodge an appeal to the Minister of Urban and Rural Development against Council's decision. Written Notice of intention to appeal should be submitted to the City of Windhoek within twenty eight (28) days from the date of this notice.
24. That the applicant appoints a registered professional Engineer to compile a detailed 50 year flood report of any stormwater course to own cost and risk.

25. That surface storm water runoff be accommodated according to Clause 35 of the Town Planning Scheme (see Info 35 of the Town Planning Scheme) stating:

That no stormwater drainage pipe, canal, work or obstruction (except stormwater drain pipes, canal or works which have been authorized in writing by the local authority or which have been or may be built, laid or erected in terms of any law) may be constructed on or over the property or located in such a way that –

- (a) the flow of stormwater from higher lying property to lower lying property is impeded or obstructed and through which any property is or may be endangered; or
- (b) the flow of a natural watercourse (in which the local authority allows flood water to run off, be discharged or to be canalised) is or can be changed, canalised or impeded.
- (c) the maintenance of such stormwater pipe, channel or work shall be the responsibility of the owner of the concerned property.

26. That prior approval must be obtained from the Chief Engineer: Planning, Design & Traffic Flow if the accommodation of the stormwater on the portions is contemplated.

27. That Engineering drawings on how the stormwater would be accommodated to the satisfaction of the Chief Engineer, Planning, Design & Traffic Flow be submitted for approval simultaneously with the building plans.

28. That all existing stormwater pipes, outlets and inlets or any other stormwater system be clearly indicated on all building plans submitted prior to the approval thereof.

29. That no building plan will be approved until the above stormwater conditions are met.

30. That a condition be included into the title deed whereby selling to a third party may only take place once the proposed stormwater conditions had been addressed by the owner.

31. That no development will be allowed onto or over any stormwater system or structure.

32. That any stormwater crossing be accommodative of at least a 50 year flood.

33. That roads and stormwater be planned, designed and constructed to municipal standard.

34. That the collector alignment to be approved by the adjacent neighbouring properties.

35. That parking requirements for Restricted Business is 1 bay per 50 m² of utilised bulk.

36. That in the case of a collector running over the boundaries of two properties the property not subdividing must also approve and give written approval of the alignment of the collector.


37. That the applicant accepts this Delegated Authority in writing.

Yours faithfully

 28/06/2013
H Lisse
Acting Strategic Executive:

4.2. ENVIRONMENTAL CLEARANCE OBTAINED

The Office of the Environmental Commissioner on 10 November 2017 issued an Environmental Clearance Certificate for the rezoning of Portion 30 of Farm Dobra No. 49. See below a copy of the ECC:



REPUBLIC OF NAMIBIA

MINISTRY OF ENVIRONMENT AND TOURISM

Tel: (00 26461) 284 2111
Fax: (00 26461) 229 936

E-mail: simon.hangula@met.gov.na
Enquiries: Mr. Simon Hangula

Cnr Robert Mugabe &
Dr Kenneth Kaunda Street
Private Bag 13306
Windhoek
Namibia
10 November 2017

OFFICE OF THE ENVIRONMENTAL COMMISSIONER

The Manager
A.S.S. Investments Sixty-Three CC
P O Box 86527
Windhoek
Eros

Dear Sir/Madam

SUBJECT: ENVIRONMENTAL CLEARANCE CERTIFICATE FOR THE PROPOSED REZONING OF PORTION 30 OF FARM DÖBRA NO 49 FROM RESIDENTIAL WITH A DENSITY OF 1 UNIT PER 5 HA TO RESTRICTED BUSINESS WITH A BULK OF 0.5 AND CREATION OF PUBLIC ACCESS ROAD, WINDHOEK, KHOMAS REGION


The Environmental impact assessment and Environmental Management Plan submitted are sufficient as these have made an adequate provision of the environmental management for the proposed activities. From this perspective, regular environmental monitoring and evaluations on environmental performance should be conducted. Targets for improvements should be established and monitored throughout this process.


This Ministry reserves the right to attach further legislative and regulatory conditions during the operational phase of the project. From this perspective, I issue this Clearance with the following condition(s): (a). All applicable permits are obtained prior to the commencement of the project. (b). This Clearance is only for rezoning and access roads.


On the basis of the above, this letter serves as an environmental clearance certificate for the project to commence. However, this clearance letter does not in any way hold the Ministry of Environment and Tourism accountable for misleading information, nor any adverse effects that may arise from this project's activities. Instead, full accountability rests with A.S.S. Investments Sixty-Three CC and their consultants.

This environmental clearance is valid for a period of (three) 3 years, from the date of issue unless withdrawn by this office.

Yours sincerely,


Teofilus Nghitila
ENVIRONMENTAL COMMISSIONER





“Stop the poaching of our rhinos”

All official correspondence must be addressed to the Permanent Secretary

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 site will have the following bulk services:

5.1. ACCESS ROAD

Access to Portion 30 is currently directly from District Road 1512 to the east of the Portion. This access will remain until the collector road network as per City of Windhoek's Masterplan for this area had been constructed. The current access is shown on the photo below:



Figure 4: Access road to Project Site

Once City of Windhoek implements the collector road system, Road 1512 will become an arterial road from which direct access from erven/portions will be limited. Portions affected by this will then take access from the collector road network. The Road Master Plan for the future development of the Brakwater Area is shown below. The roads indicated in 'brown' are the existing 'district roads' taken over by City of Windhoek from Roads Authority which will become the arterial roads in the future. These roads have been constructed and are currently used to access portions in Brakwater Area. The Roads indicated in 'blue' will become the future collector roads. These roads currently do not exist as Council still must obtain the approvals from the various land owners for the portions of their privately-owned land required for the collector road. Therefore, whenever

a landowner applies for the subdivision and/or rezoning of their land portion in the Brakwater area and this portion is affected by the future collector road, City of Windhoek make it a condition that a portion of land is made available for the future collector road.

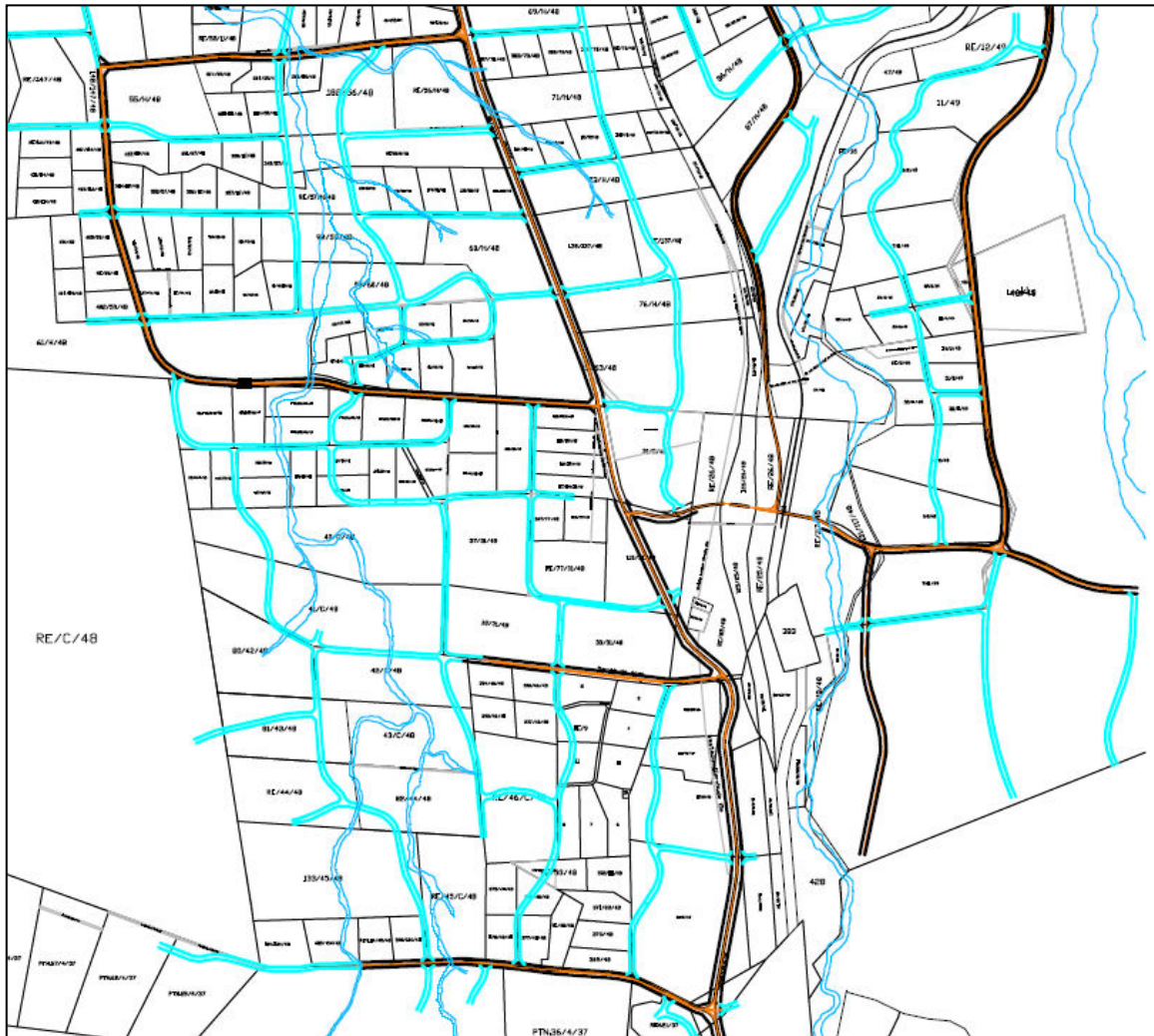


Figure 5: Roads in Brakwater

Portion 30 is also affected by the planned collector road system. See plan below obtained from City of Windhoek showing the portions required by them for future road building purposes:

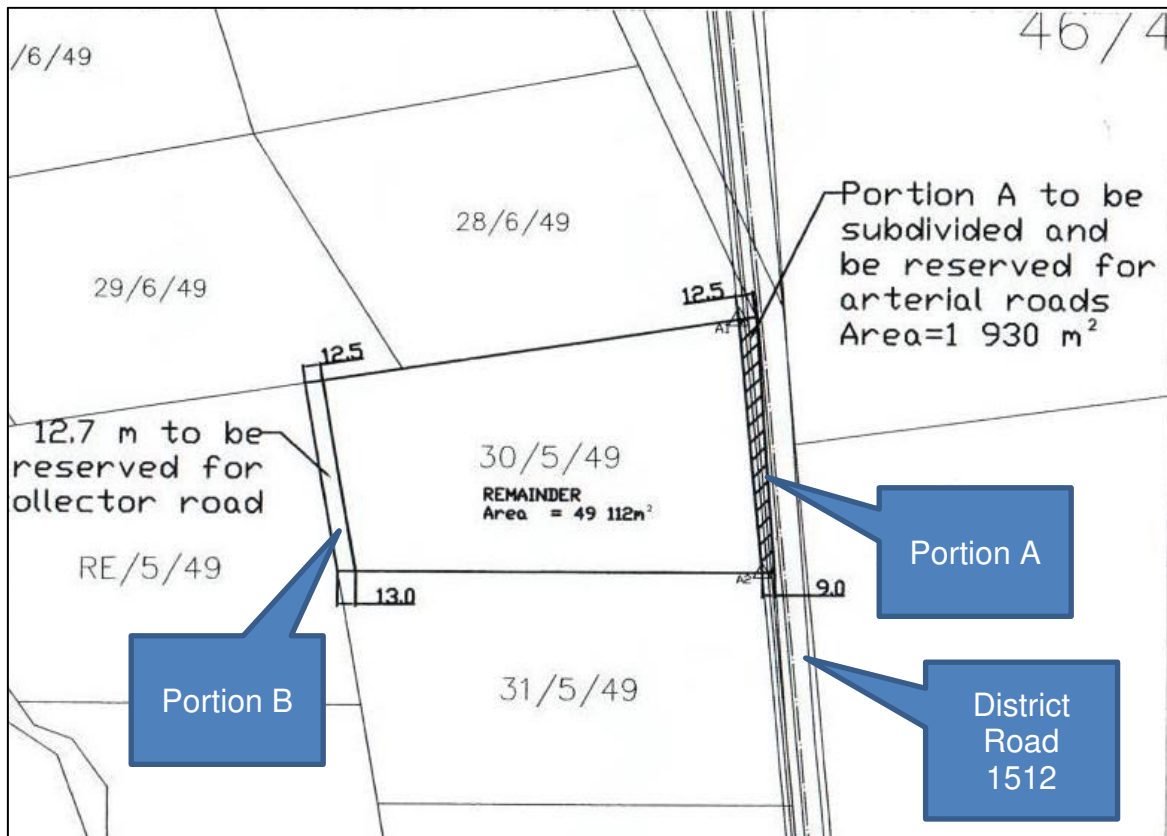


Figure 6: Plan showing portion required by City of Windhoek

The City of Windhoek indicated that they require the reservation of a strip of 12.7-meter-wide (indicated as Portion B) along the western boundary of Portion 30/5/Dobra 49 for the construction of a future collector road. This portion will only be registered as a 'now building restriction servitude' and thus remain part of Portion 30/5/Dobra 49.

Furthermore, the COW requires a portion between 9 and 12.5 meters ($\pm 1930\text{m}^2$) wide along the western boundary for the future extension of District Road 1512 (indicated as Portion A on the attached Plan). It is their condition that this portion has to be cut off from Portion 30/5/Dobra 49 for transfer to COW. The owner will be compensated for this land either in cash or the value will be set off against the betterment fee payable on the rezoning of the Portion.

5.2. WATER SUPPLY

Water to Portion 30 of Farm Dobra is currently supplied directly from the Municipal water reticulation system of Brakwater which is directly linked to the NamWater line linking Windhoek with Von Bach Dam. Water to the proposed development will be obtained through the same network as no on-site water resources are available. The City of Windhoek, in their guidelines with regard to water supply for the development of the Brakwater area indicated that the Proponent should take note:

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

44.1 That presently the water demand is high and the water supply is limited, and that therefore the water supply from the City of Windhoek (NamWater main line) will not be approved until the upgrade of the water supply line has been finalised.

It is further required that the proposed water reticulation system is designed and constructed in accordance with Municipal Standards in addition to the further requirements below:

43.9 That the new services be handed over to the Chief Engineers: Engineering Services; and Bulk Water and Waste Water or their respective representatives at an official site hand-over inspection, whereafter a Certificate of Completion be issued to the Developer.

43.10 That it be noted that no building plan for any improvements would be approved without the proof of a Certificate of Completion of the water and sewerage infrastructure.

43.11 That the Developer bear the full costs (internal water and sewerage network included) of all water and sewer services, including the professional fees for planning, design and supervision, and the construction costs.

5.3. ELECTRICITY RETICULATION

Portion 30 is linked to the existing NamPower grid in this area of Brakwater. The City of Windhoek indicated that:

44.2 That the existing electrical reticulation in the area belong to and is operated by NamPower.

44.3 That there are currently ongoing discussion between Council and NamPower, such that the assets are to be transferred to Council and be under its operation.

44.4 That until such time, the Electricity Department cannot yet provide the needed services.

44.5 That the applicant in the meantime approach NamPower for electricity connection as required.

44.6 That if the applicant design internal reticulation from 11 kV to 400 V, then such designs be submitted to the Strategic Executive: Electricity for approval before commencement of any installations as the standards and specifications of Council should be adhered to.

The Proponent will thus approach NamPower directly for the electricity requirements for the proposed development.

5.4. SEWAGE DISPOSAL

Portion 30 is still undeveloped or vacant and has thus no sewer infrastructure. City of Windhoek has no bulk sewer services available in this area of Brakwater. The proponent must therefore develop a dedicated sewer system to support the proposed development. To enable the proposed development the City of Windhoek requires the following:

- | | |
|------|---|
| 42 | That the applicant take note that no municipal sewers are available and the applicant should therefore appoint a professional Consultant to propose an acceptable waste water disposal system, subject to the following conditions: |
| 42.1 | That no pollution of the groundwater occur. |
| 42.2 | That there be no health risks to the users and surrounding residents. |
| 42.3 | That the possibility to re-use the purified effluent for irrigation purpose also be addressed. |
| 42.4 | That the costs related thereto be for the Developer's account, and the sewer system and proposed treatment of waste water be submitted and approved by the Strategic Executive: Infrastructure, Water and Technical Services. |
| 42.5 | That the City of Windhoek be subject to the issuing of Waste Water Discharge Permit and the applicant have to observe all conditions applicable to the application for such a permit. |
| 42.6 | That only full waterborne waste water systems be accepted. |
| 42.7 | That all services standards comply with the City of Windhoek's standards. |
| 42.8 | That a waste water treatment plant form part of the development. |
| 42.9 | That the operation and maintenance be the responsibility of the Developer for a period of five (5) years. |

It is proposed that the Proponent install a green sewer system where the sewer generated by the proposed development is treated on site for recycling and that only the water which cannot be recycled be discharged as per the City of Windhoek's Waste Water Discharge Permit requirements. The Proponent will appoint a professional engineer as per Council's requirements for the design of the sewer system.

5.5. STORM WATER AND DRAINAGE

Seasonal flooding in the area has been observed in the past. The natural flow of storm water and drainage must be minimally disturbed, and the natural flow accommodated where possible. Provision must be made for the accommodation of surface water/stormwater management as it may endanger infrastructure.

5.6. SOLID WASTE

It is proposed that the Proponent involve a professional waste manager and recycler (like Rent-A-Drum) for the collection, temporary storage on site and eventual transportation and recycling of the waste to be generated from the proposed development. Alternatively, the waste will be collected and temporarily stored by the respective land owners and disposed of at the approved Brakwater Municipal waste collection facility which is under the management of the Municipal Solid Waste Management Department from where it will be taken to the Kupferberg Municipal waste disposal/landfill site. The former option is the preferred option.

5.7. FIRE PROTECTION

The Proponent will put in the necessary fire protection infrastructure / extinguishers as per requirements. It is advised that a specialist Fire Protection Specialist is contracted to introduce a proper fire protection plan with the required infrastructure and to oversee the annual auditing and maintenance of the infrastructure.

6. ASSUMPTIONS AND LIMITATIONS

It is assumed that the information provided by the Proponent (A.S.S. Investments Sixty-Three CC) is accurate. The assessment is based on the prevailing environmental conditions and not on future happenings on the site. 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, A.S.S. Investments Sixty-Three 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 A.S.S. Investments Sixty-Three 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.

Public Participation and Access to Information

The public were invited to give input, comments and opinions regarding the proposed project. Letters have been sent to Interested and Affected Parties (I&APs) and to relevant authorities. Notices were placed in two local newspapers (See Appendix) on two consecutive weeks (12 and 19 April 2017) inviting public participation and comments on the proposed project were requested. Notices were also displayed on site. A public

meeting was held on 28 April 2017 at 15h00 at the offices of Green Earth Environmental Consultants at Bridgeview Offices, No. 4 Dr. Kwame Nkruma Avenue, Klein Windhoek.

In the context of environmental management, citizens must have access to information and the right to participate in decisions making.

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 30 of Farm Dobra No. 49 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 30 of Farm Dobra No. 49 is zoned 'residential' with a density of 1 dwelling per 5ha. In terms of the Town Planning Scheme provisions as well as other supporting Policies the City of Windhoek supports the rezoning of land portions to 'restricted businesses' 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.

CONCLUSION AND IMPACT

The proposed rezoning of Portion 30 of Farm Dobra No. 49 from 'residential' to 'restricted business' 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 for commercial purposes will not have a negative impact on the public.

Table 1: Other laws, acts, regulations and policies

Laws, Acts, Regulations & Policies consulted:		
Electricity Act (No. 4 of 2007)	In accordance with the Electricity Act (No. 4 of 2007) which provides 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.	The Proponent must abide to the Electricity Act.
Pollution Control and Waste Management Bill (guideline only)	The Pollution Control and Waste Management Bill is currently in preparation and is therefore included as a guideline only. Of reference to the mining, Parts 2, 7 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-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	The Proponent must adhere to the Pollution Control and Waste Management Bill.

	provisions. Part 8 provides for emergency preparedness by the person handling hazardous substances, through emergency response plans.	
Water Resources Management Act	The Water Resources Management Act (No. 11 of 2013) stipulates conditions that ensure effluent that is produced to be of a certain standard. There should 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.	The Act must be consulted. Fresh water abstraction and waste-water discharge permits should be obtained when required.
Solid and Hazardous Waste Management Regulations: Local Authorities 1992	Provides for management and handling of industrial, business and domestic waste.	The Proponent must abide to the solid waste management provisions.
Hazardous Substances Ordinance (No. 14 of 1974)	The Ordinance applies to the 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 Proponent must abide to the Ordinance's provisions.
Atmospheric Pollution Prevention Ordinance of Namibia (No. 11 of 1976)	Part 2 of the Ordinance governs the control of noxious or offensive gases. The Ordinance prohibits anyone from carrying on a scheduled process without a registration certificate in a 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	The proponent should adhere to the stipulations of the Atmospheric Pollution Prevention Ordinance.

	produced by the scheduled process.	
Nature Conservation Ordinance	The Nature Conservation Ordinance (No. 4 of 1975) covers game parks and nature reserves, the hunting and protection of wild animals, problem animals, fish and indigenous plant species. The Ministry of Environment, Forestry and Tourism (MEFT) administer it and provides for the establishment of the Nature Conservation Board.	The proposed project implementation is not located in a demarcated conservation area, national park or unique environments.
Forestry Act	The Forestry Act (No. 12 of 2001) specifies that there be a general protection of the receiving and surrounding environment. The protection of natural vegetation is of great importance, the Forestry 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.	No removal of protected tree species or removal of mature trees should happen. The Ministry of Environment, Forestry and Tourism should be consulted when required.
EU Timber Regulation: FSC (2013)	Forest Stewardship Council (FSC) came into effect in March 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 legally from the country of harvest.	The Proponent is advised to adhere to the regulation.
Labour Act	The Labour Act (No. 11 of 2007) contains regulations relating to the Health, Safety and Welfare of employees at work. These regulations are prescribed for 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).	The proponent and contractor should adhere to the Labour Act.

<p>Communal Land Rights</p>	<p>Communal land is land that belongs to the State and is held in trust for the benefit of the traditional communities living in those areas. Communal land cannot be bought or sold, but one can be given a customary land 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 Regional Communal Land Boards.</p>	<p>Consent should be obtained from Traditional Authorities, Communal Boards, Chiefs, Kings, Queens etc. if required.</p>
<p>Traditional Authorities Act (No. 17 of 1995)</p>	<p>The Traditional Authorities Act (No. 17 of 1995) provide for the establishment of traditional authorities, the designation and recognition of traditional leaders; to define their functions, duties and powers; and to provide for matters incidental thereto.</p>	<p>Traditional Authorities should be consulted when required.</p>
<p>Public and Environmental Health Act</p>	<p>The Public and Environmental Health Act (No. 1 of 2015) provides with respect to matters of public health in Namibia. The objects of 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)</p>	<p>The proponent and contractor should adhere to the Public and Environmental Health Act.</p>

	provide for early detection of diseases and public health risks.	
Coronavirus (Covid-19) Pandemic	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 (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,	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.

	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 issued under this section.	
Public Health Act (No. 36 of 1919)	Under this act, in section 119: “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 will ensure that all legal requirements of the project in relation to protection of the health of their employees and surrounding residents is protected and will 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 Conservation Act (No. 76 of 1969)	The objectives of this Act are to: Make provisions for the combating and prevention of soil erosion; Promote the conservation, protection and improvement of the soil, vegetation, sources and resources of the Republic;	Only the area required for the operations should be cleared from vegetation to ensure the minimum impact on the soil through clearance for construction.
Air Quality Act (NO. 39 of 2004)	The Air Quality Act (No. 39 of 2004) intends to provide for national norms and standards regulating air quality monitoring, management and control by all spheres of government; for specific air quality measures; and for matters incidental thereto.	The proponent and contractor should adhere to the Air Quality Act.
Vision 2030 and National Development Plans	Namibia’s overall development ambitions are articulated in the Nation’s Vision 2030. At the operational level, five-yearly national development plans (NDP’s) are prepared in extensive consultations led by the National Planning Commission in the Office	The proposed project is an important element in employment creation.

	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.	
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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:

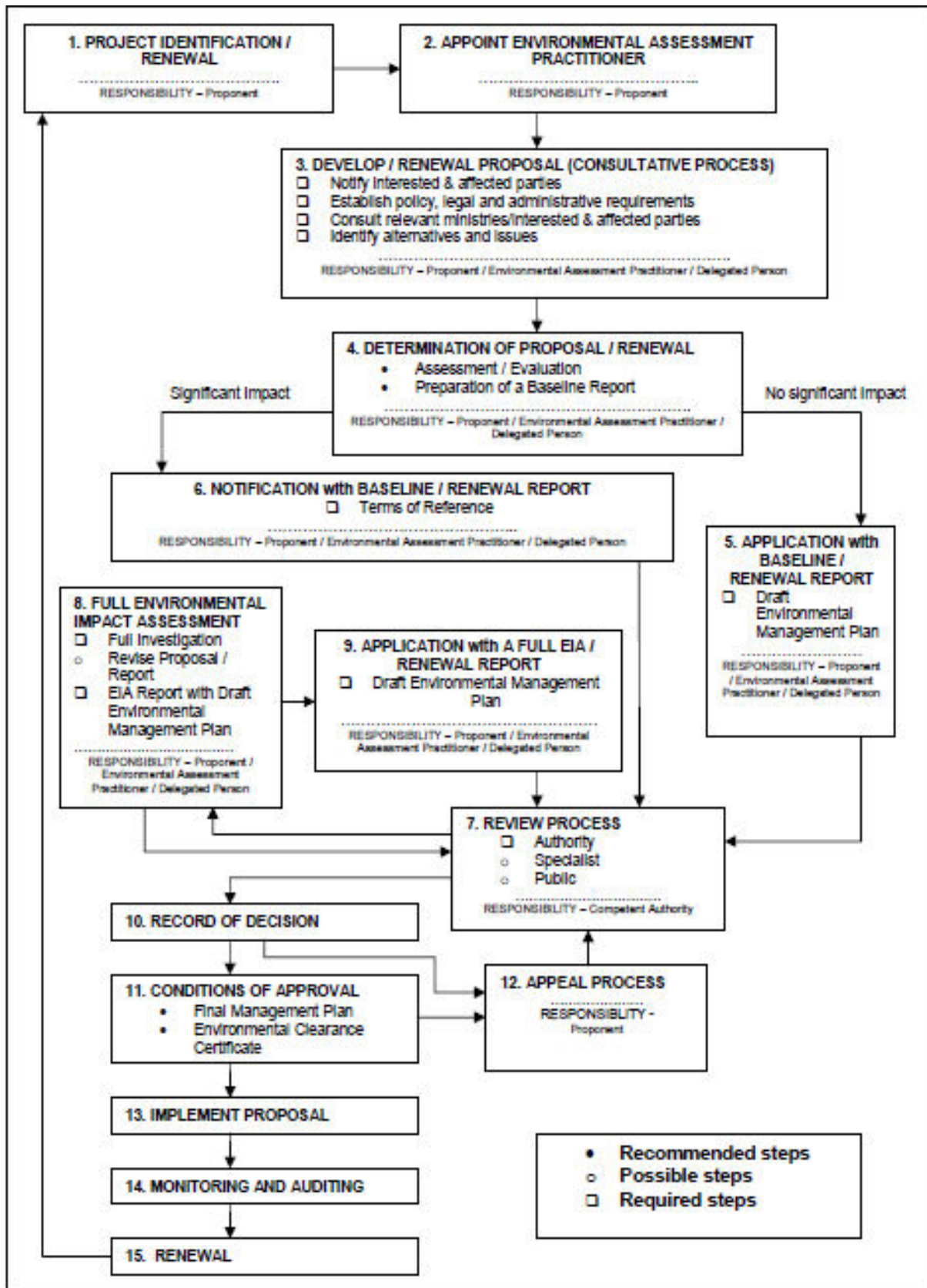


Figure 7: Flowchart of the assessment Process

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.

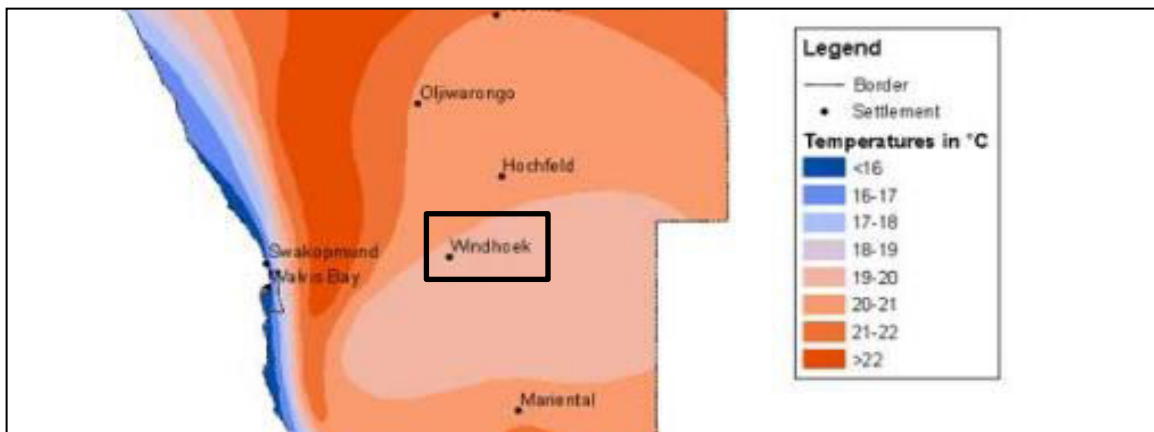


Figure 8: Average temperatures (*Atlas of Namibia Project, 2002*)

CONCLUSION AND IMPACT

The project will not have an impact on the climate.

8.2. GEOLOGY, SOILS AND GEOHYDROLOGY

Portion 30, Farm Dobra No 49 is located in the Khomas Trough on a geological area classified as Damara Supergroup and Gariep Complex. See Map below:

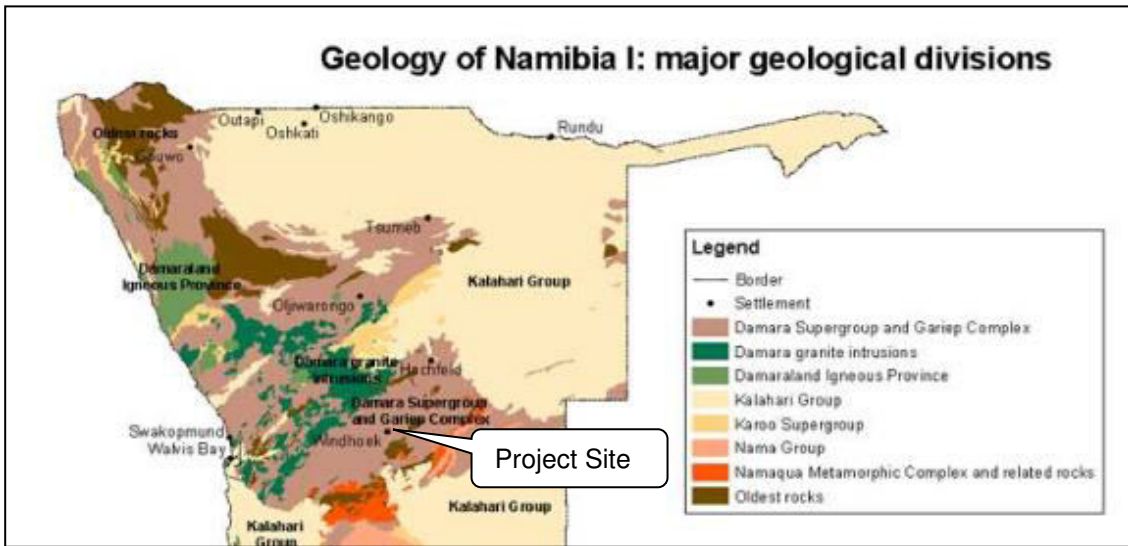


Figure 9: Geology of Namibia (Atlas of Namibia Project, 2002)

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 is 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:

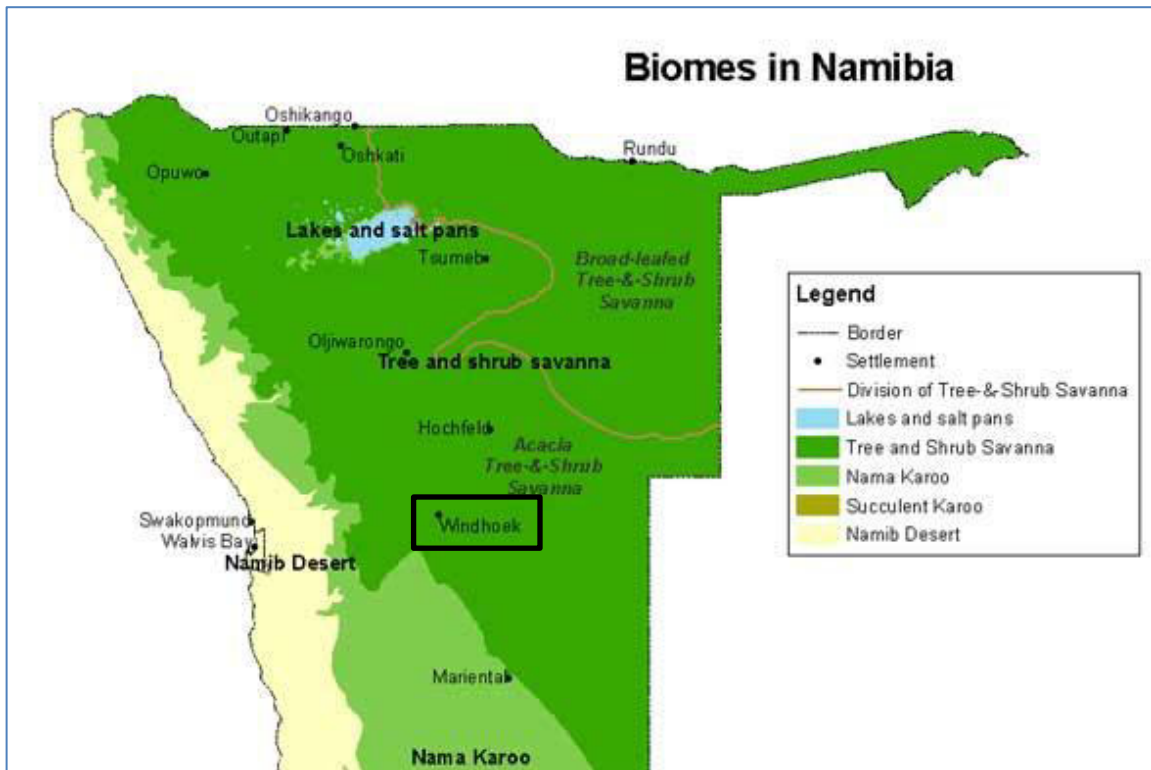


Figure 10: Biomes in Namibia (Atlas of Namibia, 2002)

CONCLUSION AND IMPACT

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

8.4. SOCIAL-ECONOMIC COMPONENT

The area of Dobra/Brakwater where Portion 30 is located is characterised by various mixed uses although the bulk of the uses are commercial. The plan below shows the surrounding uses:

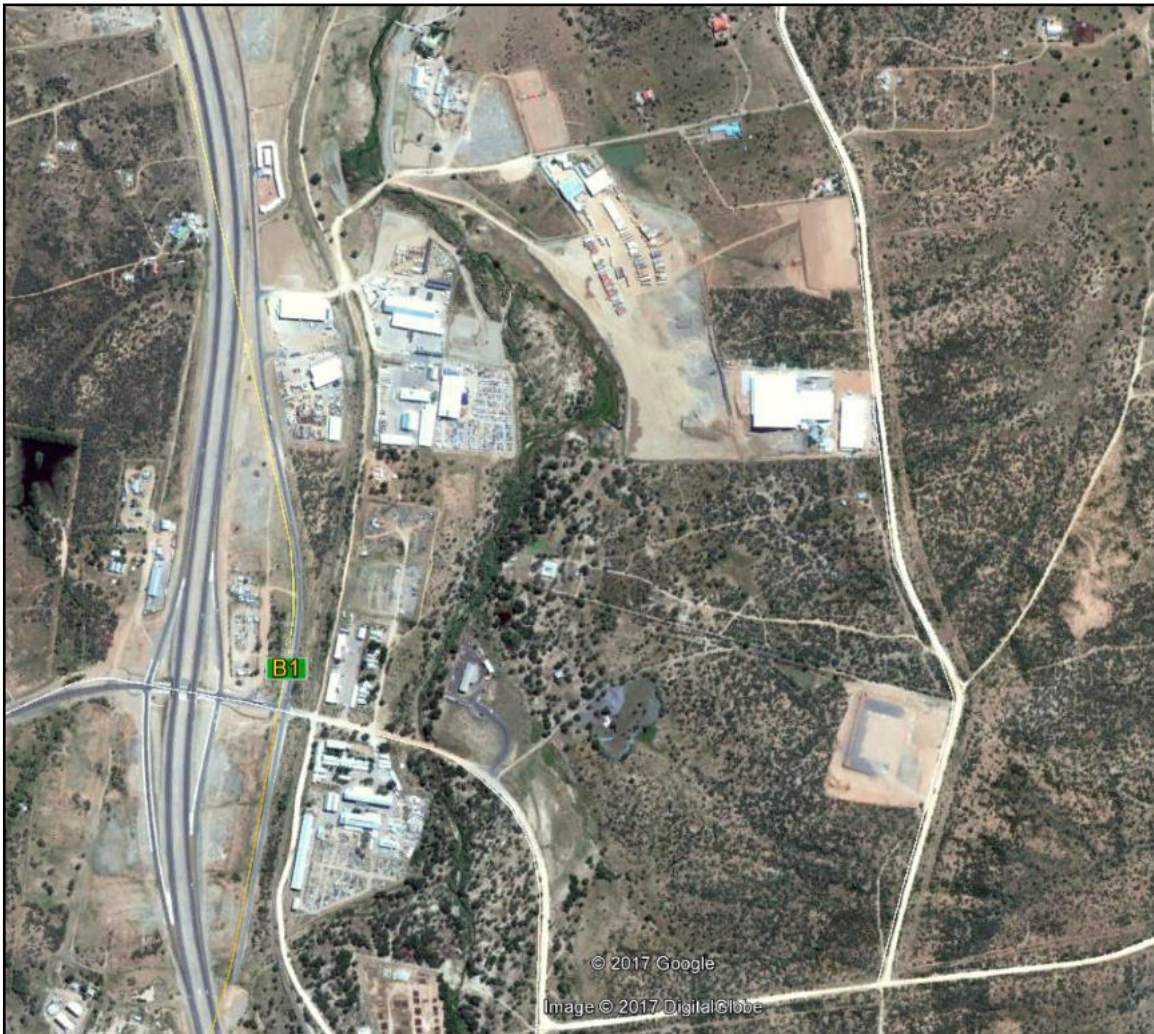


Figure 11: Surrounding Land Uses

From the figure above it can be seen that the area is not a residential area anymore as it is mainly used for commercial purposes 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 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:

Table 2: Impact Evaluation Criterion (DEAT 2006)

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

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	M	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 or 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	Magnitude	Probability	Significance	
						Unmitigated	Mitigated
Dust & Air Quality	-	2	2	4	4	M	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 health impact on groundwater users. Potential impact on the natural environment from possible polluted groundwater also exists.

Impact Evaluation

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

9.1.6. FIRES AND EXPLOSIONS

There should be sufficient water available for firefighting purposes. Ensure that all fire-fighting 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	M	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	M	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.

Impact Evaluation

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

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 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5.

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 30 of Farm Dobra No. 49, Windhoek from 'residential' with a density of 1:5ha to 'restricted business' with a bulk of 0.5 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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Water Resource Management Act, 2004. *Office of the Prime Minister*. Windhoek. Namibia, pp. 6 – 67.

APPENDIX A: CURRICULUM VITAE OF CHARLIE DU TOIT

1. **Position:** Environmental Practitioner
2. **Name/Surname:** Charl du Toit
3. **Date of Birth:** 29 October 1960
4. **Nationality:** Namibian

5. **Education:**

Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	Hons B (B + A) in Business Administration and Management		
Date Obtained	1985-1987		
Name of Institution	University of Stellenbosch, South Africa		
Degree/Qualification	BSc Agric Hons (Chemistry, Agronomy and Soil Science)		
Date Obtained	1979-1982		
Name of Institution	Boland Agricultural High School, Paarl, South Africa		
Degree/Qualification	Grade 12		
Date Obtained	1974-1978		

6. **Membership of Professional Association:** EAPAN Member (Membership Number: 112)

7. **Languages:**

	<u>Speaking</u>	<u>Reading</u>	<u>Writing</u>
English	Good	Good	Good
Afrikaans	Good	Good	Good

8. **Employment Record:**

	<u>From</u>	<u>To</u>	<u>Employer</u>	<u>Position(s) held</u>
	2009	Present	Green Earth Environmental Consultants	Environmental Practitioner
	2005	2008	Elmarie Du Toit Town Planning Consultants	Manager
	2003	2005	Pupkewitz Megabuild	General Manager
	1995	2003	Agra Cooperative Limited	Manager Trade
	1989	1995		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.



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 Development	2009 to 2011
University of South Africa	B.A. (Honours) Environmental Management	2012 to 2013

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	To	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