Environmental Impact Assessment (EIA) for the proposed township establishment on Erf A/253, Onethindi Extension 1, Oniipa, Oshikoto Region



# **ENVIRONMENTAL SCOPING REPORT**

#### **Prepared for:**

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#### **MARCH 2020**

Project Title:	Environmental	Impact	Assessment	for	the	proposed	township
	Establishment of	of Erf A/3	325, Onethindi	Exte	ensior	n 1, Oniipa,	Oshikoto
	Region						

- Client: Pronego Properties cc P. O. Box 340, Ondangwa Namibia
- Project location: Oniipa Oshikoto Region Namibia
- Project title: Environmental Scoping Report
- **EAP**: Green Gain Consultants cc
  - J. K Amushila
- Date: January March 2020

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# List of Abbreviations and Acronyms

BID:	Background Information Document
EA:	Environmental Assessment
EAP:	Environmental Assessment Practitioner
ECC	Environmental Clearance Certificate
EIA:	Environmental Impact Assessment
EMA:	Environmental Management Act
EMP:	Environmental Management Plan
ESMP	Environmental and Social Management Plan
ESR:	Environmental Scoping Report
GG:	Government Gazette
GN:	Government Notice
I&APs:	Interested and Affected Parties
MAWF	Ministry of Agriculture Water and Forestry
MET:	Ministry of Environment and Tourism
PPE:	Personal Protective Equipment
SDF	Spatial Development Framework

# 1. Introduction and Background

# 1.1 Introduction

Pronego Properties cc has been granted authority by the Oniipa Town Council to subdivide Erf 253, Onethindi Extension 1 into Erf A and Remainder and establish a new township development consisting of  $\pm$  120 erven on Erf A/253. The proposed development site is approximately 98,708m<sup>2</sup> in size and is located along the Ondangwa-Omuthiya main road.

The site is already occupied by existing development consisting of residential and business properties. The intention is to establish a mixed used township development by formalizing the existing land uses and incorporating compatible new land uses. Approval has been granted by the Oniipa Town Council for the intended development.

In terms of the Environmental Management Act (No. 7 of 2007) and the Environmental Impact Assessment Regulations (GN No 30 of 2012), the proposed development may not be carried out without an Environmental Impact Assessment (EIA) being conducted and an Environmental Clearance Certificate (ECC) being obtained.

Green Gain Consultants cc has been appointed to attend to and complete an Environmental Scoping Assessment, prepare an Environmental and Social Management Plan (ESMP) and apply for the Environmental Clearance Certificate (ECC) on behalf of the proponent.

# 1.2 Scope of the study

This scoping study was carried out in accordance with the Environmental Management Act (No. 7 of 2007) and it's EIA Regulations (GG No. 4878 GN No. 30). It indicates the description of the environment that may be affected by the activity and the manner in which the activity may affect the environment. Information relating to the receiving environment and its social surroundings has been sourced through the following methods.

- Site visits to collect primary data.
- Gathering existing information relating to similar developments and issues.
- Discussions, meetings and site visits with authorities.
- Opinions and concerns raised by I&AP's and stakeholders; and
- Ecological/hydrological surveys and qualified opinions.

# 1.3 Terms of Reference

The Terms of Reference for the proposed project are based on the requirements set out by the Environmental Management Act (No. 7 of 2007) and it's EIA Regulations (GN No 30 of 2012). The process covered the following steps, which are reported in this scoping report as follows:

- Provide a detailed description of the proposed activity.
- Identify all policies, legislation and guidelines that are relevant to the proposed development.
- Identify existing environmental (both ecological and socio-economic) conditions of the receiving environment in order to identify potentially sensitive areas.
- Evaluate the need and desirability of the proposed development.
- Notify and consult I&AP's regarding the proposed development and provide them with reasonable opportunity to participate during the process.
- Identify potential environmental impacts the proposed development will have on the natural & urban environment and assess their significance; and
- Outline management and mitigation measures in an EMP to minimize and/or mitigate potentially negative impacts, which cannot be avoided.

This scoping report will be submitted to the Environmental Commissioner, as required by Section 27(3) of the Environment Management Act (No 7 of 2007).

#### The following is vital as part of the scope of work:

#### a) Environmental impacts (biophysical)

- Impact on flora and fauna
- Impact on surface water and ground water
- Impact on land capability
- Solid waste disposal
- Impact of the proposed and required infrastructure and services

#### b) Socio-economic impacts

- Impact on traffic
- Impact on local economy
- Impact on existing land uses

# 1.4 Project team

The project involves the following teams

Developer/Proponent	Pronego Properties cc	
	P. O. Box 340, Ondangwa	
	Namibia	
	Mr. Petrus Nandago	
	azi_nt@yahoo.com	
Local Authority	Oniipa Town Council	
	Tell: 065 245 700	
	Mr. Jakob Junias	
Town Planner	<b>TOYA Urban Planning Consultants Cc</b> P.O. Box 99294, Windhoek	
	TEL: 0813099839 / 0812769756	
Environmental Assessment	nt Green Gain Consultants cc	
Practitioner	Office Erf 2696, Joe Davis, Narraville, Walvis Bay	
	Email: info@greengain.com.na	

# 2. LEGISLATION, POLICIES & GUIDELINES

The pursuit of sustainability, with respect to any development, is guided by a sound legislative and policy framework. This section provides a review of applicable and relevant Namibian legislation, policies and guidelines. This review serves to inform the Developer of the requirements and expectations, as laid out in terms of these instruments, to be fulfilled before the proposed project may commence. The findings of the abovementioned review in preparation of this scoping report for the proposed development are summarised below.

Legislation/ Policy/ Guideline	Relevant Provisions	Implications for this project
The Constitution of the Republic of Namibia (1990)	The article 95(i) recites: "The State shall actively promote maintenance 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" Article 91(c) recites: "The functions of the Ombudsman shall be defined and prescribed by an Act of Parliament and shall include the following the duty to investigate complaints concerning the over-utilization of living natural resources, the irrational exploitation of non- renewable resources, the degradation and destruction of ecosystems and failure to protect the beauty and character of Namibia".	Through the implementation of the EMP, the proponent shall be advocating for sound environmental management as set out in the Constitution.
Environmental Management Act (No. 7 of 2007)	<ul> <li>Requires that projects with significant environmental impact are subject to an environmental assessment process (Section 27).</li> <li>Details principles which are to guide all EAs.</li> </ul>	The EMA and its regulations should inform and guide this EA process.
Environmental Impact Assessment Regulations GN 28-30 (GG 4878)	<ul> <li>Details requirements for public consultation within a given environmental assessment process (GN 30 S21).</li> <li>Details the requirements for what should be included in a Scoping Report (GN 30 S8) and an Assessment Report (GN 30 S15).</li> </ul>	
The Regional Councils Act (No. 22 of 1992)	• This Act sets out the conditions under which Regional Councils must be elected and administer	The Oshikoto Regional Council is considered to be a stakeholder and was consulted during the EA process

Local Authorities Act (No. 23	each delineated region. From a	Oniipa Town Council is the
of 1992)	<ul> <li>land use and project planning point of view, their duties include, as described in section 28 "to undertake the planning of the development of the region for which it has been established with a view to physical, social and economic characteristics, urbanisation patterns, natural resources, infrastructure, land utilisation pattern and sensitivity of the natural environment".</li> <li>The main objective of this Act is to initiate, supervise, manage and evaluate development.</li> </ul>	responsible Local Authority of the area in which the proposed development will be located.
Labour Act (No. 11 of 2007)	<ul> <li>Details various requirements regarding health and safety of labourers</li> <li>Details requirements regarding minimum wage and working conditions.</li> </ul>	The Developer should ensure that all contractors involved during the construction, operation and maintenance of the proposed project comply with the provisions of these legal instruments.
Public Health Act (No. 1 of 2015)	Provide a framework for a structured uniform public and environmental health system in Namibia; and to provide for incidental matters. Part 9 prescribes procedures for Integrated Waste Management, while Part 10 calls for the prevention of creating Health Nuisances.	The developer should ensure compliance with the provisions of these legal instrument. A general obligation for the contractor not to pollute the environment
National Heritage Act (No. 27 of 2004)	Section 48(1) states that "A person may apply to the [National Heritage] Council [NHC] for a permit to carry out works or activities in relation to a protected place or protected item".	Any heritage resources discovered during construction and operations requires a permit from the NHC for relocation.
Water Resources Management Act (No. 24 of 2004)	<ul> <li>Provides provision for the control, conservation and use of water for domestic, agricultural, urban and industrial purposes.</li> <li>Deals with provision of license/permit that are required for abstracting, using water and discharge of effluent.</li> </ul>	The protection of groundwater resources should be a priority. Obligation not to pollute the environment and soil.
Town Planning Ordinance (No. 18 of 1954)	Subdivision of land situated in any area to which an approved Town Planning Scheme applies must be consistent with that scheme (S31).	The proposed land use of the project site must be consistent with the Oniipa Town Planning Scheme.
Townships and Division of Land Ordinance (No. 11 of 1963)	Details the functions of the Township Board including what they consider when receiving an application for Township Establishment (S3).	The proposed layout and land uses should be informed by environmental factors such as water supply, soil etc. as laid out in Section 3.
Road Ordinance 1972 (No. 17 0f 1972)	<ul> <li>Width of proclaimed roads and road reserve boundaries (S3.1)</li> <li>Control of traffic on urban trunk and main roads (S27.1)</li> </ul>	The limitations applicable on RA proclaimed roads should inform the proposed layout and zonings where applicable.

	<ul> <li>Rails, tracks, bridges, wires, cables, subways or culverts across or under proclaimed roads (S36.1)</li> <li>Infringements and obstructions on and interference with proclaimed roads. (S37.1)</li> <li>Distance from proclaimed roads at which fences are erected (S38)</li> </ul>	<ul> <li>Access from B1 road should be approved by the Roads Authority</li> <li>The following restrictions must apply; <ul> <li>100m from the main road for main building</li> <li>30m from the road for any structure</li> </ul> </li> </ul>
Pollution Control and Waste Management Bill	<ul> <li>To prevent and regulate the discharge of pollutants to the air, water and land;</li> <li>To furthermore regulate noise, dust and odour pollution; and to establish a system of waste planning and management</li> </ul>	The Developer should ensure compliance with the provisions of these legal instrument.

### 3.1 Locality

The proposed development site is located within the Onethindi Extension 1. The site lies along the main road (B1) from Ondangwa to Omuthiya and can be found on the geographic coordinates 17°56'07.14"S and 16°01'42.96"E and



Figure 1: Locality of the proposed developments

## 3.2 Site Description and existing land uses

The site has a flat elevation ranging from 1122-1123 m.a.s.l. and does not contain any major drainage lines. It is however bordered on the north by a natural watercourse which forms part of the main watercourse (Oshana) in the area. The site is dominated by scatted vegetation consisting mainly of indigenous trees such as marura, makalani palms, jackal berry, berchmia discolour, thorn bush as well as herbaceous grass species.

The larger part of the site has been used as traditional homestead for many years, thus it is heavily disturbed. Some portions are also occupied by existing development consisting of houses, crop fields and animal kraals. There are also several businesses which mostly found alongside the main road.



Figure 2: site overview

The site is traversed by the main Namwater pipe which carries water from Ondangwa to the town of Oniipa. Most of these developments have been in existence before the proclamation of the Oniipa Town council.

# 3.3 Adjacent Land Uses

The proposed development site is adjacent to the main road (B1) from Ondangwa to Omuthiya. It is also adjacent to existing development consisting of businesses which are concentrated along the main road as well as residential properties (houses).



Figure 3: Site surroundings

# 3.4 The Proposed Development

#### 3.4.1 Proposed land uses

The proposed township development will be a mixed use consisting of mainly "single residential" general residential, general business, Institutional, POS and Remainder as Streets.

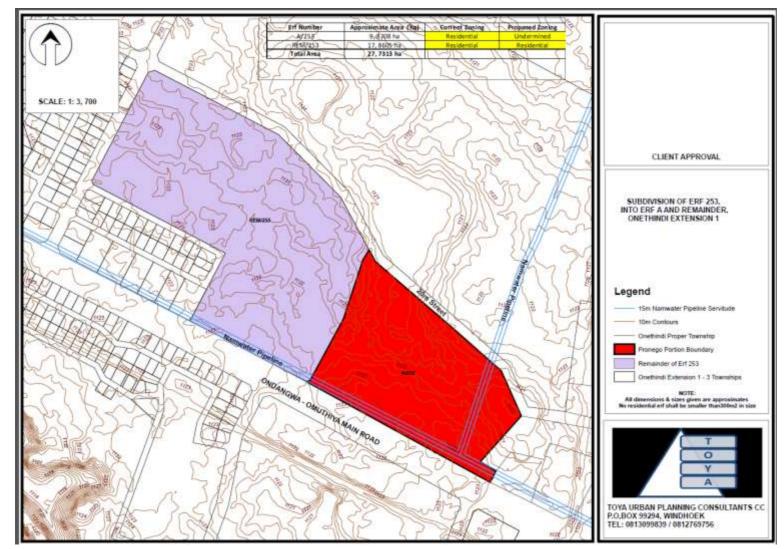
Land use/Zoning	Total Area (m <sup>2</sup> )	No. of Erven	Percentage (%)	Uses
Sigle Residential	44,465	101	45	Houses
General residential	9,359	5	9	Houses/Flats
General Business	15,417	7	16	Existing development
Institutional	618	1	1	Development of
Public Open Space	12,545	5	13	Playground and Namwater pipeline
Street	16,304	1	17	Access
Total	98,708	120	100	

Table 2: Proposed land uses

The proposed land use will be consisting of residential properties with 45% followed by General Businesses (16%), Street network (17%) and POS (13%). General residential is minimal (9%) while Institutional is the least composition (1%). The proposed layout was prepared in consideration of the existing land uses.

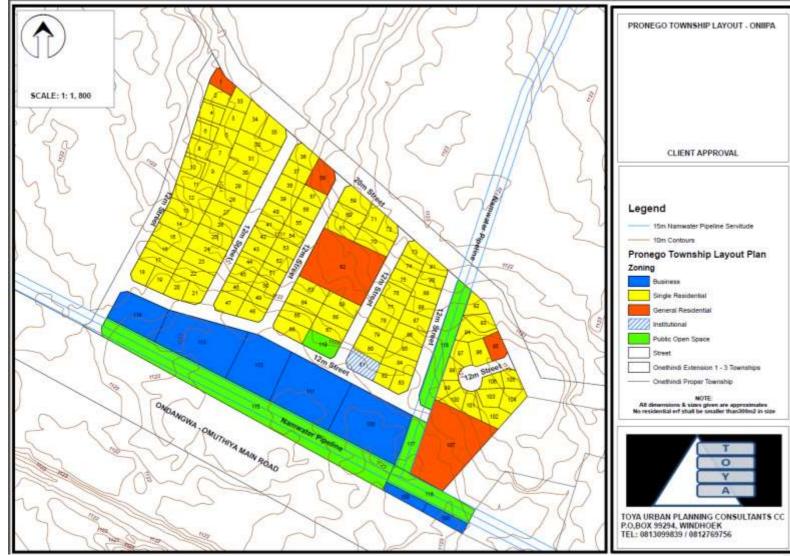
The proposed development will contribute to growth of the town by providing additional residential properties and general businesses which are the main needs of the Town Council.

#### 3.4.2 Proposed subdivision



The intended development entails the subdivision of Erf 253 into Erf A and Remainder. The proposed township development by Pronego Properties will be on Erf A (in red).

Figure 4: Proposed subdivision



The proposed township layout depicts that single residentials (yellow) are located adjacent to each other and intercepted by General residential (red) while Businesses (blue) will be located also close to each other but far from the residential areas.

There is one institutional erven (erf 81) which will be developed into a Preprimary school as well as a Playground to be accommodated on a POS (erf 119).

The long stretch of POS, Erf 115--118 (green) is to accommodate the existing Namwater pipeline which runs from Ondangwa to Oniipa, hence no development will be allowed on this space. The street network will consist of four (4) internal streets connecting to each other and to the main access roads.

Figure 5: Proposed layout

# 3.5 Need and Desirability

The need and desirability of the proposed development is based on the following aspects.

The "need" for the project:

- The provision of low-income housing has become a national concern. With the growing demand for serviced land due to rapid urbanization, it is of high priority that the available and developable land surrounding the town area are developed to provide land especially for housing and businesses.
- The project is planned at a time and place in a developing sector of the town and can be considered to be a natural opportunity associated with the growth of the town.
- The development will enable the Town Council to ensure timely and adequate service delivery to existing land users.

The "desirability" of the project:

- As the site is located in an "expansion zone" of the town, the approval of this application would not compromise the integrity of the proposed town Urban Structure Plan.
- The approval of this application would not compromise the integrity of the existing environmental management priorities for the area.
- The location factors favour this land-use (associated with the activity applied for) as it is located within a developing orientated area with much potential for growth.
- It is not anticipated that the activity will result in unacceptable opportunity costs as it will be integrated with the existing developments.
- The proposed development will ensure service delivery is provided while creating business opportunities for developers and creation of local employment.

## **3.6 Project Alternatives**

The EIA Regulations stipulates that the Scoping process should investigate alternative development options to any proposed developments/activities. The following alternatives were analyzed.

- Land use alternatives: The proposed development sites is within the townlands and thus are expected to be developed at any time to accommodate the growth of town. Moreover, the site is already occupied by developments which existed before the proclamation of the town; hence, the site is considered suitable for the proposed development and no alternative site is required.
- Do-Nothing The do-nothing ("no go") option would entail not using the site and maintaining the site as is. From certain perspectives this is not a viable option as the site is situated within a proclaimed area planned for urban use and surrounded by either upcoming or already existing residential communities. By not developing the site, the site will be anomalous in the context of the surrounding urban residential landuses, and some of the direct and indirect socio-economic benefits (i.e. job creation, housing shortages, provision of further housing aimed at the mature living market, etc.) will not be realized.
- Alternative design and Layouts- The design and layout plan are based on existing
  physical features i.e. houses, business etc. on the site. The proposed designed was
  found to be ideal and not expected to give rise to significant environmental impacts,
  hence no alternative was deemed necessary. Moreover, the final layout also
  incorporated inputs from relevant Affected and Interested Parties, Stakeholders as well
  as

# 4. DESCRIPTION OF THE AFFECTED ENVIRONMENT

This chapter provides an overview of the baseline biophysical and social environmental conditions, with which the proposed development will interact. This information has been sourced from observations made and photographs taken during site visits, the team's experience and existing literature from previous research conducted in the area. This chapter also identifies sensitivities pertaining to key environmental features as well as potential impacts resulting from the proposed project in relation to these sensitivities.

### **4.1 Biophysical Environment**

#### 4.1.1 Climate

Northern Central is defined as a semi-arid to sub-humid climate, with hot summers and warm winters. The average annual rainfall in Ondangwa is about 470 mm occurring between October and April, with the heaviest falls from January to March and the peak in February. The soils are sandy, allowing high infiltration and the average annual evaporation is about 2 800 mm. Consequently, there is no flow in the drainage channels during the dry season. The rainfall pattern is highly variable in amount and distribution. Temperatures are also cooler and more moderate, with approximate seasonal variations of between 10 and 30 °C (Kangombe, 2010).

Oshikoto region is one of the northern central regions of Namibia which are traversed by the Cuvelai basins and since the start of 2009 have experienced incessant torrential rains and high-water flows arising from Angola causing severe flooding.

#### 4.1.2 Soils and Geology

The main soils that occur in these regions are alluvial and other weakly developed low-lying soils. Dark alluvial sand and loam soil are also found in the northern regions.

The soil is dominated by deep Kalahari and Namib sand that mostly occur in the formation of sands and other sedimentary materials, while the clay sodic sands dominate in the oshanas. The soil type classification is termed to be favourable for crop cultivation and plant growth in general, and this is determined by its physical properties to the nature of water retention, lower salinity and high nutrient level. Soils in the Cuvelai basin are generally nutrient-poor and are often saline. The soil also comprises of mosaic soil type such as clay and average salty clay. This determines that the main soil dominance is characterized by its definition on consistency, colour and structure.

#### 4.1.3 Landscape and topography

The town is situated on the eastern edge of the Cuvelai system which is characteristics by shallow drainage channels called "oshanas" with pockets or islands of higher lying land in between. The oshanas have a general north-south alignment and flow occurs as a result of water passing over shallow grassed "natural spillways" between the oshanas.

The topography of the area is a gently sloping plain with a gradient of about 1:2 500. The oshanas periodically carry water after heavy local rains or good falls in highland areas to the north in Angola. These flows originating in Angola very seldom reaches Oniipa, and flow that does occur through the town normally originates from local rainfall.

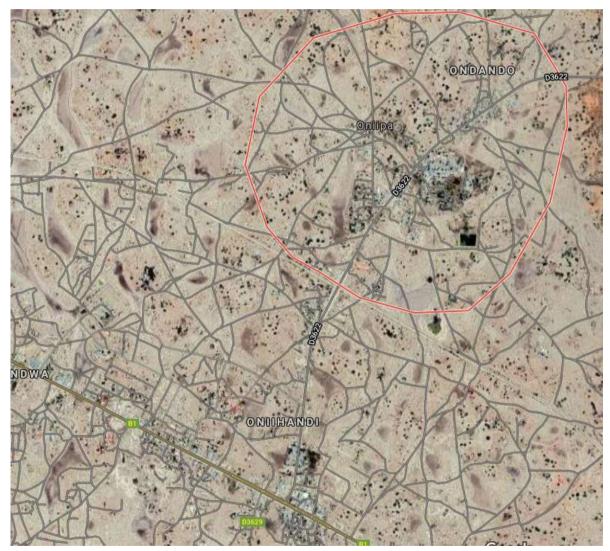


Figure 5: Topographic view of the Oniipa

Floods in the area and surrounding mostly affect low lying areas within town boundaries and accessibility to surrounding areas. The continued growth of the town means that the pressure for suitable land in the town increased to a point where many people settled in lower lying areas on the edges of the higher lying land portions and sometimes even within oshanas.

#### 4.1.4 Fauna and Flora

Due to the presence of traditional homesteads the vegetation of the area is dominated by indigenous trees, such as Jackal berry, Marula, Makalani Palm, thorn trees and few shrub and grass species. The low-laying area are occupied by few shrubs, grass and herbs species, *Eragrostis and Schmidtia species*.



Figure 6: Flora of the site

The local occurring fauna that are expected or known to occur at the site includes domestic animals (cattle, sheep and goats), small ground burrowing animals, reptiles, and local bird's species.



Figure 7; Local fauna

## 4.2 Socio-economic Environment

#### 4.2.1 Town overview

Oniipa is a town located in Oshikoto Region of northern Namibia and is a district capital of the Oniipa Electoral Constituency. It is situated along the B1 Road between Omuthiya and Ondangwa. According to 2011 Census, the town had a population size of about +-6,535 people and is dumbed as a district capital of the Oniipa Electoral Constituency.



Figure 8: Locality of Oniipa town

#### 4.2.2 History

Oniipa Town is named after an African Ebony tree, which according to oral history served as a tannery that bears fruits of thick skins, hence the name Oniipa (a place with skins/hides). Oniipa was established by the Finnish Mission Society in 1872. It boasts of the first Hospital in Namibia known as Onandjokwe Lutheran Hospital established in 1911 by Dr Selma Rainio (Gwanandjokwe). The first nursing school in Namibia was established by Kuku Gwanandjokwe in 1930 at Oniipa Mission Station. The first Teachers Seminary was established in Oniipa on 18 June 1913. Oniipa is home to the Evangelical Lutheran Church in Namibia (ELCIN), and its printing press which opened its doors to the public in 1901. The first pastors' seminary was founded in Oniipa in 1923 (Oniipa Town Council, 2020).

Oniipa is enriched with many of the heritage structures and objects. The oldest structures built in mud bricks and stylish architectural designs are found in Oniipa Town. This represents a significant attraction to tourists and perpetual travellers. Preservation and restoration of these heritage structures is a vital component of urban rehalatalization efforts. Heritage buildings and objects cultivate pride of our past and making us unique in the world. As singled out, we have seen greater potentials on heritage structures as enormous attractors of tourists (Oniipa, 2020).

#### 4.2.3 Bulk service supply

The town of Oniipa is a young yet a fast-growing town. Municipal services are served mostly to formal settlement.

- Water Supply: There is a major pipeline that brings water from Oshakati-Ondangwa (NAMWATER), serving most of the urban area with a reticulated network, except in some informal settlements, where the service is through communal taps.
- Road network: There is an existing roadwork connecting the town to other towns like Ondangwa and Omuthiya via B1 road and Eenhana via D3622 road, as well as easy access to the railway.
- Sewerage & Drainage: The existing system serves most of the planned areas through a reticulated network, pump stations and oxidation ponds. The informal settlements are not served by sewerage; the solutions are through septic tanks, pit latrines and others. No drainage system is in place, only partial solutions.
- Communication & Electricity: The town has accessibility to selected services/facilities. These include television, radio, newspaper, telephone and computer. Most of the town's electricity is served via NORED, although some areas within the existing informal settlements are not yet served.

#### 4.2.4 Socio-economic development

In terms of social development, the town is home to the well-known old church hospital called Onandjokwe Lutheran Hospital, which was named after the first female nurse. The town is home to seven schools, three public schools and four private schools.

Key commercial activities in Oniipa range from dry industries, tourism, retailing and transportation. Oniipa is considered an educational hub where most people got their education through the Finnish Mission and ELCIN. In addition, there are 3 bakeries, 2 butcheries, different workshops, 6 Grocery Shops and 4 mini-service stores. The council has recently initiated an annual exhibition festival to be known as Oshipe Annual Festival. Oshipe is expected to strengthen the town's economy and help the businesses community to penetrate the global market through benchmarking and networking. Oshipe is further expected to promote and preserve the indigenous culture of Oniipa.

#### 4.2.5 Land Use and availability

Oniipa Town has ample land for all types of developments and can offer business opportunities in heavy and light industries, hospitality, education, housing, and manufacturing. Our key strategic economic priorities are versed in urban agriculture, manufacturing, tourism, housing development, hospitality, education and contemporary shopping malls. The town is strategically positioning itself to be the reception Centre for business transformation in Namibia due to its strategic position along the key transport corridors of Namibia.

Public consultation is an important component of an Environmental Assessment (EA) as it provides potential Interested and Affected Parties (I&APs) with a platform whereby they can raise any issues or concerns relevant to the proposed project. This assists the environmental consultant in considering the full spectrum of potential impacts and to what extent further investigations are required.

In addition, the public consultation process also grants I&AP's an opportunity to review and comment on all the documents produced throughout the EA process. This is done in accordance with the Environmental Management Act's EIA Regulations. Communication with stakeholders and I&AP's about the proposed development were facilitated through the following means:

## 5.1 Notification of key Stakeholders and Interested & Affected Parties

Section 21 of the EIA Regulations details steps to be taken during a given public consultation process and these steps have been used in guiding this process. Communication with I&AP's about the proposed developments was facilitated through the following means:

- Public Notifications were placed in the local newspapers and public notices.
- The notices were advertised in New Era newspaper for 20 February and 27 February 2020 and Confidante newspaper for 20 February and 27 February 2020.
- The notice provided a brief description of the proposed development, its locality and invites the public to register as I&APs and to the Public meeting. (**Appendix C**)
- Identified key stakeholders were invited to submit comments toward the envisaged project.
- Background Information Document (BID) was compiled that contained essential information about the proposed development.

# 5.2 Public meeting

The public meeting was held at on the Saturday 29 February 2020 at the proposed development site at 10:00 am. The meeting was attended mostly be the affected residents, the developer, Town planner, EIA practitioner as well as other interested parties.

During the meeting, the Developer introduced gave a background of the project ad introduce the project team present which included the Town Planners from TOYA Urban and Town Planners as well as the EAP (Mr. Joseph Amushila) of Green Gain Consultants cc.



The Town Planner presented the proposed township layout, land uses and township boundaries. At the same occasion, the EAP (presented the EIA processes (purpose and preliminary findings). Attendants were then given a chance to pose questions and/or give comments to the project team.

#### The following issues were raised.

Table 3; Issues raised during consultation

Issus raised	Feedback/Response
Are the people going to be removed from their current plots, in case the proposed land use is something other than residential?	Nobody is going to be removed. Property owners will go into agreement with the developer and Town Council regarding sales, lease/rental agreements thereof.
How comes are we included in the proposed township if we are not part of the Nantinda's homestead?	The intended development does not only cover Nantinda's homestead but all properties within Erf A/235, Onethindi Extension 1 which has been long planned by the Town Council. Pronego properties cc has entered into agreement with the Town Council to implement the development on the TC behalf.
Can I put up a temporary structure on the area covered by Namwater pipe?	It is not permitted to establish any property, weather temporary or permanent on top of the Namwater pipeline.
Are our structures going to be demolished and replaced with new ones according to Town Building Policy?	Not necessarily, but if the structure is too old, the town council mighty require the demolishing of such structures. However, this should be agreed upon by the concerned parties (property owner, Developer and Town Council
My house is in the way of the proposed main road, does it mean, I am going to be removed completely and what are the procedure?	The house is affected by the main road proposed by the Town Council. This road is not part of this development at hand; however, the affected owner should seek clarity from the Town Council.
Since this development normally take long, am I allowed to build from this time one?	All affected properties owners are discouraged from constructing any property until the township layout has been approved.
We are very happy to Mr. Nantinda and his partners for a good idea, since it has taken the Town Council many years, to bring service to us. We are happy that we will be to receive our tittle deeds sooner than we expected	Noted

# 6. IMPACT ASSESSMENT

### 6.1 Introduction

The EIA Regulations require "a description of the significance of any significant effects, including cumulative effects, which may occur as a result of the undertaking of the activity".

The Table below indicates a summary of identified environmental impacts. These impacts are categorized into the various relevant stages of the life cycle of the proposed development, namely: Planning phase, Construction phase and Operational phase. The environmental assessment section of the Scoping Report and the consequent EMP shall also be compartmentalized into these into these phases.

Due to the nature of this development it is anticipated that all the infrastructure would be permanent, hence decommissioning will not be required. Maintenance of infrastructure will be addressed under the operational phase.

### 6.2 Method of Assessment

The potential environmental impacts associated with the proposed will be evaluated according to its nature, extent, duration, intensity, probability and significance of the impacts as follows.

CRITERIA		DESC	RIPTION	
EXTENT	National (4) The whole country	<b>Regional (3)</b> Oshikoto region and neighbouring regions	Local (2) Within a radius of 2 km of the proposed site	Site (1) Within the proposed site
DURATION	Permanent (4) Mitigation either by man or natural process will not occur in such a way or in a timeframe that the impact can be considered short-lived	Long-term (3) The impact will last for the entire operational life of the development but will be mitigated by direct human action or by natural processes thereafter.	Medium-term (2) The impact will last for the period of the construction phase, where after it will be entirely negated	Short-term (1) The impact will either disappear with mitigation or will be mitigated through natural process in a span shorter than the construction phase
INTENSITY	Very High (4) Natural, cultural and social functions and processes are altered to an extent that they permanently cease	High (3) Natural, cultural and social functions and processes are altered to an extent that they temporarily cease	Moderate (2) Affected environment is altered, but natural, cultural and social functions and processes continue albeit in a modified way	Low (1) Impact affects the environment in such a way that natural, cultural and social functions and processes are not affected
PROBABILITY	Definite (4) Impact will certainly occur	Highly Probable (3)	Possible (2) The impact may occur	Improbable (1) Likelihood of the impact

#### Table 4: Impact Assessment criteria

		Most likely that the impact will occur		materialising is very low
SIGNIFICANCE	physical extent & required. Signific	indication of the impo- time scale, and there ance is given before a each impact indicates	fore indicates the leve nd after mitigation. The	l of mitigation ne total number of
STATUS OF THE IMPACT	<ul> <li>Positive (benef</li> <li>Negative (adve</li> <li>Neutral (impact</li> </ul>	• • • •	·	ν to bear the costs of

Table 5: Criteria for significance ratings and associated range of scores

Significance Rate	Description	Score
Low	A low impact has no permanent impact of significance. Mitigation measures are feasible and are readily instituted as part of a standing design, construction or operating procedure.	1 - 4
Moderate	An important impact which requires mitigation. Mitigation is possible with additional design and construction inputs.	5 - 8
High	The design of the site may be affected. Mitigation and possible remediation are needed during the construction and/or operational phases. The effects of the impact may affect the broader environment.	9 – 12
Very High	Permanent and important impacts. The design of the site may be affected. Intensive remediation is needed during construction and/or operational phases. Any activity which results in a "very high impact" is likely to be a fatal flaw.	13 - 20

### 6.3 Assessment of Identified Impacts

All impacts included in the table below fall within the scope of this project and the responsibility of Developer. Each of the potential impacts are screened and subjected to the criteria stipulated above in **Table 4**. The significance of each potential impact is determined based on the criteria in **Table 5**. It is expected that most of these impacts can be decreased by the proposed migratory measures.

#### Table 6: Potential Impacts during the development phase (Construction) of the proposed development

ASPECT	POTENTIAL IMPACT	SIGNIF	MITIGATION MEASURE				
		Extent	Duration	Intensity	Probability	Significance	
	Loss of vegetation during construction	1	3	2	2	Moderate	<ul> <li>Only plants affected by the activities must be cleared.</li> <li>All indigenous trees must be marked and left out of construction activities where possible.</li> </ul>
BIOPHYSICAL IMPACTS	Alteration of existing visual perspective	1	4	2	2	Moderate	-Maintain the existing indigenous trees community and plan more trees in in and around the development to enhance greenery view
	Possible surface water and groundwater pollution	2	3	3	2	Moderate	<ul> <li>-No pollutant must be discharged directly into watercourse or underground.</li> <li>-Underground storage of hazardous goods should not be permitted in the proposed</li> </ul>
	Impact on the natural watercourse (Oshana) and natural flow of storm water and flood water	3	4	4	3	Moderate	-Ensure there is enough drainage for storm water by placing culverts and drainage channels when constructing access roads and other facilities.
	Loss of topsoil during construction	1	2	2	2	Low	-Soil conservation measures should be used on-site to help reduce erosion.

	Land disturbances due to construction activities	1	1	1	2	Low	<ul> <li>Prevent silting of watercourses by use of silt traps and re-vegetation of disturbed areas</li> <li>Excavated topsoil must be stockpiled and protected for later use.</li> <li>Avoid soil compaction and limit excavation to the area to be developed</li> <li>All open trenches must be filled and</li> </ul>
	Potential damage or destruction to undiscovered heritage or cultural sites in the area	2	3	1	2	Low	area must be properly rehabilitated -There are no major archaeological or Paleontological grounds to suspend the proposed development. In case of any material of archaeological heritage importance observed during construction/operation phase, it must be reported to the National Heritage Council.
	Spillage, stockpiles and other construction related activities	1	1	1	2	Moderate	-Concrete mixing should be done on a pre-designed slab underlined by PVC lining or previously disturbed areas -Any spillage (fuel, oil, chemical etc.). must be cleaned immediately -All construction material must be sourced off-site from commercial sources
	Impacts of temporary construction camps	1	1	2	2	Moderate	<ul> <li>-Construction camps (if allowed) should be properly located away from watercourses</li> <li>-Provide potable ablution facilities during construction</li> <li>-The site used for construction camps should be rehabilitated after construction phase</li> </ul>
SOCIO- ECOCNOMIC	Increase in traffic within the area is expected due to construction activities and establishment of a township.	2	1	1	2	Moderate	<ul> <li>-Identify new access road to avoid congestion.</li> <li>-Flagmen and traffic controls should be appointed to regulate traffic flow of construction vehicles.</li> <li>-Appropriate road signs &amp; markings, sidewalks for pedestrians and taxi ranks should be provided throughout the layout.</li> </ul>
	Generation of dust	1	1	1	2	Moderate	-Use dust-suppressing agents -Limit Vehicle speed

						-Avoid dust generating activities during strong wind.
Noise created by construction activities, which might be a nuisance to residents and employees.	1	1	1	1	Low	<ul> <li>-Construction should be limited to normal working days and office hours (08h00-17h00).</li> <li>-All employees must have PPE.</li> <li>-Watering of all construction haulage signage should be place at the entrance of the construction.</li> </ul>
Loss of agricultural land for grazing & cultivation to residential/town	2	4	3	3	Moderate	-The proposed development site is already a proclaimed townland.
New development will attract new criminal activities in the area	1	1	1	1	Low	-All items should be stored away from the sites -Ensure that are properties are secured
Economic development (+ve)	4	2	1	3	High	-Contractors should source materials from local supplier to enhance the local economy
Employment of the local community	4	4	2	3	Moderate	-Local laborers (especially the ones from the affected & neighboring village/residents) and local contractors (especially SMME's) should be utilized at greater extent. This should also include the youth, women and people with disability.
New development will increase demand water	4	4	4	4	High	-Ensure water recycling measures and provided alternative source of water i.e. rainwater harvesting.

The identified negative impacts during the construction phase ranges from low to moderate while positive impacts ranges from Moderate to High. Hence, the proposed development can be implemented with only minimal negative impacts provided that the mitigation measures are dully implemented.

ASPECT	POTENTIAL IMPACT	SIGNIF	CANCE BE	EFORE MIT	MITIGATION MEASURE		
		Extent	Duration	Intensity	Probability	Significance	
	Impact on biodiversity (flora and fauna)	1	4	1	2	Moderate	-Plant more trees to enhance biodiversity
	Alteration of existing visual perspective	1	4	1	1	Moderate	-Maintain the existing indigenous trees community and plan more trees in in and around the development to enhance greenery view
BIOPHYSICAL groun IMPACTS sewar	Possible surface water and groundwater pollution from leaking sewage lines or underground storage of dangerous goods.	2	1	2	2	Moderate	<ul> <li>-No pollutant must be discharged directly into watercourse or underground.</li> <li>-All houses must be connected to the Municipal sewer system</li> <li>-Sewage lines must be maintained frequently to prevent leakages</li> </ul>
	Impact on the natural watercourse (Oshana) and natural flow of storm water and flood water	2	1	1	1	Moderate	<ul> <li>-Ensure maintenance of storm water channels.</li> <li>-No waste should be discharged into drainage or natural water flows.</li> </ul>
SOCIO- ECOCNOMIC	Increase in traffic within the area and diversion of existing access roads for the community due to the new development	2	4	1	1	Moderate	-Ensure enough access roads and provide regular maintenance -Provide appropriate road signs & markings, sidewalks for pedestrians and taxi ranks should be provided
	Land use conflict between the Town Council and livestock owners over water and grazing area as livestock will be attracted by water and grazing within the new township.		4	4	3	Moderate	-All animals currently kept on site must be moved to rural areas and no animal should be kept at any property within this site
	Increase demand of water and electricity	2	4	4	4	Low	-The proposed development is part of the approved town SDF and thus have been included in the demand management plan.
	Loss of access to indigenous trees by the local people	2	4	2	4	Low	-Existing indigenous trees must be conserved in Public Open Space areas

#### Table 7: Potential Impacts during operation phase of the proposed development

						and communities must be allowed access to these trees even after development.
The relocation of people will disrupt the social cohesion and connectedness among the community	2	4	3	2	Low	-Existing houses will not be shifted but rather be converted to urban houses. Residents are still connected to each other as neighbors.
Provision of housing delivery (+ve)	4	4	4	4	High	-Local people must be given the first priority
Employment of the local community (+ve)					High	Local laborers (especially the ones from the affected & neighboring village/residents) and local contractors (especially SMME's) should be utilized at greater extent. This should also include the youth, women and people with disability.
-Provision of services next to the people (sewage, communication, etc.)	4	4	4	4	High	-Consider inputs from locals

The intended development is not expected to result in serious negative impacts during operation, hence their significance ranges from Low to moderate.

# 7. CONCLUSION AND RECOMMENDATIONS

The key potential impacts associated with the construction, operational and maintenance phases of the proposed project have been identified and their significance assessed. All identified impacts can be mitigated to reduce the significance of these impacts to an acceptable level. Mitigation measures are described in greater detail in the EMP. Hence, the project, as proposed in this report, can be implemented with no significant impacts if executed according to the EMP.

### 7.1 Conclusion

- The proposed site is suitable for the envisaged development because it is compatible with the adjacent land uses (existing residential and the businesses in the vicinity). It is easily accessible and can easily be connected to existing networks (bulk supply services) e.g. water, electricity, etc.
- The development will enable the Town Council to decrease their housing backlog and minimize the formation of illegal settlements on areas not considered for residential planning.
- Since no objection was received during the consultation period, the project is well received by both I&AP's as well as by stakeholders.
- It is also concluded that there are no are no sensitive cultural or heritage materials on the proposed sites and in case of any such material found at site during construction phase, this should be handled as per the National Heritage Act mentioned in chapter4.
- The scope is limited to assessing the potential impacts associated with the proposed development; therefore, the effect on the surrounding environment is based on the current land use.

## 7.2 Recommendations

The EAP is of the opinion that the development should be authorized because it is not expected to generate significant impacts to the affected environment. We further recommend that the Developer

- Sufficient fill (gravel) must be provided to ensure stability of the soil and prevent
- The project manager shall prepare a Storm Water Management Plan for the site and the neighbouring catchments that will receive runoff from the proposed development.
- The project design must incorporate the harvesting and storage of rainwater to reduce the amount of storm water to be attenuated.
- The proponent must implement the proposed mitigation measures outlined in the Environmental and Social Management Plan (ESMP).

To this end, it is therefore recommended that an Environmental Clearance Certificate be granted for the proposed **Township Development on Erf A/Erf 253, Onethindi Extension 1, Oniipa, Oshikoto Region.** 

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APPENDIX A:Council ResolutionAPPENDIX B:Proof of ConsultationsList of IAPsNewspaper AdvertisementAttendance registers for the Public Meeting

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Enquiries: Ms. Marth E-mail: miltula@onlip		CHIEF EXECUTIVE Ref: 9/6	
			07 October 2019
Pronego Properties Co	i)		
P.O.Box 340 Ondangwa			
Namibia			
Dear Mr. Nantinda.			
RE: EXPRESSION OF	NTENT TO DEVELOP LAND		
We refer to your letter d	ated 28 March 2010		
Town and Tow Pronego Prope Remainder of 0 The design and Pronego Prope Upon registrati 1.00/m <sup>2</sup> by way Council has the The grace peri receipt of this I No compensat back to the Cou	nlands No. 1164. rties Cc to appoint a professional Dnipa Town and Townlands No. 1 I supervision of municipal services rties Cc shall not change the initia on of the proposed land, Pronego of private treaty. a right to revoke the approval shou od allowed to commence with the etter. ion to be incurred in this process uncil.	c to build houses and other intended Town Planner and Land Surveyor 164. should be done by qualified / regis proposal without Council approval Properties Cc will be required to p Id any dispute arise on the propose construction of this project shall be except if the initial project proposa	to carry out the Subdivision of tered Engineers. ourchase it off from Council at d land. 3 years, effective from the date l fails and the land rights is gi
We trust that you will fin			
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