## ENVIRONMENTAL IMPACT REPORT

(IN COMPLIANCE WITH SECTION 24 G OF NEMA, 1998)
FOR THE CLEARANCE OF INDEGENOUS VEGETATION ON THE FARM
LIMPOPO VIEW 42 MT WITHIN MUSINA LOCAL MUNICIPALITY,
VHEMBE DISTRICT MUNICIPALITY, LIMPOPO PROVINCE

LEDET reference number: 12/1/9/S24G-V31

**AUTHOR**: Johannes Claassens

**PROJECT NAME**: LIMPOPO VIEW

**STATUS OF REPORT**: First

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Tua Conserva Environmental & Conservation Services cc

#### **EXECUTIVE SUMMARY**

Limpopo View has started in 2011 under new ownership. The primary farming activity leg is game farming and hunting.

This report has been compiled to comply with Section 24(G) to rectify the non-compliance with legislation. It addresses the clearing of indigenous vegetation undertook late in 2017 and early 2018 and provides an insight into the receiving environment regards the impacts that could have negative influences on the receiving environment. A total area of  $\pm 4.5$  hectares was cleared with protected tree species left intact. This report will also address future phased bush clearing for a total cleared area of  $\pm 24.8$  hectares. The development is for planting of lucerne used for feeding game on the farm, the bush clearing triggered the regulations. The combined area will be  $\pm 39.3$  hectares. There are existing cultivated lands of  $\pm 12$  hectares, also planted with lucerne adjoining to the west.

The risk of potential impacts was assessed to gather information and to provide findings to LEDET. This is part of pro-active legislation, e.g. NEMA compliance. The assessment focused on the receiving environment that included fauna and flora, biodiversity, risk and hazards and impacts related to pollution, social-and socio-economic impacts or influences. Cumulatively the **in-situ** situation was assessed by comparison of measurable such as flora and fauna found with the supporting habitats and influence on biodiversity, as well as potential of pollution of terrestrial areas and water resources. The role of the activity in the social and socio-economic spectrum has also been assessed to determine the effect it has to the social environment in which it is situated. Two specialist reports was conducted; the first an Ecological and Red Data Report and secondly a Phase 1 Archaeological and Heritage Report. An Environmental Management Plan is also supplied.

The impact assessment could not find any significant reason for closure of the project based on significant impacts or even lesser impacts that could not be mitigated, nor not to approve this report with the recommendations and mitigations and other management control as recommended.

The 24 G process had to be implemented of which this report is the result. Throughout the process this was a crucial point to "safe-guard" the receiving environment for the future.

What became evident in the assessment is that the development did not impact significantly on the environment.

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	of Legal and Policy Requirements	
ABBREVIA	TIONS	
BPS	Border Protection System	
DAFF	Department of Agriculture, Forestry and Fisheries	
DWS	Department of Water and Sanitation	
EIR	Environmental Impact Report	
EMP	Environmental Management Plan	
I&AP	Interested & Affected Parties	
LEDET	Department of Economic Development, Environment and Tourism	
	Limpopo province	
NEMA	Environmental Management Act, 1998 (Act No 107 of 1998)	

#### 1 INTRODUCTION

#### 1.1 General

This report contains the results of an on-site investigation for the expansion of croplands for Limpopo View. This application is according to Section 24G, a voluntary application for rectification of clearance of indigenous vegetation. An application was submitted on the 14<sup>th</sup> June 2018 and acknowledgement received on 22nd June 2018.

Reference number: 12/1/9/S24G-V31

#### 1.2 Report objective

The Environmental Impact Report (EIR) was conducted to supply the Limpopo Department of Economic Development, Environment and Tourism (LEDET) with the necessary information to make a decision regarding the environmental authorisation of the EIR in specific for the Section 24 (G) which is applicable.

#### 1.3 **Applicant**

Mr C. P. Potgieter

Contact: P.O. BOX 743

**DELMAS** 

2210

CELL: 082 524 8040

E-MAIL: potgietercp@telkomsa.net

#### Information on EAP 1.4

#### 1.3.1 Details of EAP

Tua Conserva Environmental and Conservation Services cc

P. O. Box 960

**FAUNA PARK** 

**POLOKWANE** 

0787

Represented by: Mr. J. Claassens

Contact: 082 885 9118

E-mail: tuaconserva@gmail.com

1.3.2 Experience of EAP: Resume attached as Appendix A.

## 2 METHODOLOGY

Methodology followed was by conducting surveys on the project area, discuss processes with the owner, source documents from owner and other relevant related documentation and finally to compile a 24 G environmental assessment report.

The information gathering process included a public participation process with identified and interested parties. For the activities conducted data was sourced from the owner and farm manager.

## 3 LEGAL AND POLICY REQUIREMENTS

**Table 1: List of Legal and Policy Requirements** 

		INTERNA	ATIONAL
URAL RESOURCES	Convention to Desertification (CCD)	Combat	The United Nations Convention on the Combating of Desertification defines land degradation as the: "reduction or loss of the biological or economic productivity and complexity of rain fed cropland, irrigated cropland or range, pasture, forest and woodlands in arid, semi-arid and dry sub-humid areas, resulting from land uses or from a process or combination of processes, including processes, arising from human activities and habitation pattern, such as the:  • long-term loss of natural vegetation;  • soil erosion caused by wind/water, and  • deterioration of the physical, chemical and biological or economic properties of soil.
ENVIRONMENT AND NATURAL RESOURCES	Convention on Biological (CBD)	Diversity	The CBD aims to effect international co-operation in the conservation of biological diversity and to promote the sustainable use of living natural resources worldwide. Membership of this convention has led to the publication of the White Paper on the Conservation, and Sustainable Use of South Africa's Biodiversity (DEAT 1997), which aims to ensure the sustainable use of biodiversity in all sectors, including industry (DEAT 1999).
		NATI	ONAL

CONSTITUTIONAL RIGHTS	The Constitution of South Africa (Act 108 of 1996).	Introduces a Constitutional framework for post 1974 South Africa. Chapter 2; Environment:  Section 24: Everyone has the right- a. to an environment that is not harmful to their health or well-being; and b. to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that: i. prevent pollution and ecological degradation; ii. promote conservation; and iii. secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.  Justice Administrative Action Section 33
N AND NATURAL RESOURCES	National Environmental Management Act (Act No. 107 of 1998) (NEMA)	The State must respect, protect, promote and fulfil the social, economic and Environmental rights of everyone and strive to meet the basic needs of previously disadvantaged communities;  • sustainable development requires the integration of social, economic and environmental principles.  • everyone has the right to have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures that —  • prevent pollution and ecological degradation;  • promote conservation.
ENVIRONMENTAL, CONSERVATION AND NA	National Environmental Management Waste Act, 2008 (Act No. 59 of 2008)  National Environmental Management: Biodiversity Act (Act No. 10 of 2004)	The Waste Act promote effective waste management practices through the promotion of the waste management hierarchy which prioritises waste avoidance, reuse, recycling, recovery and treatment, and disposal as a last resort.  The objectives of this Act are —  (a) within the framework of the National Environmental Management Act, to provide for —  (i) the management and conservation of biological diversity;  (ii) the use of indigenous biological resources in a sustainable manner; and (iii) the fair and equitable sharing among
	NEMA Threatened Ecosystems in South Africa	stakeholders of benefits arising.  The objectives are to reduce the rate of ecosystem and species extinction. This includes further degradation and loss of structure, function and composition of threatened ecosystems. The purpose of listing protected ecosystems is primarily to preserve witness sites of exceptionally high conservation value.

Environmental Conservation Act No 73 0f 1989	<ul> <li>Waste disposal practices (S20)</li> <li>National Noise Control Regulations (GN R154)</li> </ul>				
	dated 10 January 1992)				
National Heritage Resources Act 25	Stipulates assessment criteria and categories				
of 1999	of heritage resources according to their significance (S7)				
	• Provides for the protection of all				
	archaeological and palaeontological sites, and meteorites (S35)				
	<ul> <li>Provides for the conservation and care of</li> </ul>				
	cemeteries and graves by SAHRA where this is not the responsibility of any other authority (S36)				
	<ul> <li>Lists activities which require developers any</li> </ul>				
	person who intends to undertake to notify the				
	responsible heritage resources authority and				
	furnish it with details regarding the location,				
	nature and extent of the proposed development (S38)				
	Requires the compilation of a Conservation				
	Management Plan as well as a permit from SAHRA				
	for the presentation of archaeological sites as part of				
	tourism attraction (S44)				
The National Water Act (Act No. 36 of 1998)	The National Water Act is important because it provides a framework to protect the natural water				
	resources against over exploitation and to ensure that there is water for social and economic development				
	and water for the future (DWA).				
	Water resources are water bodies such as rivers,				
	streams, wetlands, estuaries and groundwater. The National Water Act aims to protect, use, develop,				
	conserve, manage and control water resources as a				
	whole. Rivers, dams, wetlands, the surrounding land, groundwater, as well as human activities that				
	influence them, will be managed as one cycle. One				
	of the principles of the Act is sustainability which				
National Forests Act (Act No. 84 of	includes ensuring that the environment is protected.  Natural forests and woodlands form an important part				
1998)	of that environment and need to be conserved and developed according to the principles of sustainable				
	management; Parliament therefore enacts the following law:				
	Prohibition of destruction of natural forests and the destruction of indigenous trees in any natural forest.				
National Veld and Forest Fire Act 101 of 1998	Regulates veld and forest fires				
Animal Diseases and Parasites Act No 35 of 1984	This act prescribes the controls to be implemented for diseases designated by the act or its amendments as "controlled" (e.g. Animal Disease Control disease),				
	or any disease not currently present in South Africa. The Directorate of Veterinary Services of the Department of Agriculture is responsible for the				
	implementation of the controls laid down in the act.				

	Conservation of Agricultural Resources Act (Act No. 43 of 1983)  Fencing Act No 31 of 1963	The objects of this Act are to provide for the conservation of the natural agricultural resources of the Republic by the maintenance of the production potential of land, by the combating and prevention of erosion and weakening or destruction of the water sources, and by the protection of the vegetation and the combating of weeds and invader plants.  Regulates all matters relating to fencing				
	PROV	INCIAL				
ENVIRONMENTAL & CONSERVATION	Limpopo Environmental Management Act No 7 of 2003 (LEMA)	Regulates provincial conservation issues				

## 4 GEOGRAPHIC DESCRIPTION

## 4.1 Project locality

The facility is situated on the LIMPOPO VIEW 42 MT within MUSINA Local Municipality, Vhembe District, Limpopo Province

The co-ordinates (WGS84 - Lo 31°) of the project site are Latitude 22°21'32.50" and Longitude 30°17'44.83".

## **Route to location:**

From Polokwane on N1, direction north, to Musina, turn-off to right on R508 for  $\pm 15$  kilometres, turn right on Malala Drift, district road, follow road for  $\pm 16$  km turn right at T-junction, after  $\pm 2.9$  km farm entrance on the right.



Figure 1: Location Map

The farm LIMPOPO VIEW 42 MT is 1521.4112 ha in size. It is directly bordering onto the Limpopo River. A portion of the farm is cut-off by the district road with the cut-off portion situated between the road and Limpopo River. It is on the cut-off portion on which the development took place. Of this area  $\pm 12$  ha was being actively cultivated for crops prior to the new clearing. The rest of the farm south of the road is used for game farming and hunting.

## Sense of placing of project area on farm.

The project area is situated between the road and river as mentioned above. Refer to Figure 3 below on page 12.

There is an existing military patrol road and fences (in poor condition: refer to insert) between the project area and the river.

## **Border Protection System**

The international border between South Africa and Zimbabwe is situated in the middle of the Limpopo Riverbed. On South Africa's side a border protection system has been erected in the mod-1980's. This system consists of a two fences and a military patrol road. The system became in dis-repair and planning is in process of being rejuvenating the system. Tua Conserva is the appointed environmental consultant for this process.

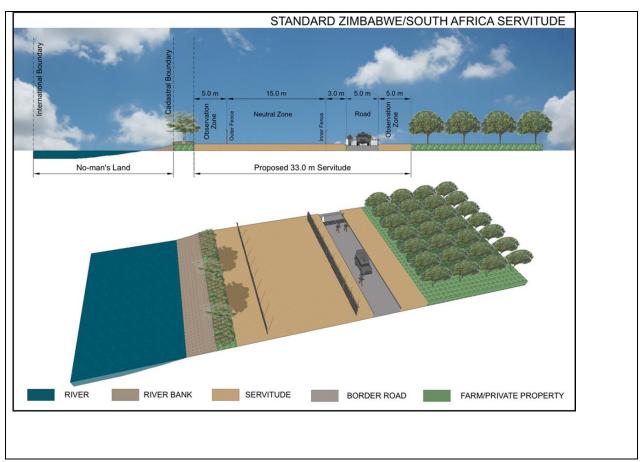


Figure 2: Border Protection System

Two important aspects related to the international boundary and the cadastral boundary is of importance:

- (i) International Boundary: Is located in the middle of the rivers main flow stream;
- (ii) Cadastral Boundary: Is located on the riverbank of the Limpopo River.

## The sense of location of the project area:

- There is a buffer area between the project area and the Limpopo River created by the Border Protection System;
- The Border Protection System is situated ±48 meters from the riverbank;

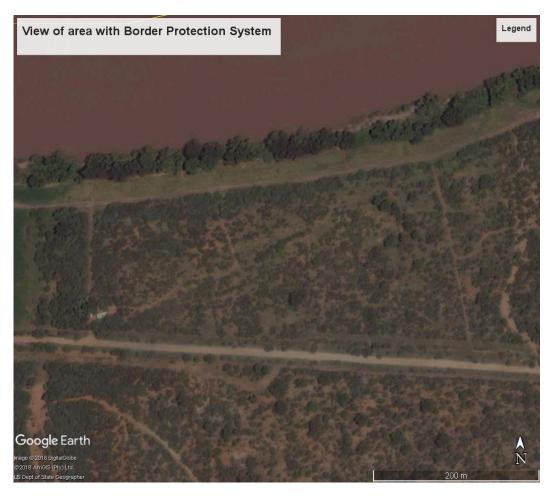


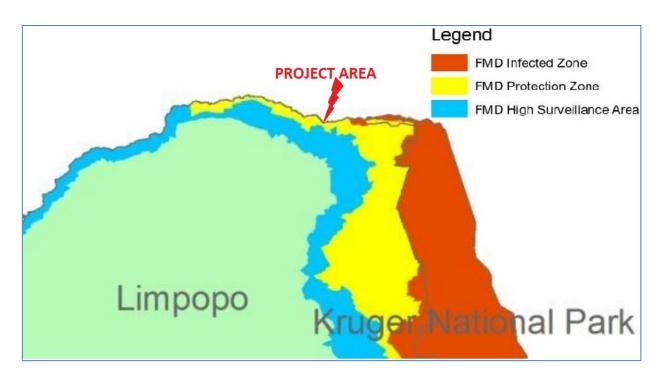
Figure 3: View of area and Border Protection System

• The boreholes are situated on the edge of the riparian zone;



Figure 4: Location of borehole

- The project area can be considered as a fragmented part of the farm, it being cut-off by the district road. Refer to Figure 3 where road is clearly visible.
- The placing in close proximity to the river provides access to water and more fertile land. This is also found in evidence both up-and downstream on other farms.
- The location is outside the riparian zone. It should be mentioned that the Border Protection System (BPS) largely destroyed part of the riparian zone and the transition terrestrial vegetation away from the riverbank on the footprint for the BPS.
- Land-uses for the area are:
  - (i) Game farming;
  - (ii) Maramani Private Nature Reserve;
  - (iii) Limpopo View Conservancy;
  - (iv) Crop farming (lucerne) along the Limpopo River;
  - (v) Crop farming (tomatoes) along the Limpopo River;
  - (vi) Crop farming inland at Nzhelelle Irrigation scheme;
  - (vii) Madimbo Corridor downstream;
  - (viii) Kruger National Park further east.
- The nearest communities are at Sibasa (situated south-east) of the former Venda homeland;
- Zimbabwe is situated across the Limpopo River and is part of the rural CAMPFIRE program for the rural communities. Elephants, buffalo and game are free-roaming and often cross the river into South Africa.
- The area is located in the Foot-and-Mouth Protection Zone which necessitates control on movement of cloven hooved animals. Refer to Figure 5.



**Figure 5: Foot-and-Mouth Protection Zone** 

#### Note:

The species that needs to be actively prevented from entering is buffalo, kudu, warthog as well as livestock such as cattle and goats.

## **Sense of place in receiving environment:**

The surrounding farms are used mostly for game farming. Some agricultural activities are situated along the Limpopo River. ZZ2 is the exception with large croplands along the river ( $\pm$  9.9 kilometres long which far overshadow the development on Limpopo View) and also inland, this is made possible by an off-channel storage dam.

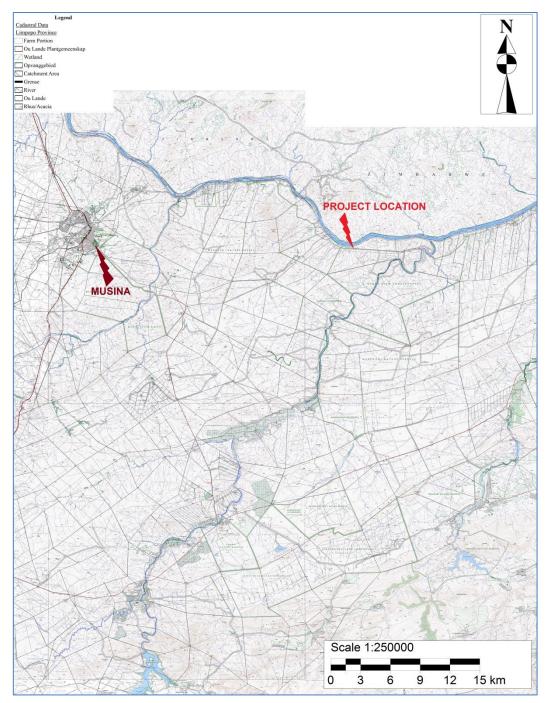


Figure 6: Sense of place of location (Cadastral Map)

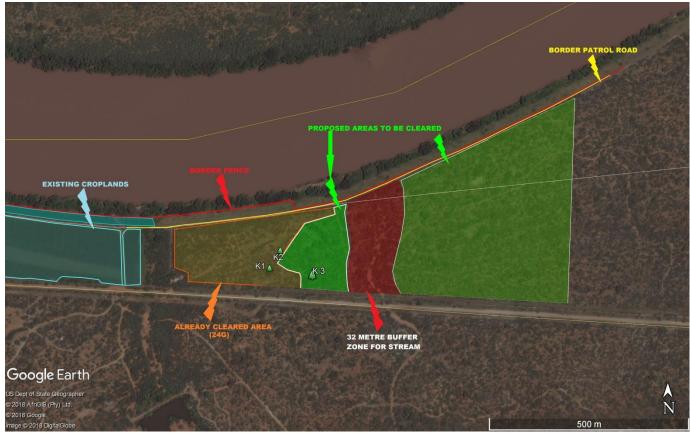


Figure 7: Sense of place (Google Image)

The following observations were made during the site-visit:

- (i) The project area is more than 32 meters away from the riverbank;
- (ii) The area adjoining downstream (east), which is considered for a phased extension of bush clearing for croplands, to the project area (that has been cleared of vegetation) has a typical semi-arid terrestrial vegetation composition. It does not represent nor has an affinity to riparian vegetation.
- (iii) Limpopo Conservation Plan version 2 (LCPv2)Although the area is designated a Critical Biodiversity Area (CBA), it is not related to the water resource of the Limpopo River.
- (iv) The mean average carrying capacity for game in this vegetation type is calculated at 1LSU/15 hectares. Game which occurs includes Steenbuck, duiker, bushbuck, kudu and giraffe.
- (v) The fact that the project area is fenced on all sides by a game fence, and along the Limpopo River also being electrified in effect isolated the portion of farm on which

- the project area is located. Small-and medium game can move through the fences at specific location underneath the fences, but no larger herbivore can enter or exit.
- (vi) Elephant frequently used to cross over from Zimbabwe and necessitated the electric fence. This area is known for the seasonal migration of elephant.
- (vii) Hippopotamus that also occurred in this stretch of the Limpopo River moved into a dam on the landward side of Limpopo River and was kept alive by the owner during the drought by supplementary feeding of lucerne. They are still present in the dam on the farm.
- (viii) Protected trees do occur on the project area and direct surroundings. Boabab, Sheherd's Tree and Marula trees were not removed.
- (ix) By inspecting the remains of the trees that was cleared and burnt as well as the regrowth it was found that the species are mainly *Colophospermum mopane*, *Vachellia tortillis*, *V. karroo*, *Combretum spp-*, *Terminalia prunioides*, *Dichrostachyus cinerea*, *Grewia bicolor*, *G.caffra* and *G. monticola* species.



Figure 8: Regrowth of Mopane (left) and Raisin (right)



Figure 9: Regrowth of Bushwillow (left) and Sickle bush (right)

(x) No outstanding habitat features for species survival or communities was found.

## (xi) Boreholes are located on the riverbank. Three are used.



Figure 10: Location of borehole(s) along riparian vegetation edge

## 4.2 Description of activity

Cultivation on LIMPOPO VIEW 42 MT only occurs along the Limpopo River as described. Farming is mostly with game and for hunting with crop productions of lucerne, tomatoes and other cash crops.

The location of the area cleared of indigenous vegetation with further extension of clearing of indigenous vegetation for crop lands. Previously the area was not utilised for any crop production.



Figure 11: View of area cleared of vegetation



Figure 12: Proposed next phase for clearing indigenous vegetation

## 5 IDENTIFICATION OF IMPACTS

## 5.1 Background

The project was visited after being appointed by the applicant to conduct a survey on the area cleared. The survey included a survey of the area not cleared to determine the type of vegetation by identification of plants which were burnt as well as remaining trees and then also the regrowth of vegetation, especially the woody plants. The adjoining area to the east of the cleared area was also surveyed as the applicant want to clear it at a later stage after the 24G application has been finalized. During the survey the following was noted: ecological systems present, fauna and flora species and habitat. This was compiled in an Ecological and Red Data Report attached to this report.

An Archaeological Phase 1 Report was also conducted to identify the archaeological-and heritage status of the area. Furthermore were the socio-economic influence with impacts assessed by interviews with the applicant and the workers on the farm.

The identification of the influence of the project on the receiving environment was also placed in context to what activities take place in a radius of 50 km.

## 5.2 Possible list of Issues

## 5.2.1 Terrestrial pollution

- (i) Issue: Oil spillage from incorrect procedures
- (ii) Issue: Diesel spillage from construction machine

## 5.2.2 Water pollution

- (i) Use of chemicals on existing-and new croplands.
- (ii) Non-compliance with water quality standards.
- 5.2.3 Waste Pollution
  - (i) Any form of waste produced.
- 5.2.4 Other Legislation compliance
  - (i) Conservation of Agriculture Resources Act, 1983 (Act No. 43 of 1983):
    - Regulation 2: Application to cultivate virgin land
    - Regulation 15: Prohibited Plants
    - Regulation 1: Cultivate virgin soil
  - (ii) Water Use license for Section 21 of the Water Act, 1998 (Act No. 36 of 1998)
  - (iii) National Forests Act (Act No. 84 of 1998), protection of listed tree species.
- 5.2.5 Biodiversity destruction and ecological processes influenced
  - (i) Flora
    - Red Data
    - Protected species
  - (ii) Fauna
    - Red Data
    - Protected species
    - Movement
    - Survival
- 5.2.6 Archaeological and Heritage destruction

Destruction of sites of importance.

5.2.7 Socio-economic influences

Influence on businesses and associated financial factors.

5.2.8 Social Influences

Influence on human and society.

## 6 DESCRIPTION OF SOCIAL AND SOCIO-ECONOMIC LANDSCAPE

## 6.1 Social aspects

The setting of the project can be described as remote rural. The area is populated by farmers and rural communities. The workforce is sourced from these rural communities. The distance from large towns such as Musina is too far away for residents from the communities to consider working from home.

The location (distance from the towns and communities) of the project together with the type of farming activities (game farming, hunting, and crops) necessitates a permanent staff presence.

Work opportunities are therefore not readily available. The type of work is also in specific niche segments such as game farming and hunting which are specialized activities combined with infrastructure maintenance such as fence maintenance and water supply. Trophy caping-and preparation, skinning and meat processing together with security patrols against poaching are specialized activities.

## 6.2 Socio-economic aspects

The area is remotely situated with the nearest big town, Musina,  $\pm 32$  km to the west. The proposed development provides opportunities for local labor and therefore skills and capacity is improved with economic stability. The labor is sourced from the community of Masisi area,  $\pm 67$  km to the south-east.

The prevailing drought in this semi-arid location had a marked influence on the carrying capacity of the Mopane veld. To prevent the survival of productive game species they had to be supplied with additional quality food. The farm already produces lucerne that is suitable. The drought however necessitated a higher demand of supplementary food due to the prevailing drought and the negative impact on the primary producers of food, e.g. the biomass from herbaceous (grasses) en leave (trees).

The income for a game farm is the utilization of live game sales and hunting of game species. If no income is generated from the renewable natural resource, e.g. game then the possibility of lay-off of workers is normally the first step in financial survival.

It is for the above obvious reason that the applicant decided to clear the vegetation to extend his existing lucerne production potential. Producing his own lucerne is a better option as to buy it elsewhere at higher than normal prices due to the overall demand of

the cumulative need by other game farmers and then still has to transport it to his property which can be considered as located in a remote location.

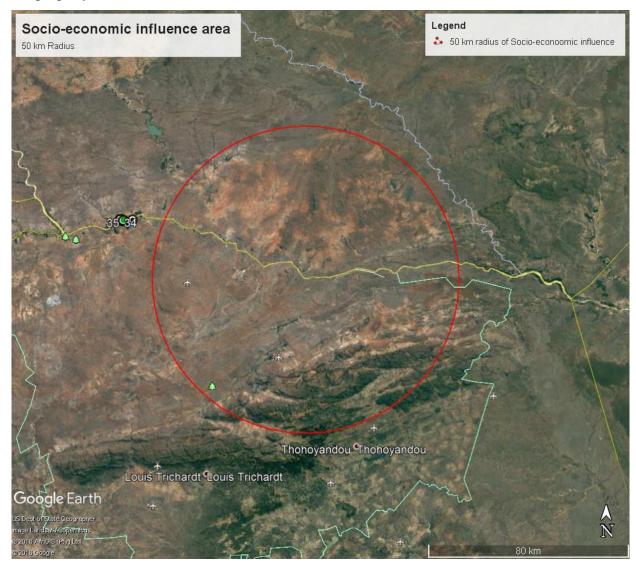


Figure 13: Socio-economic influence area

## 7 PUBLIC PARTICIPATION PROCESS

## 7.1 Process

A PPP was conducted for which the documentation is attached as Appendix B. The process included the following:

## 7.1.1 Advertisement in newspaper

• Paper: Zoutpansberger

• Date: 22 June 2018

Attached find Register of Advertisement and Register of Response.

Copy attached as Appendix B

## 7.1.2 Placing of notices

Notices were placed at:

- Gate to project area on the farm
- At notice board at Musina Local Municipal offices

Attached find Register of placement and Register of Response. Appendix B

Copy of notice is attached as Appendix B

#### 7.1.3 Written notifications to I&A Parties

- (i) Notifications were sent by electronic post to Organs of state :
  - DAFF
  - DWS
  - Musina Local Municipality
  - Vhembe District Municipality

Attached find:

- a. Notification Register: Appendix B
- b. Response Register: Appendix B
- (ii) Landowners

Notifications were sent by electronic post to:

- Mr Ken Liebenberg:
- Mr Johannes Joubert:
- Mr Anthony Bornman: ZZ2
- Mr C. de Villiers Theunissen:

Attached find map indicating properties of neighbours. Appendix C

#### 7.2 Results

The following results were received:

- 7.2.1 Comments: None
- 7.2.2 Objections: None

#### 8 NEED AND DISERABILITY OF ACTIVITY

The expansion is the direct result to support the game to survive after the prolonged drought and to lessen the feeding impact on the herbaceous layer on the farm. The existing lucerne croplands are too small to supply sufficient lucerne to maintain the condition of the

game. The environmental compliance is the measure to control impact on the receiving environment within all legal parameters.

To be viable and to survive in the niche market segment of live game sales and hunting the game had to be kept alive. The clearing of indigenous vegetation triggered the environmental regulations related to expansion.

## Comments:

- (i) The activity is in line with the landuse, which is agriculture;
- (ii)The activity will contributes to maintaining the game population on the farm;
- (iii) The activity provides permanent job security in a deep-rural setting where full-time secure working opportunities are rare;
- (iv) The activity is an integral part of game farming in the semi-arid region.
- (v) The use of the area for crop plantings is using s small area that cannot be used as a viable part of the game producing farm;
- (vi) The activity is a direct contributor to the economy of South-Africa in the form of SARS and other institutions.
- (vii) It generates foreign economy by visiting hunters.

#### 9 CONSIDERATION OF ALTERNATIVES

## 9.1 No-go alternative

This option can only be considered if the assessment and/or the other professional studies revealed a fatal flaw in the process and or where no other planning guidelines could correct or mitigate identified issues and/or flaws.

#### 9.2 Process alternatives

The process of expansion is the only option to be able to ensure that the process of providing a constant product (lucerne) as supplementary feeding from the farm itself. The resources of arable land for crop production are available and water is available. The following processes have to be complied with:

- (i) Environmental compliance;
- (ii) Permit to utilise arable land;
- (iii) Be in possession of a wateruse license.

#### 9.3 Location alternatives

- (i) The location is the most appropriate site to accommodate the needs of the developer. No other suitable options are available on the property. The following is conducive for the location:
  - c. Using the area between the district road and the river provides the opportunity to use land fragmented and isolated from the rest of the farm;
  - d. No need for access roads, pipelines, electricity lines etc.

#### 10 SPECIALIST REPORTS

## 10.1 Ecological-and Red Data Report

This report was compiled by Tua Conserva Environmental & Conservation Services cc. Attached as Appendix D.

Below is a summary of the findings and recommendations:

- i) That the project area has been historically disturbed.
- ii) The loss in vegetation and associated habitat is not of high concern and that with mitigation the projects impact on the receiving environment can be managed.

## 10.2 Archaeological Phase 1 Report.

A Phase 1 Archaeological Report was conducted this decision is in line with the necessary legislation. No archaeological or heritage sites were found.

A report from a specialist is attached as Appendix E

National Heritage Resources Act, Act 25 of 1999, Section 38 (1) of this Act requires the conduction of Heritage Impact Assessment in case of:

- (a) the construction of a road, wall, powerline, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50 m in length; and
- (c) any development or other activity which will change the character of an area of land, or water -
  - (i) exceeding 5 000 m<sup>2</sup> in extent;
  - (ii) involving three or more existing erven or subdivisions thereof; or
- (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
- (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a Provincial Heritage Resources Authority;
- (d) the re-zoning of a site exceeding 10 000 m2 in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a Provincial Heritage Resources Authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority

and furnish it with details regarding the location, nature and extent of the proposed development.

Section 3 of the national heritage resource Act (25 of 1999) lists a wide range of national resources that qualify as part of South Africa national estate. When conducting a Heritage Impact Assessment (HIA) the following heritage resources had to be identified:

- (a) Places, buildings structures and equipment of cultural significance
- (b) Places to which oral traditions are attached or which are associated with living heritage
- (c) Historical settlements and townscapes
- (d) Landscapes and natural features of cultural significance
- (e) Geological sites of scientific or cultural importance
- (f) Archaeological and paleontological sites
- (g) Graves and burial grounds including-
  - (i) ancestral graves
  - (ii) royal graves and graves of traditional leaders
  - (iii) graves of victims of conflict
  - (iv) graves of individuals designated by the Minister by notice in the Gazette
  - (v) historical graves and cemeteries; and
- (vi) other human remains which are not covered by in terms of the Human Tissue Act, 1983 (Act No. 65 of 1983)
- (h) Sites of significance relating to the history of slavery in South Africa
- (i) moveable objects, including -
- (i) objects recovered from the soil or waters of South Africa, including archaeological and paleontological objects and material, meteorites and rare geological specimens
- (ii) objects to which oral traditions are attached or which are associated with living heritage
- (iii) ethnographic art and objects
- (iv) military objects
- (v) objects of decorative or fine art
- (vi) objects of scientific or technological interest; and
- (vii) books, records, documents, photographic positives and negatives, graphic, film or video material or sound recordings, excluding those that are public records as defined in section 1 of the National Archives of South Africa Act, 1996 (Act No. 43 of 1996).

Section 3 of the National Heritage Resources Act (No. 25 of 1999) also distinguishes nine criteria for places and objects to qualify as 'part of the national estate if they have cultural significance or other special value ... '. These criteria are the following:

- (a) Its importance in the community, or pattern of South Africa's history
- (b) Its possession of uncommon, rare or endangered aspects of South Africa's natural or cultural heritage
- (c) Its potential to yield information that will contribute to an understanding of South Africa's natural or cultural heritage
- (d) Its importance in demonstrating the principal characteristics of a particular class of South Africa's natural or cultural places or objects

- (e) Its importance in exhibiting particular aesthetic characteristics valued by a community or cultural group
- (f) Its importance in demonstrating a high degree of creative or technical achievement at particular period
- (g) Its strong or special association with a particular community or cultural group for social, cultural or spiritual reasons
- (h) Its strong or special association with the life or work of a person, group or organisation of importance in the history of South Africa; and
- (i) Sites of significance relating to the history of slavery in South Africa.

## Other sections of the Act with relevance are the following:

- **Section 34(1)** No person may alter or demolish any structure or part of a structure, which is older than 60 years without a permit issued by the relevant provincial heritage resources authority.
- **Section 35(4)** No person may, without a permit issued by the responsible heritage resources authority:
  - destroy, damage, excavate, alter, deface or otherwise disturb any archaeological or palaeontological site or any meteorite
- **Section 36 (3)** No person may, without a permit issued by SAHRA or a provincial heritage resources authority:
  - destroy, damage, alter, exhume, remove from its original position or otherwise disturb any grave or burial ground older than 60 years which is situated outside formal cemetery administered by a local authority; or
  - bring onto or use at a burial ground or grave any excavation equipment, or any equipment which assists in detection or recovery of metals.
- 10.3 Environmental Management Plan (EMP)

Is attached as Appendix F

# 11. ADVANTAGES AND DISADVANTAGES OF THE PROPOSED ACTIVITY AND ALTERNATIVES ON THE ENVIRONMENT AND COMMUNITY

## 11.1 Advantages of the proposed activity

- The proposed croplands are essential for lucerne production used for feeding of game.
- ii) The feeding of game directly supports the game viewing-and hunting activities on the farm.
- iii) It also supplies food for hippopotamus to survive the drought till such time that they can move back to the Limpopo River. This is a positive contribution to biodiversity.
- iv) Is an agricultural activity on productive land that was not previously utilised.

- v) Local (in-situ) renewable resources are used.
- vi) It is more cost-effective to produce fodder than to buy it elsewhere and to transport it to farm.
- vii) It provides permanent job-security.
- viii) It also provides a food reserve in the winter for other wildlife species.



Figure 14: Vervet monkey in lucerne land

## 11.2Disadvantages of the proposed activity

- i) Clearing of indigenous vegetation.
- ii) Clearing of protected species.

#### 11.3Alternatives

i) Use area for livestock production.

#### Rational:

- Not considered as the area is too small for via numbers of livestock. It does not have the carrying capacity.
- Theft of livestock is a concern from Zimbabwe.
- The area is in FMD Protection Zone in South Africa and FMD Uncontrolled in Zimbabwe which places a high risk on livestock farming.
- To move livestock is an intensive management process with specific control measures which is costly for testing of blood samples.
- ii) Use area for wildlife breeding project.

#### Rational:

- Area is zoned as FMD Infected Zone by DAFF.
- Wildlife cannot be moved as live assets from the area. Same reason as for livestock.
- iii) Use area for hunting.

#### Rational:

- The area cannot support viable game numbers for sustainable hunting.
- Area is too small to be used as viable hunting area.
- iv) Leave area as is.

#### Rational:

- Agricultural land is left unproductive.
- v) Use area for crop production

#### Rational:

- Lucerne can be moved without FMD restrictions.
- The croplands can be used as a further buffer zone for biosecurity against
   FMD spreading into the adjoining farm.
- The farm can support its needs in lucerne for game.

## 12. ENVIRONMENTAL IMPACT DETERMINATION AND EVALUATION

## 12.1 Assessment method

The assessment of impacts will largely be based on DEA's (1998) Guideline Document: EIA Regulations. The assessment will consider impacts arising from the planning, construction and operation phases of the proposed project both before and after the implementation of appropriate mitigation measures. Due to the inherent difficulties involved in attaching significance ratings to impacts, it is proposed that the evaluation of the significance of impacts be done according to the rating system described below.

In any process of identifying and recognizing impacts, one must recognize that the determination of impact significance is inherently an anthropocentric concept. Duinker and Beanlands, (1986) in DEAT 2002. Thompson (1988), (1990) in DEAT 2002 stated that the significance of an impact is an expression of the cost or value of an impact to society.

However, the tendency is always towards a system of quantifying the significance of the impacts so that it is a true representation of the existing situation on site. This will be done by using where ever possible, legal and scientific standards which are applicable. The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The *consequence matrix* use parameters like *severity, duration* and *extent* of impact as well as *compliance* to standards. Values of 1-5 are assigned to the parameters that are added and averaged to determine the overall consequence. The same process is followed with the *likelihood* that consists of two parameters namely *frequency* and *probability*. The overall consequence and the overall likelihood are then multiplied to give values ranging from 1 to 25. These values as shown in the following table are then used to rank the significance. It must be said however that in the end, a subjective judging of an impact can still be done, but the reasons for doing so must be qualified.

#### Significance ratings (Plomp 2004)

**Table 2: Significance Ratings** 

Significance	Low	Low-	Medium	Medium-	Hig
		Medium		High	h
Overall					
Consequence					
X Overall	1-	5-9.9	10-	15-	20-
Likelihood	4.9		14.9	19.9	25

## Description of the parameters used in the matrixes

#### **Severity**

Low Cost/high potential to mitigate. Impacts easily reversible, non harmful insignificant change/deterioration or disturbance to natural environments.

Low-medium Low cost to mitigate Small/potentially harmful Moderate change/ deterioration or disturbance to natural environment.

Medium Substantial cost to mitigate. Potential to mitigate and potential to reverse impact. Harmful Significant change/ deterioration or disturbance to natural environment.

Medium-high High cost to mitigate. Possible to mitigate Great/Very Harmful Very significant change/deterioration or disturbance to natural environment.

High Prohibitive cost to mitigate. Little or no mechanism to mitigate.

Irreversible. Extremely Harmful Disastrous change/deterioration or disturbance to natural environment.

#### Duration

Low Up to one month

Low-medium One month to three months

Medium Three months to one year

Medium-high One to ten years
High Beyond ten years

**Extent** 

Low Footprint area

Low-medium Area directly bordering the footprint area

Medium Farms adjoining to west and east.

Medium-high Surrounding farms

High Regional National and International

**Frequency** 

Low Once/more a year or once/more during operation

Low-medium Once/more in 6 months

Medium Once/more a month

Medium-high Once/more a week

High Daily

**Probability** 

Low Almost never/almost impossible
Low-medium Very seldom/highly unlikely
Medium Infrequent/unlikely/seldom
Medium-high Often/Regularly/Likely/Possible

High Daily/Highly likely/definitely

## Compliance

The following criteria are used during the rating of possible impacts.

Low Best Practice
Low-medium Compliance

Medium Non-compliance/conformance to Policies etc-Internal

Medium-high Non-compliance/conformance to Legislation etc-External

High Directive, prosecution of closure or potential for non-

renewal of licenses or rights.

# 12.2 Aspects, related impacts, significance and proposed mitigation measures

The issues identified were placed in Groupings and the number of issued for each was listed below:

Biophysical Considerations :
 Current and Potential Landuse :
 Social Considerations :

4. Socio-economic Considerations:

5. Cultural Considerations :

6. Risk and Hazard Considerations :7. Cumulative Considerations :

BIOPHYSICAL CHARACTERISTICS									
Sense of place in receiving environment									
PHASE		Construction a	nd operational						
CONFIDEN	CE	High (50-1009	%)						
	EX	TENT				RISK			
Site Specific	Local	Regional	National	Yes			Yes No		
PROBABILITY					SIGNIFICANCE				
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High	
			STATUS & IN	TENSI	TY				
Major		Moderate		N	<b>I</b> inor				
+5	+4	+3	+2		+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATIO	)N			]	FREQUENCY	7	
Transient	Short- term	Medium	Long-term	Per	manent	High	Med	Low	
COMPLIANCE									

**COMPLIANCE** 

Construction: High Operational: High

#### **ISSUE**

Wrong placing in receiving environment regards:

- Landuse
- Sterilising land

#### **NATURE OF IMPACT**

- (i) In contrast with approved landuse
- (ii) Fragmentation of biological communities

# AFFECTED AREAS

The footprint of initial area cleared and addition phased area to be cleared

## **BACKGROUND INFORMATION**

#### Background information:

The development is inland from the Limpopo River on is bordered on the south by the District gravel road with Escom power lines.

The area has been subjected to human interference since early 1900's with a marked increase from the early 1950's.

The Foot-and-Mouth fence was erected in the mid-sixties along the Limpopo Riverbank.

The Border protection fences and military road was erected in 1984.

#### Status before new development:

Google images (prior to development and dated back to 2004) and on-site surveys indicates previous human interference in the form of bush clearing, roads and prospecting.

The vegetation cannot be considered as pristine due to the above.

Large indigenous trees are present throughout the project area, protected species is still present on the cleared area indicating that preservation of trees is important to the developer. The vegetation is described as Mopane Bushveld (Low & Rebelo, 1996) with large parts being conserved.

## What was found:

- (i) The environmental landscape has already been transformed by infrastructure with the development area partly rehabilitated.
- (ii) The footprint area was subjected to human influence over time.
- (iii) The area is outside the 32 m off-set of the Limpopo Riverbank.
- (iv) Pollution built-up and/or signs of pollutions of significance were not found.
- (v) The activity is in line with the landuse of agriculture. All along the river similar areas has been cleared and used for agricultural purposes.
- (vi) The activity is seen as positive for agricultural game farming purposes.
- (vii) It provides jobs in a remote rural area.

#### **MITIGATION:**

#### What is recommended for mitigation:

(i) That agriculture approval is applied for.

BIOPHYSICAL CHARACTERISTICS									
Sense of place: Location									
PHASE Construction and operational									
CONFIDENCE High (50-100%)									
	EX	TENT				RISK			
Site Specific	Local	Regional	National	Yes No			Yes No		
PROBABILITY				SIGNIFICANCE					
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High	
		S	TATUS & IN	TENS	ITY				
Major		Moderate		N	Iinor				
+5	+4	+3	+2		+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATIO	ON			FF	REQUENC	Y	
Transient	Short- term	Medium	Long-term	Permanent		High	Med	Low	
			COMPLIA	NCE					

Construction: High Operational: High

#### **ISSUE**

Destruction and/or removal of vegetation with protected status and/or development in 32 m off-set from Limpopo Riverbank and associated vegetation.

## **NATURE OF IMPACT**

- (i) Removal of protected species
- (ii) Destruction of Red Data species

## **AFFECTED AREAS**

The footprint of the exiting cleared area and the proposed phased clearing.

## **BACKGROUND INFORMATION**

#### Sense of place:

The project is situated outside the riparian vegetation zone.

Areas for crop production is situated upstream and downstream in similar zone. One area downstream is approximately 10 km long. The same is evident upstream. It is indicative that crops can be produced.

The sense of location of the project area was found to be conducive for:

- Minimum disturbance of productive land;
- Minimum sterilising of productive land;
- Minimum fragmentation of productive land;
- Best option for fragmented land use;
- Placing in close proximity to existing farming infrastructure;
- Minimum impact on receiving environment.

## **MITIGATION:**

- (i) The crop land should be properly fenced to prevent damage to crops.
- (ii) The watercourse should be fenced at both sides to prevent spill-over development form the croplands.
- (iii) The existing roads can be used for movement.

BIOPHYSICAL CHARACTERISTICS									
Flora: Destruction									
PHASE Construction and operational									
CONFIDENCE High (50-100%)									
	EX	TENT				RISE	<u> </u>		
Site Specific	Local	Regional	National	Yes No			No		
PROBABILITY				SIGNIFICANCE					
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High	
		S	TATUS & IN	TENS	ITY				
Major		Moderate		N	Iinor				
+5	+4	+3	+2		+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATIO	ON			F)	REQUENC	Y	
Transient	Short- term	Medium	Long-term	Peri	manent	High	Med	Low	
			COMPLIA	NCE					

Construction: High Operational: Low

#### **ISSUE**

Destruction and/or removal of vegetation with protected status.

## **NATURE OF IMPACT**

- (iii) Removal of protected species
- (iv) Destruction of Red Data species

## **AFFECTED AREAS**

The footprint of the actual structure and direct surroundings used for access and infrastructure

## **MITIGATION:**

## Background information:

The area already cleared included protected species.

The area shows signs of past human impacts.

## Status before new extension:

Google images (prior to development and dated back to 2004) indicates that minimum vegetation has been partly removed for infrastructure. This is not uncommon for farming sites.

The vegetation cannot be considered as pristine due to the above.

The vegetation is described as Mopane Bushveld (Low & Rebelo, 1996) with large parts being conserved.

#### What was found:

- (i) Listed protected species were found on the area that was cleared.
- (ii) The footprint area was subjected to human influence over time which left the protected species intact.

#### What is recommended for mitigation:

- (i) That no protected trees are removed. This includes:
  - Baobab
  - Shepherd's Tree
  - Marula
  - Apple Leaf

BIOPHYSIC	BIOPHYSICAL CHARACTERISTICS							
Fauna: Influence of activities on wildlife								
PHASE Construction and operational								
CONFIDE	NCE	High (50-100	)%)					
	EXT	TENT				RIS	K	
Site Specific	Local	Regional	National		Yes		N	0
PROBABILITY					S	IGNIFI	CANCE	
Definite	Highly probable	Probable	Improbabl e	Low	Low- Medium	Mediu m	Medium -High	High
		STA	TUS & INTE	ENSIT	Y			
Major		Moderate		Mi	nor			
+5	+4	+3	+2	+	1		Positive	
-5	-4	-3	-2	-:	1		Negative	
		<b>DURATION</b>				Fl	REQUEN	CY
Transient	Short-	Medium	Long-term	Permanent		High	Med	Low
	term							
			COMPLIAN	CE				

Construction: High Operational: Low

**ISSUE** 

Influencing the natural populations of species

## NATURE OF IMPACT

- (i) Destruction of habitat
- (ii) Creating an artificial food source for mammal species

## **AFFECTED AREAS**

Area surrounding the project area.

## **MITIGATION:**

### Background information:

The development is situated in between the district road to the south and the Limpopo River to the north.

The Border Protection System consisting of a double fences and a military patrol road was erected parallel to the Limpopo River. This system is in disrepair but planning is in process to repair and upgrade the fences and road.

Elephant, hippopotamus, buffalo and various other game species move across the Limpopo River from Zimbabwe.

Damage to crops and infrastructure is caused by mostly the elephants.

Buffalo has to be destroyed due to the threat of FMD.

## What was found:

- (i) The system structures impacted on the receiving environment.
- (ii) Habitat, mostly vegetation was destroyed for species.
- (iii) The project area, and habitat, is isolated by manmade structures.
- (iv) The existing structures prevent the movement of terrestrial medium-large mammal species to and from the river system.
- (v) Elephant still poses a problem by circumventing the fences still in place and causes damage to croplands.

## What is recommended for mitigation:

(i) That the croplands is properly fenced and electrified to protect crops.

BIOPHYSIC	CAL CHAR	ACTERISTIC	CS					
Pollution: T	errestrial							
PHASE Construction								
CONFIDENCE High (50-100%)								
	EXT	FENT				RISK		
Site Specific	Local	Regional	National		Yes No			
	PROBA	BILITY			SIG	NIFICA	NCE	
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High
STATUS & INTENSITY								
Major		Moderate		M	inor			
+5	+4	+3	+2	•	+1	Positive		
-5	-4	-3	-2	-1		Negative		
		DURATIO	ON	FREQUENCY				CY
Transient	Short- term	Medium	Long-term	Pern	nanent	High	Med	Low
			COMPLIA	NCE				
Construction	on: Low-me	dium (Compl	iance)					
			ISSUE	1				
Pollution by	use of cher	nicals						
		N.	ATURE OF I	MPAC	T			
Destruction	of vegetation	n						
		P	AFFECTED A	AREAS	<u> </u>			
Riparian ve	getation and	protected left	t intact by clea	ring				
			MITIGATI	ION:				

## Background information:

The adjoining towards the river area has been subjected to chemicals when the Border Protection system has been erected.

# **Status** of terrestrial surroundings:

- (i) No pollution was found.
- (ii) No chemicals are used in lucerne production.

## What is recommended for mitigation:

- (i) Best practises in farming should be implemented.
- (ii) That an environmental audit inspection is conducted every two months from approval for a six moth period.

BIOPHYSI	BIOPHYSICAL CHARACTERISTICS								
Natural syst	ems: Biodiv	ersity and eco	ological system	ıs					
PHASE		Construction	and operation	nal					
CONFIDE	NCE	High (50-10	0%)						
	EX	TENT		RISK					
Site Specific	National		Yes		No				
	PROBA	ABILITY			S	<b>IGNIFIC</b>	ANCE		
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High	
		ST	ATUS & INT	ENSI	ГҮ				
Major		Moderate		M	inor				
+5	+4	+3	+2	-	+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATIO	N			FF	REQUENC	CY	
Transient Short- Medium Long-term Permanent High Med term							Low		
	COMPLIANCE								

**COMPLIANCE** 

**Construction: Medium (Compliance) Operational: High (Compliance)** 

#### **ISSUE**

Influence on the biodiversity of the area and influences on habitats and system functionality

# **NATURE OF IMPACT**

Destruction of sensitive habitat that supports biodiversity

#### **AFFECTED AREAS**

Project footprint area

#### **BACKGROUND INFORMATION**

The development is in close proximity to the farming infrastructure and has been integrated with the existing structures, some of which has been adapted for the extension of the warehouse packing structures.

#### <u>What was found:</u>

- (i) The area in which the project is located is indicated as CBA2. The project area has however no direct influence on the water habitat or connectivity.
- (ii) Location
  - The footprint area of the project is situated on a footprint area defined by previous security structures a provincial road and farming infrastructure activities.
  - The existing cleared footprint and the phased future footprint still leaves a large area undeveloped that could be developed undisturbed.
- (iii) Croplands
  - There are existing croplands approximately 12 ha land under cultivation directly to the west;
- (iv) Total farm
  - Total surface area of farm is approximately ?????? ha.
  - The development represents ???% of the total farm.

#### **MITIGATION:**

#### What is recommended for:

- (i) Croplands:
  - (a) Any protected tree species should be left intact on the old croplands when it is cultivated.

CURRENT	AND POTE	ENTIAL LAN	D USE AND	LANDSCI	PAE CH	ARACTI	ER		
Compatibili	ity with zone	ed land use							
PHASE		Construction	and operatio	nal					
CONFIDE	NCE	High (50-10	0%)						
	EXT	FENT				RISK			
Site Specific	Local	Regional	National	Yes No					
		ABILITY				IFICAN			
Definite	Highly probable	Probable	Improbabl e	Low	Low- Medium	Medium	Medium -High	High	
		ST	ATUS & INT	ENSITY					
Major		Moderate		Minor					
+5	+4	+3	+2	+1		Posi	tive		
-5	-4	-3	-2	-1		Negative			
		DURATION			FREQUENCY				
Transient	Short-	Medium	Long-term	Permaner	nt Hig	gh N	led	Low	
	term								
			COMPLIA	NCE					
Operationa	ıl: Complian	ice							
			ISSUE						
The project	does not con	nform with lai							
		N <sub>A</sub>	ATURE OF I	MPACT					
Incompatib	le landuse			A DELG					
T. I.	T. 40		AFFECTED A	AREAS					
Farm Limpo	opo View 42	2 MT	BATTER OF A TEXT	ION					
****	. T		MITIGAT	ION:					
	What was found: The area is zoned for agriculture.								
			I : D:-						
		parallel to the							
_	The croplands is outside the 32 m zone form the riverbank.								

**Mitigation** 

(i)

(ii)

Protected tree species be left in place

Watercourses buffer zones are delineated.

CURRENT A	AND POTI	ENTIAL LAN	D USE AND LA	NDSCI	PAE CH	ARACT]	ER	
Legal consid	erations: W	Vater Use licen	ces					
PHASE		Construction	and operational					
CONFIDEN	ICE	High (50-100	)%)					
	E	XTENT				RISK		
Site Specific	Local	Regional	National		Yes		No	
	PROI	BABILITY			SIG	NIFICA	NCE	
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High
STATUS & INTENSITY								
Major		Moderate		Mi	nor			
+5	+4	+3	+2	+	-1		Positive	
-5	-4	-3	-2	-	1		Negative	
		DURATIO	ON			FR	<b>EQUENC</b>	Y
Transient	Short-	Medium	Long-term	Perm	anent	High	Med	Low
	term							
			COMPLIANC	E				
Operational	: Medium-	high (Complia						
			ISSUE					
Water Use L	icense							
		NA	TURE OF IMI	PACT				
Legal compl	iance							
	AFFECTED AREAS							
Limpopo Vie	Limpopo View 42 MT							
	MITIGATION:							

Background:
There is previous existing croplands under irrigation.

A WULA is available from DWS.

# **Documentation:**

DWS permits:

Section 21(a): Taking water from a water resource. Available. Attached as (i) Appendix E.

# What is recommended for mitigation:

Continuous monitoring of water use.

# Social Impact Assessment is analysing, monitoring and managing the social consequences of development in communities and should always be of prime concern

Awareness of the differential distribution of impacts among different groups in society, and particularly the impact burden experienced by vulnerable groups in the community should always be of prime concern

There are many International Agreements and Declarations that contain notable statements.

Principle 1 of the 1992 Rio Declaration on Environment and Development, for example, states that "Human beings are at the centre of concerns for sustainable development."

SOCIAL C	ONSIDER	ATIONS				_				
			on of impacts an	nong gi	roups in s	ociety.				
			•	- 0	тоары пты					
PHASE			and operational							
CONFIDE		High (50-10	0%)							
~	_	XTENT	I			RISK				
Site Specific	Local	Regional	National		Yes		No			
		BABILITY		т		GNIFICA		TT' 1		
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High		
		ST	TATUS & INTI	ENSIT	Ϋ́Y					
Major		Moderate		M	Iinor					
+5	+4	+3	+2		+1		Positive			
-5	-4	-3	-2		-1		Negative			
DURATION FREQUENCY										
Transient Short- Medium Long-term Permanent High Med Low										
	term									
			COMPLIAN	CE						
Operationa	al: High po	sitive								
			ISSUE							
The effect of	on social sta	ability in comn								
			ATURE OF IM							
	rticularly im	pact lessen/burd	dens the social exp	perienc	ed by vuln	erable gro	oups in the			
community			A DEED CORDED AND	DE 4 0						
3.5			AFFECTED A	<u>KEAS</u>						
Masisi		D. C.		000	TYON					
XX/1 4 C	1	BACK	GROUND INFO	<u>ORMA</u>	ATION					
What was for (i) Th		t is in a deep rur	al setting							
	_	_	ar setting. rmers (black-and w	hite) an	d rural com	munities				
` '			ractising two agricu			munitios.				
	_	_	influence area is rea							
		ainstay for the ar								
		•	nt opportunities for	membe	rs of rural c	ommunitie	es.			
(vii) The development has a significant positive influence in supporting the local rural social context.										
	MITIGATION:									
			1,111101111	71 10						

#### What is recommended for mitigation:

- No recommendation can be made except to recommend that the application as contemplated is approved with recommendations made.
- (ii) That the EMP compiled is implemented.
- (iii) That an environmental practitioner is appointed for the project to conduct independent audits for the farm.

	SOCIAL CONSIDERATIONS Give picture of local cultural context								
PHASE		Construction	n and operation	nal					
CONFIDE	NCE	High (50-10	0%)						
	EXTENT					RISI	ζ		
Site Specific	Local	Regional	National		Yes		No	)	
	PROB	ABILITY			S	<b>IGNIFIC</b>	ANCE		
Definite	finite Highly probable Probable Improbable Low Low-Medium Medium High							High	
		ST	ATUS & INT	'ENSI	TY				
Major		Moderate		M	inor				
+5	+4	+3	+2	-	+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATIO	N			FF	REQUENC	CY	
Transient	Short-	Medium	Long-term	Pern	nanent	High	Med	Low	
	term								
COMPLIANCE									
Operational: High positive									
A CONTRACTOR OF THE CONTRACTOR									

#### **ISSUE**

Does the type of activity alter the historical landuse pattern of agriculture

#### **NATURE OF IMPACT**

Sterilising or altering productive agricultural land

# **AFFECTED AREAS**

Project footprint area

#### **MITIGATION:**

#### What was found:

- The demographic location of the influence area is remote rural.
- The economic mainstay for the area is agriculture.
- It provides permanent employment opportunities for both sexes.
- The activity provides a diversification of agriculture potential of the farm. This is essential to job security.
- The development has a significant positive influence in supporting the local rural social context.

# What could happen?:

The scenario of the domino effect if the project is not approved could result in:

- Die-off of game; which will result in
- Less income from game sales and hunting; which will result in
- Retrenching of workers and resultant financial stress for the families.
- It will impact on biodiversity, e.g. the hippopotamus will most probably die as well.

#### What is recommended for mitigation:

- No recommendation can be made except to recommend that the application as contemplated is approved with recommendations made.
- That the EMP compiled is implemented.
- That an environmental practitioner is appointed for the project to conduct independent audits for the farm.

The aim of the socio-economic considerations is to understand the current social and economic environment and use it as a baseline for predictions and measurements

"The right to development is an inalienable human right by virtue of which every human person and all peoples are entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be fully realised."

runy reanse	Ju.									
SOCIO-EC	ONOMIC C	ONSIDERAT	ΓIONS							
Documents	s and analysi	s of local hist	orical setting o	of proje	ect					
PHASE		Construction	n and operation	nal						
CONFIDE	NCE	High (50-10	0%)							
	EX'	TENT				RIS	K			
Site Specific	Local	Regional	National		Yes		N	0		
	PROB	ABILITY			S	IGNIFI	CANCE			
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High		
STATUS & INTENSITY										
Major	Major Moderate Minor									
+5	+4	+3	+2	-	+1	Positive				
-5	-4	-3	-2		-1		Negative			
		DURATIO	N			FREQUENCY				
Transient	Short-	Medium	Long-term	Pern	nanent	High	Med	Low		
	term									
			COMPLIA	NCE						
Operation	al: High posi	itive								
			ISSUE							
Does the type	of activity alte		the agricultural pr			and or sur	rounding pro	perties.		
			ATURE OF I	MPA(	CT					
Sterilising of	or altering pr	oductive agric								
			AFFECTED A	REA	S					
Project foot	tprint and ad	joining proper								
			MITIGATI	ON:						
<b>Background</b>	information:									

The development is in close proximity to the farming infrastructure for crop production.

Agriculture activities carried on since 2011 by the owner when he bought the farm.

### What was found:

The footprint area of the project is situated on a footprint similar to the rest of farming both to the west and east.

The footprint area has been altered with the erection of the Border Protection System.

Existing structures is present.

The system as currently implemented is contributing to a structured farming planning process.

# What is recommended:

That project proceed as an agriculture activity.

#### SOCIO-ECONOMIC CONSIDERATIONS Project scale **PHASE** Construction and operational **CONFIDENCE** High (50-100%) **EXTENT RISK** Site National Regional Yes No Local Specific **PROBABILITY SIGNIFICANCE** Low-Medium Medium-High **Definite** Probable **Improbable** probable Medium High **STATUS & INTENSITY** Minor Major Moderate +2 Positive +5 +4 +3 +1-5 -3 -2 -1 Negative -4 **DURATION FREQUENCY**

#### **COMPLIANCE**

Permanent

High

Med

Low

Long-term

**Operational:** The type of activity is considered as a light industrial-agricultural and allowable on land zoned for agricultural use. M-H.

#### **ISSUE**

Does the type of activity alter or infringe on the agricultural productivity of the land or surrounding properties.

#### **NATURE OF IMPACT**

Sterilising or altering productive agricultural land

# **AFFECTED AREAS**

Project footprint area and surroundings

#### WHAT WAS FOUND

Total size of farm:  $\pm$  1521.4112 ha

Short-

term

Total new cropland (24G):  $\pm 4.5$  ha. Represent 0.3% of farm.

Medium

Total planned phased new crop land: ± 24.8 ha

Total percentage of farm used for new croplands: 1.6 %

#### **MITIGATION:**

#### What is recommended:

Transient

That no development is considered on arable agricultural land.

Future expansion should be directly adjoining the existing croplands and use the same infrastructure.

The 32 meters bufferzones is implemented for all watercourses.

Protected trees must be left in-situ.

SOCIO-ECO	SOCIO-ECONOMIC CONSIDERATIONS								
Demographic	c influence								
PHASE		Construction	and operational						
CONFIDEN	ICE	High (50-100	L						
	E	XTENT				RISK			
Site Specific	Local	Regional	National		Yes		No		
	PRO	BABILITY			SI	GNIFIC	ANCE		
Definite	Highly probable								
		S	TATUS & INTE	ENSIT	Y				
Major		Moderate		N.	Iinor				
+5	+4	+3	+2		+1		Positive		
-5	-4	-3	-2		-1		Negative		
		DURATI	ON			F	REQUENC	Y	
Transient	Short- term	Medium	Long-term	Peri	manent	High	Med	Low	
	COMPLIANCE								

**Operational:** The type of activity is considered as an agricultural activity and allowable on land zoned for agricultural use.

#### **ISSUE**

Does the type of activity alter or infringe on the agricultural productivity of the land or surrounding properties.

Level of vulnerability in social environment

The project scale

- Input
- Output

# AFFECTED AREAS

The affected areas include firstly the direct demographic area in which the project is situated, secondly the regional and provincial demographic context.

#### Direct:

The proposed development is a direct contributor to the demographic influence due to its location as well as the specific contributor on various levels in the area.

This influence is positive.

#### **Indirect:**

In the same way in which the game farm provides job opportunities and contribute to the area-, regional-and national economy, it also in-directly provides jobs and economic welfare in the input chain into the agricultural activities as well as the out-put chain from the activities such as game sale and hunting by both local and foreign hunters.

#### **NATURE OF IMPACT**

Impact on social well-fare on job-losses if project is closed.

#### **BACKGROUND INFORMATION**

#### **Background information:**

The development developed over time and expanded by involving businesses and producers that delivered services and products, this is commonly referred to as *value chain input*. From the game farm (where the game is supported by the lucerne) game products is distributed which in turn creates an *value chain output* to the point where the consumers buys the product.

### What was found:

The influence footprint area of the project is situated on a footprint area defined by previous-and current historical farming infrastructure activities since 1950's.

A total of not less than 10 businesses are involved in the value chain.

The output value chain is much more complex as the products are dispersed into South Africa and off-shore by foreign hunters.

NEMA and other legislation are there to ensure sustainability and ultimately welfare for the communities and South Africans as a whole. This farm is producing a prodct and is part of the area and district municipal social and economic producers.

To close or not approve an environmental authorisation will have un-calculated negative impacts.

#### **MITIGATION:**

#### What is recommended for mitigation:

It is recommended that this application with recommendation is implemented.

The ecotourism component should be exploited and opportunities where tourists (visiting the farm) can spend more money should be created.

SOCIO-ECONOMIC CONSIDERATIONS									
		ial environme							
PHASE		Construction	n and operation	nal					
CONFIDE	NCE	<b>CE</b> High (50-100%)							
	EX	TENT			R	ISK			
Site Specific	Local	Regional	National	Yes			No		
	PROB	ABILITY			SIGNIF	<b>ICANCE</b>			
Definite	Highly probable	Probable	Improbable	Low Low- Medium	Medium	Medium- High	High		
			STATUS & I	NTENSITY					
Major		Moderate		Minor					
+5	+4	+3	+2	+1		Positi	ve		
-5	-4	-3	-2	-1		Negati	ive		
		DURATIO	N			FREQUE	ENCY		
Transient Short- Medium Long-term Permanent High Med Low									
			COMPT	TARIOT					

#### COMPLIANCE

**Operational:** The type of activity is considered as agricultural and allowable on land zoned for agricultural use.

#### **ISSUE**

What will the result be if the development is not approved and closed?

#### **NATURE OF IMPACT**

The farm has to be supported by itself, in this case by producing sufficient lucerne to support the game population. The supplementary feeding of lucerne was made necessary by the drought. The cumulative impact of not providing supplementary feeding will have catstrophic influence on the viability of the game farm. A chain reaction into the input-and output value chain, the workers their families and businesses supported by the workers will be directly influenced negatively.

#### AFFECTED AREAS

Project footprint area, district municipal, provincial national and international.

# **BACKGROUND INFORMATION**

#### What was found:

The primary producers (herbaceous layer) in the ecological food chain or herbivores have been negatively affected by the drought.

To sustain the existing game population is by feeding. This has a two-fold effect; the first being that food is provided for the species to survive and sustain their lifecycle, secondly is that the feeding pressure on the "damaged" natural veld is alleviated which allows for the herbaceous layer to recover.

The proposed cleared area and the phased clearing of additional area to produce lucerne would secure the activities that

supports the farm and the people is supports.

#### **MITIGATION:**

### What is recommended for mitigation:

- (i) That the report is evaluated and environmental authorisation supplied.
- (ii) That the recommendations are implemented of:
  - a. Implement the zoning plan that secures the vegetation along the watercourse;
  - b. Leave the protected tree species in place.

SOCIO-EC	ONOMIC (	CONSIDERA	TIONS					
Nature and	significance	e of the impac	ets					
		T ~						
PHASE		Construction	n and operation	nal				
CONFIDE	NCE	High (50-10	00%)					
	EX	TENT				RIS	SK	
Site Specific	Local	Regional	National		Yes			No
PROBABILITY SIGNIFICANCE								
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High
			STATUS &	INTE	NSITY			
Major		Moderate		N	<b>l</b> inor			
+5	+4	+3	+2		+1		Positive	e
-5	-4	-3	-2		-1		Negativ	e
	DURATION FREQUENCY							
Transient	Short- term	Medium	Long-term	Peri	manent	High	Med	Low

#### **COMPLIANCE**

**Operational:** The type of activity is considered as agricultural and allowable on land zoned for agricultural use.

#### **ISSUE**

- (i) What is the significance of the impact(s) by the cleared are and extension of the cropland?; and
- (ii) What is the significance of the impact(s) when not allowing the extension?

#### NATURE OF IMPACT

- 1. By extension of facility:
  - (i) The assessment of impacts could not find any negative impacts of high importance by the development;
  - (ii) No serious pollution or impacts on biotic-or abiotic systems was found to be of concern;
  - (iii) Development did not alter-or sterilise productive agricultural land, in fact, it can be uses productively.
  - (iv) Positive cumulative impacts for socio economic were found to be of a high significance.
- 2. By downsizing-, closing of facility will lead to:
  - (i) High probability that primary producers in the ecological food-chain will be further impacted on.
  - (j) Die-off of game;
  - (k) Loss in specie diversity;
  - (l) Downsizing of workers;
  - (i) Breakdown of value chain (input-and output);
  - (ii) Create a loss in food production;
  - (iii) Result in less tax etc., are all issues that has to be considered.

The cumulative impacts above are negative compared to the impacts of the extension of the facility.

#### AFFECTED AREAS

- 1. Project footprint area
- 2. Demographic footprint
- 3. Social footprint
- 4. Socio-economic footprint

#### **BACKGROUND INFORMATION**

The development is in close proximity to the farming infrastructure and has been integrated with the existing structures, which lessens development impact.

#### What was found:

The footprint area of the project is situated on a footprint area defined by previous historical farming and or human interference.

#### **MITIGATION:**

#### What is recommended for mitigation:

- 1. An environmental management plan is compiled for the project. This needs to be implemented.
- 2. To ensure continuity in environmental compliance an Environmental Assessment Practitioner (EAP) has to be appointed to conduct bi-monthly auditing of the facility until the development has been completed.

SOCIO-ECONOM	SOCIO-ECONOMIC CONSIDERATIONS								
Site selection									
PHASE		Construction	n and operation	nal					
CONFIDENCE		High (50-10	0%)						
	EXTE	NT				RISK			
Site Specific Local Regional National Yes No									
	PROBAB	ILITY		SIGNIFICANCE					
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High	
		STAT	TUS & INTEN	NSITY	,				
Major		Moderate		M	inor				
+5	+4	+3	+2	-	+1		Positive		
-5	-4	-3	-2		-1		Negative		
	Γ	URATION		•		FR	EQUENC	CY	
Transient	Short-	Medium	Long-term	Permanent High Med Lo				Low	
	term								

#### **COMPLIANCE**

**Operational:** The type of activity is considered as agriculture and allowable on land zoned for agricultural use.

#### **ISSUE**

Does the type of activity alter or infringe on the agricultural productivity of the land or surrounding properties.

#### **NATURE OF IMPACT**

Sterilising or altering productive agricultural land

#### **AFFECTED AREAS**

Project footprint area

#### **BACKGROUND INFORMATION**

The development is in close proximity to the previous farming infrastructure and has been integrated with the existing structures.

# What was found:

The footprint area of the project is situated on a footprint area defined by previous historical farming and human developments which includes:

- Game farming;
- Crop farming;
- Eskom power lines;
- Housing;
- Border Protection System

# **MITIGATION:**

#### What is recommended for mitigation:

- 1. That the existing site is approved.
- 2. That the footprint area, including the movement routes, is properly demarcated.

#### SOCIO-ECONOMIC CONSIDERATIONS Contribution to skills development and capacity building Construction and operational **PHASE CONFIDENCE** High (50-100%) **EXTENT** RISK Site Specific Local Regional National Yes No **PROBABILITY SIGNIFICANCE** Highly Medium Medium-**Probable** Low-High Definite Improbable Low probable Medium High **STATUS & INTENSITY** Major Moderate Minor +5 +4 +3 +2+1Positive -5 -4 -3 -2 -1 Negative **DURATION FREQUENCY** Transient Short-Medium Long-term Permanent High Med Low

#### **COMPLIANCE**

Operational: The type of activity is considered as a light industrial-agricultural. M-H

#### **ISSUE**

What contribution does the project provides for skills development and capacity building in a rural environment

# **NATURE OF IMPACT**

Is there a positive contribution to skills development and capacity building in a rural environment

#### AFFECTED AREAS

Project footprint area, communities and number of people employed.

# **BACKGROUND INFORMATION**

The development is considered as a light-agricultural industry. It provides work for a broad spectrum of rural community members of both genders. The work covers a broad spectrum of skills.

# **What was found:**

Workers are employed at various levels from technical to managerial level.

The type of work include the following activities:

term

- Farm manager
- Hospitality
- Hunting tracker
- Skinners
- Drivers
- Irrigation control
- Field patrollers

#### **MITIGATION:**

#### What is recommended for mitigation:

No recommendation can be made as the existing staffing structure provides positive opportunities for workers of both genders.

CULTURAL CO	CULTURAL CONSIDERATIONS									
Disturbance of are	chaeological	l-or graves site	es							
PHASE		Construction	n and operation	nal						
CONFIDENCE		High (50-10		141						
CONFIDENCE	EXTE		070)			RIS	<b>K</b>			
Site Specific	Local	Regional	National		Yes	KIS	No.	2		
Site Specific	PROBAB		National			ICNIEI		)		
D - 6' - '4 -	Highly	1	T	Low	Low-	IGNIFIO Medium	Medium-	High		
Definite	probable	Probable	Improbable	Low	Medium	Wicdiani	High	Ingn		
STATUS & INTENSITY										
Major Moderate Minor										
+5 +4 +3 +2 +1 Positive										
-5 -4 -3 -2 -1 Negative										
	I	DURATION				F	REQUEN	CY		
Transient	Short-	Medium	Long-term	Perm	anent	High	Med	Low		
	term					Ü				
		(	COMPLIANC	E						
National Heritage Re	sources Act, A	ct 25 of 1999, S	ection 38 (1)							
Letter attached as Ap	pendix B									
	1.1		ISSUE							
Compliance with legi	islation	NT A	TUDE OF IMP	A CT						
Possible damage or d	estruction to a		TURE OF IMPA	ACI						
1 033101e damage of d	estruction to a		FFECTED ARE	AS						
Project footprint area										
BACKGROUND INFORMATION										
No archaeological or heritage sites were found.										
TT/1 / •	MITIGATION:									
1 -	What is recommended for mitigation:  1. That motion is taken of the relevant Act when any future execution is made on the form									
	1. That notice is taken of the relevant Act when any future excavation is made on the farm.									

2. That the SOP for Archaeological –and Heritage Sites are implemented when clearing is done.

RISK AND HAZARD CONSIDERATIONS									
			.ND						
Spread of diseas	es: Biosecur	ıty							
PHASE		Construction	n and operation	nal					
CONFIDENCE	1	High (50-10	0%)						
	EXTE	ENT				RISI	K		
Site Specific	Local	Regional	National		Yes		No	)	
	PROBAE	BILITY			S	IGNIFIC	CANCE		
Definite	Highly probable	Probable	Improbable	probable Low Low-Medium Medium High					
		STA	TUS & INTE	NSIT	Y				
Major		Moderate		M	linor				
+5	+4	+3	+2		+1		Positive		
-5	-4	-3	-2		-1		Negative		
		<b>DURATION</b>				F	REQUEN	CY	
Transient	Short-	Medium	Long-term	Perr	nanent	High	Med	Low	
	term								
COMPLIANCE									
The project area is situated in a Foot-and-Mouth Disease Control Area: Protection Zone (yellow area									

on map)

**ISSUE** 

Compliance with legislation

#### NATURE OF IMPACT

Spread of infection from Zimbabwe onto the farm and subsequent Limpopo

# AFFECTED AREAS

Project footprint area

#### **BACKGROUND INFORMATION**

The area was initially fenced with a Foot-and-Mouth fence in the 1964 along the riverbank. In the mid-1980's this fence was replaced by the Border Protection System consisting of a double fence and a military patrol road and also served as the FMD control. After 1994 the "System" progressively became in dis-repair to poor maintenance. The famers began erecting their own game fences and also electrified the fences to keep out elephant (which acted as breachers of the fences) which in turn allowed access by livestock and game from Zimbabwe.

At Limpopo View 42 MT the owner after acquiring the farm in 2011 kept on planting lucerne for game. With the drought the situation on natural food supply became critical and was the catalyst for him to clear the indigenous vegetation. To protect the lucerne from livestock, elephant and game he erected the electrified game fence. The rest of the area between the district road and the river is also game fenced.

#### **MITIGATION:**

#### What is recommended for mitigation:

(i) The project area and the proposed phased extension is approved. It will serve as a further bufferzone to prevent the spread of FMD.

CUMULATIVE CONSIDERATIONS								
Productive use of resources								
PHASE		Construction and operational						
CONFIDENCE		High (50-100%)						
EXTENT				RISK				
Site Specific	Local	Regional	National	Yes			No	
PROBABILITY				SIGNIFICANCE				
Definite	Highly probable	Probable	Improbable	Low	Low- Medium	Medium	Medium- High	High
STATUS & INTENSITY								
Major		Moderate		Minor				
+5	+4	+3	+2	+1		Positive		
-5	-4	-3	-2	-1		Negative		
DURATION					FREQUENCY			Y
Transient	Short-term	Medium	Long-term	Permanent		High	Med	Low
COMPLIANCE								

This application is to rectify a NEMA Regulation transgression.

If the applicant applied beforehand for environmental authorisation by following the impact assessment process the probability for approval would by high.

#### **ISSUE**

Compliance with legislation

#### **NATURE OF IMPACT**

The listed Regulation under NEMA is for removal of indigenous vegetation

#### AFFECTED AREAS

Project footprint area

The game farms financial survival

Job security

Productive use of natural resources

#### **BACKGROUND INFORMATION**

At Limpopo View 42 MT the owner after acquiring the farm in 2011 kept on planting lucerne for game. With the drought the situation on natural food supply became critical and was the catalyst for him to clear the indigenous vegetation. To protect the lucerne from livestock, elephant and game he erected the electrified game fence. The rest of the area between the district road and the river is also game fenced. To buy and transport the same product elsewhere is not a viable financial option.

### **MITIGATION:**

# What is recommended for mitigation:

- (i) The application is approved.
- (ii) That the EMP supplied is implemented.
- (iii) That protected trees is left intact.
- (iv) That the zoned surface plan for the phased development is implemented.

### 12.3 Summary of impacts

#### 12.3.1 Significance

Impacts with Significance ratings of either *Medium-high* or *High* are impacts, which are regarded as potentially significant, rated without any mitigation measures. In the assessment it was found that the receiving environment can accommodate the clearing of vegetation with mitigation.

What was found is that if the project was to be closed is that it would have a significant impact at social-, socio-economic level as well on the area-and regional economy.

Impacts regards compliance ratings of either *Medium-high* or *High* are impacts, which are regarded as potentially serious issues. There were one of High-and 5 of Medium-High Importance, all were positive in outcome.

#### 12.3.2 Compliance

Only 2 issues of were identified related to other compliance legislation:

- (i) Permission from DAFF: Applied for.
- (ii) Water Use Licence: In place.

#### 10.3.3 Conclusion

The issues identified as potential risks was assessed and proved not to pose significant threats to the receiving environment. The issues can be managed by better management

and housekeeping and is already addressed the management structures and in this report.

#### 13. DESCRIPTION OF ASSUMPTIONS

In this report it is assumed that:

- i) The developer will keep on to act responsible with regards to the environment at all times.
- ii) That the recommendations made in this report and other specialist reports are implemented and followed.
- iii) That the development will abide by the ethical standards of development and will stay within the parameters of best practices.

#### 14. AUTHORISATION OF ACTIVITY AND CONDITIONS

The purpose of this report is to provide information in a compiled format regards the potential impacts of the development already undertook so that the relevant authority can make an informed decision regarding the approval/not approved of the 24 G Environmental Impact Assessment Report.

Recommendations were made throughout the report as well as the Specialist Reports attached. Also to guide the competent authority to understand the type of impacts and its seriousness thereof to ensure that misconceptions is not made but facts based on facts and realities.

#### 15. ENVIRONMENTAL STATEMENT

### 15.1 **Summary of key findings**

- 15.1.1 The expansion developed was triggered by the 2014 (amended) regulations resulting in non-compliance without an environmental authorization.
- 15.1.2 The bush clearing expansion will cover an area of 24.8ha.
- 15.1.3 This area has been impacted on by previous farming activities such as roads, prospecting holes and other activities such as the BPS and Eskom lines. Thus the vegetation was already impacted on.
- 15.1.4 Protected tree species was found on the project area as well as on the adjoining croplands. These trees were left intact since farming started which indicated the applicants due diligence on protection issues.

- 15.1.5 No Red Data fauna was found on the project area or the direct surrounding that indicate the permanent presence of Red Data. Protected tree species are present and in the cleared area was left intact.
- 15.1.6 No objections have been raised or submitted by adjoining landowners in the past or with this investigation PPP.
- 15.1.7 No sign of pollution (terrestrial) was found by oil or other substances or materials.
- 15.1.8 No signs of water pollution found.
- 15.1.9 The farm practices organic crop production which has a low significance of impacts on the renewable resources.

### 15.2 What resulted in the non-compliance:

The information supplied by the applicant was that he was not aware of the NEMA specifications and once made aware by the notification he immediately appointe Tua Conserva. With the afore mentioned in mind the question should be asked whether the unlawful activity, e.g. expansion of facilities would have been approved if the correct procedures were followed?

#### 15.3 Compliance with other legislation:

- 15.3.1 National Water Act
  - (i) Mr. Potgieter has a legal water-use license for agricultural activities.
  - (ii) The water is from three boreholes.
- 15.3.2 Archaeological Assessment was not necessary as it did not trigger the minimum regulations. Refer to letter of practicing archaeologist.
- 16. Closing comments
- 16.1 The activities conducted that lead to the 24G application was assessed. No impacts were identified that contributed to a specific significant negative impact to the receiving environment. What has to be mentioned is that the facilities are part of the farming activities that evolved (growth) on the specific footprint.
- 16.2 No significant pollution or destruction to terrestrial habitat that could impact on species or watercourse was found.
- 16.3 There is no information provided, gathered or supplied that could impart or result in a negative outcome on the expansions conducted as well as the new expansions planned.

17. AUTHORISATION OF ACTIVITY AND CONDITIONS

The purpose of this report is to provide information in a compiled format regards the

potential impacts of the proposed development so that the relevant authority can make

an informed decision regarding the approval/not approved of the Environmental Impact

Assessment Report. Recommendations are supplied to be included.

14.1Recommendations

14.1.1 The appointment of an environmental assessment practitioner (EAP) to conduct

audit inspections implementation of the recommendations for the expansion

construction period and for the phased development.

14.1.2 That the EAP conduct environmental compliance inspections and submit reports

every two months over a period of 6 months or until such time as area applied for

has been cleared by developer.

14.1.3 That protected trees are left intact and *in-situ*.

14.1.4 That the watercourse is demarcated as indicated with buffer zone of not less than 32

meters on both sides.

J. Claassens

Tua Conserva: EA

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