## **DRAFT BASIC ASSESSMENT REPORT**

THE PROPOSED DEVELOPMENT OF A RETAIL AND COMMERCIAL DEVELOPMENT NODE ON A PORTION OF HOLDING 2027 OF THE VAAL HARTS SETTLEMENT A AGRICULTURAL HOLDINGS, VRYBURG RD, PHOKWANE MUNICIPALITY, NORTHERN CAPE PROVINCE.

## DENC REF: NC/BA/44/FB/PHO/HAR/2013; NCP/EIA/0000261/2013

**MARCH 2014** 

#### **PROPONENT:**



**COMPILED BY:** 



## **EXECUTIVE SUMMARY**

The proponent, Babereki Consulting Engineers CC, proposes to develop a retail and commercial node on a portion of Holding 2027 of the Vaal Harts Settlement A Agricultural Holdings, Vryburg registration division (RD), Phokwane Municipality.

In the South African legislative framework, the National Environmental Management Act (NEMA) regulates development activities which may pose a risk to the integrity of the ecological and human environment. Coupled with NEMA, listed activities are provided, which describe the types of development, limits, expanse and nature where a Basic Assessment (BA) process is required. These are referred to as the NEMA EIA Regulations of 2010.

The following listed activity will be triggered, by the proposed development and a Basic Assessment Process (BA) is being undertaken for the proposed development:

Activity 23: Listing Notice 1, GR 544 of 18 June 2010

The transformation of undeveloped, vacant or derelict land to -

(i) residential, retail, commercial, recreational, industrial or institutional use, inside an urban area, and where the total area to be transformed is 5 hectares or more, but less than 20 hectares.

Enviroworks was appointed as the project Environmental Assessment Practitioner (EAP) to conduct this Basic Assessment process. The application for environmental authorisation has been lodged with the Northern Cape Department of Environment and Nature Conservation (DENC), i.e. the competent authority for this application.

This proposed retail and commercial node broadly entails the construction of a hotel of approximately 4 500m<sup>2</sup> in extent, comprising of approximately 100 beds, three shopping areas with a collective footprint of approximately 4 545m<sup>2</sup>, a retail centre of 12 612m<sup>2</sup>, parking areas and other associated infrastructure. The proposed development is to be located in close proximity to the town of Hartswater, next to the N18 road, between Kimberley and Vryburg in the northern part of the Northern Cape Province.

It is believed that the proposed project, will address demands in terms of access to retail and commercial centres from the N18. The proposed project will also provide space for business development which will contribute to Local Economic Development (LED) within the Phokwane municipal area and Hartswater.

#### Description of the Receiving Environment

The proposed development area is not used for productive agricultural purposes and appears to have been disturbed at some point in the past.

A field assessment by Prof. du Preez, the Ecologist appointed for this project, indicated that no watercourses or wetlands are present on the property under investigation.

The vegetation of the proposed development area is dominated by a shrub community. No Red Data listed or protected plant species have been identified, but the Camel Thorn (*Acacia Erioloba*) is a protected species in terms of the Forest Act (Act No. 84 of 1998). The shrub community has a relatively medium biodiversity but a low conservation importance in a local, regional or national context. No alien plants were noted on site however a number were noted along the dirt roads on the property.

The Giant Bullfrog (*Pyxicephalus adspersus*) is a protected frog species whose conservation status has been revised and will be included as a Red Data Species under the category 'Lower Risk near threatened'. Giant Bullfrogs have been recorded breeding at suitable sites around the Hartswater area.

Previous agricultural activities in the area, coupled with increased habitat destruction for urban expansion, degradation (alien plant invasion) and disturbances, are all causal factors in the alteration of reptile species occurring in these areas. No reptile species of conservation concern were found on the property however suitable habitats are present.

Due to the extensive destruction of the Kimberley Thornveld in the Hartswater region for crop production, the bird population on the site is limited to typical savanna birds which adapted to the transformed environment. Guineafowl, Woodpeckers, Shaft-tailed Whydahs, Shrikes, Hornbills, Sociable Weavers are common in the area. Rarer birds such as raptors frequent the area on a seasonal basis but the habitat is not suitable for them to become resident. No Red Data species were recorded on the site.

The majority of larger mammal species are likely to have been eradicated or have moved away from the area as a result of previous agricultural activities, hunting and poaching as well as habitat alteration and degradation. Spring Hare, Porcupine, Blacked-Back Jackal and Caracal have however been recorded from surrounding areas. No sensitive or endangered mammals were recorded within the study area.

#### **Public Participation Process**

The Public Participation Process (PPP) for this Basic Assessment process was undertaken in accordance with section 54 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA).

On 13 February 2014, a site notice was placed on the boundary of the proposed development area, and other site notices were placed at the Phokwane Local Municipality building and the O.M. Mothibi Library in Hartswater. The on-site notices were placed for a 21 day period.

Copies of the Background Information Document (BID) were hand delivered to neighbouring land owners and neighbouring businesses on 13 February 2014. The public was informed on the availability of the BID on the Enviroworks website, by means of hand delivering the BIDs to the neighbouring landowners and businesses.

Advertisements were placed under the Legal Section of the Volksblad and Diamond Fields Advertiser (DFA) newspapers. The advertisements were placed to notify the public of the proposed development and give them the opportunity to raise their comments on the proposed development.

Governmental Authorities and a list of potentially interested and/or affected Stakeholders and Interested and Affected Parties (I&APs) were notified via e-mail on the availability of the BID and they were invited to comment on the proposed project.

Comments from stakeholders can be viewed in the Comments and Response Report, included in **Appendix E.** 

This draft Basic Assessment Report (BAR) will be made available to the public to review for 40 calendar days from 25 March 2014 until 12 May 2014.

#### Impact Assessment

If the proposed retail and commercial node is developed, the vegetation of the relevant footprint area will be destroyed. The footprint of the proposed development area is relatively small in terms of the regional context and the plant community has a relatively low biodiversity conservation importance in a local, regional or national context.

Development of the proposed project will most likely have a **medium-high** negative, long-term impact on the remaining (albeit limited) faunal component, residing in or utilising the affected natural areas. Alteration of the Savanna vegetation along the proposed development will directly and indirectly impact on the smaller sedentary species (insects, arachnids, reptiles, amphibians and mammals)

adapted to their ground dwelling habitats. Larger, more agile species (birds and mammals) will flee the area and re-locate in suitable habitats away from the development.

Based on the size and the nature of the development, a five year design horizon was selected for the Traffic Impact Study. Applying the assumed growth rate of 2.5% from the base year to the design horizon year the growth factor would be 1.13, meaning an increase in background traffic volume of 13% over the five year design horizon. For the future scenario analysis the current traffic volumes were maintained as background traffic and increased by an annual growth factor of 2.5%. The posted speed limit of 80 km/h along the N18 and 60 km/h along Strydom Street, in the vicinity of the site, are appropriate for the expected future traffic conditions. The existing critical peak, in terms of traffic volume, was found to be the afternoon (PM) peak hour while the Saturday (SAT) peak hour tested with lower demands. Once developed and fully occupied, the proposed development may be expected to generate in the order of 598 and 860 new vehicle trips in PM and SAT commuter peak hours respectively.

The following table provides a summary of the impact assessment outcome significance ratings.

Table 1: Summary of identified impacts and associated impact ratings (without and with mitigation).

PLANNING & DESIGN PHASE								
There are no potential impacts that are likely to occur during this phase.								
CONSTRUCTION PHASE	CONSTRUCTION PHASE							
Potential Impacts that are likely to occur during the	e Construction Phase	):						
Nature of Impact	Direct/Indirect	Without	With	Rating				
		Mitigation	Mitigation	Туре				
Ecological Disturbance:	Direct and Indirect	High	Medium-high	Negative				
Disturbance and loss of vegetation through the clearing of development footprints.								
Impact on faunal community structure	Direct and Indirect	Medium-high	Low	Negative				
Soil Erosion:	Direct and Indirect	Medium	Low	Negative				
Erosion and consequent loss of topsoil through construction activities i.e. clearing of vegetation, stockpiling of top soil and channelling of storm water.								
Pollution of Topsoil:	Direct and Indirect	Low-medium	Low	Negative				
Contamination of topsoil during construction								
activities i.e. builders' rubble, cement, diesel, oil,								
etc.								
Solid Waste Generation:	Direct and Indirect	Low-medium	Low	Negative				

Solid waste generation during construction				
activities i.e. builders rubble, cement, etc.				
Noise Pollution:	Direct	Medium-high	Low-medium	Negative
Noise pollution created by construction activities				
and associated machinery could disrupt				
neighbouring residents.				
Dust Pollution:	Direct and Indirect	Medium	Low	Negative
Dust pollution created during construction				
activities could disrupt surrounding businesses				
and residents.				
Health and Safety:	Direct	Medium	Low	Negative
The health and safety of pedestrians due to				
construction vehicles using Strydom Street to				
gain access to the site as well as the presence				
of earth moving equipment on site.				
The health and safety of the construction				
workers during construction related activities				
Employment Opportunities:	Direct	Medium	Medium	Positive
The proposed project will create temporary				
employment opportunities during the				
construction phase.				
Conflict:	Direct	Low	Low	Negative
Influx of construction workers, competing for				
available jobs with the local community.				
Influx of Jobseekers:	Direct	Low-medium	Low-medium	Negative
In-migration of jobseekers leading to expansion				
of the informal settlement which in turn can place				
additional strain on already limited resources.				
Heritage:	None	-	-	Positive
Discovery of heritage resources				
OPERATIONAL PHASE				
Potential Impacts that are likely to occur during the	e Operational Phase:			
Nature of Impact	Direct/Indirect	Without	With	Rating
		Mitigation	Mitigation	Туре
Ecological Disturbance:	Direct	Low-medium	Low-medium	Negative

Destruction of vegetation at within the proposed				
development area.				
Solid Waste Management:	Direct and Indirect	Medium	Low	Negative
The capacity of the local municipality to deal with				
the increase in solid waste generation could be				
put under strain which could lead to a failure to				
collect and dispose of solid waste.				
Influx of Jobseekers:	Direct and Indirect	Low-medium	Low-medium	Negative
In-migration of jobseekers leading to expansion				
of the informal settlement which in turn can place				
additional strain on already limited resources.				
Employment Opportunities:	Direct and Indirect	Medium	Medium	Positive
The proposed project will create permanent				
employment positions.				
Economic Impacts:	Indirect	Medium-high	Medium	Negative
The proposed development could have an				
impact on existing businesses and				
accommodation facilities in Hartswater and				
surrounding areas.				
Traffic Congestion:	Direct	Medium	Low-medium	Negative
The proposed retail and commercial center is				
predicted to be a popular commodity within				
Hartswater and it is likely that it will caused				
increased levels of traffic within the area in and				
around Strydom Street and Pokwani Way.				

## DECOMMISSIONING AND CLOSING PHASE

Potential Impacts that are likely to occur in the Decommissioning and Closure Phase.

No discernible impacts are envisaged as it is unlikely that any aspect of the project will be decommissioned or closed at this point in time.

## No-go Alternative

The 'no-go' alternative assumes that the proposed activity does not go-ahead, implying a continuation of the current situation or the status quo.

In the case of this project, the 'no-go' alternative would result in no retail and commercial centre being constructed. There are currently no activities taking place on the proposed development area, therefore the property is not being utilised to its full potential. Should the proposed project not go ahead it may also hinder the economic development

in the form of short term employment, long term job creation, financial injection and future developments within the area.

In light of Table 1, it is evident that the potential impacts relating to ecology are of a **high to low** significance. The overall impacts are of a negative nature, whilst most impacts can be mitigated to reach acceptable levels of impact. Other than the majority of the negative impacts that may occur, some positive impacts, with low significance, may occur from the social and heritage aspects point of view.

Based on the information provided, it is the opinion of Enviroworks that no fatal flaws have been identified for the proposed project and that this report is sufficient enough to allow the Department of Environment and Nature Conservation (DENC), Northern Cape Province to make an informed decision.

Enviroworks therefore recommends that Environmental Authorisation be granted for the proposed projects based on the following recommendations:

- Appointment of an independent Environmental Control Officer (ECO) during the construction
  phase to oversee implementation of the mitigation and management measures prescribed in
  the Environmental Management Programme.
- The facility, and compliance with the Environmental Management Programme (EMPr) should be monitored sporadically during the operational phase of the project.
- An independent Environmental Control Officer should be appointed to monitor the decommissioning of the facility, in accordance with the EMPr.

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LIS	T OF ABBREVIATIONS	
BAR -	- Basic Assessment Report	
BID –	Background Information Document	
DENC	- Department of Environment and Nature Conservation	
DFA -	- Diamond Fields Advertiser	
ECO -	- Environmental Control Officer	
EMPr	- Environmental Management Programme	
IDP –	Integrated Development Programme	
	- Local Economic Development	
	Afternoon	
	- Public Participation Process	
	Registration Division	
	regionation Dividen	

**SAT** - Saturday

**SANRAL** – South African National Road Agency SOC Ltd.

# NORTHERN CAPE PROVINCE

# DEPARTMENT OF ENVIRONMENT & NATURE CONSERVATION



## Porofensi Ya Kapa Bokone LEFAPHA LA BOJANALA TIKOLOGO LE SHOMARELO

## **BASIC ASSESSMENT REPORT**

Project applicant:	Babereki Consulting Engineers CC				
Business reg. no./ID. no.:	2008/128571/23				
Contact person:	Mr. Tshego Motaung				
Postal address:	P.O. Box 585, Kimberley, 8300				
Telephone:	053 832 1287	Cell:	082 565 1236		
E-mail:	tmotaung@babereki.co.za Fax: 053 832 1546				

## Prepared by:

Environmental Assessment	Enviroworks				
Practitioner/Firm:					
Business reg. no./ID. no.:	CK 2002/09542/23				
Contact person:	Miss Adél Groenewald				
Postal address:	Suite 116, Private Bag X01, Brandhof,	, 9324			
Telephone:	051 – 436 0793	Cell:	072 460 3333		
E-mail:	adel@enviroworks.co.za	Fax:	051 – 436 0791		

	(For official use only)
File Reference Number:	
<b>Application Number:</b>	
Date Received:	

# NORTHERN CAPE PROVINCE

# DEPARTMENT OF ENVIRONMENT & NATURE CONSERVATION



## Porofensi Ya Kapa Bokone LEFAPHA LA BOJANALA TIKOLOGO LE SHOMARELO

# Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2010.

#### Kindly note that:

- This basic assessment report is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2010 and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
- 2. The report must be typed within the spaces provided in the form. The size of the spaces provided are not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
- 4. An incomplete report may be returned to the applicant for revision.
- 5. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 6. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 7. No faxed or e-mailed reports will be accepted.
- 8. The report must be compiled by an independent environmental assessment practitioner.
- Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

## **SECTION A: ACTIVITY INFORMATION**

Has	а	specialist	been	consulted	to	assist	with	the	completion	of	this	NO
section	on'	?										NO

If YES, please complete form XX for each specialist thus appointed: Any specialist reports must be contained in Appendix D.

#### 1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail:

The proponent, Babereki Consulting Engineers CC, proposes to develop a retail and commercial node on Erf No. 2027, Vryburg Registration Division (RD), Hartswater, in the Phokwane Local Municipality.

The proposed development area will be approximately 7 ha in extent. This proposal entails the construction of a hotel of approximately 4 500m<sup>2</sup> in extent, containing about 100 beds, three shopping areas with a collective footprint of approximately 4 545m<sup>2</sup>, a retail centre of approximately 12 612m<sup>2</sup>, parking areas and other associated infrastructure.

The proposed development is to be located in close proximity to the town of Hartswater, next to the N18 road, between Kimberley and Vryburg in the northern part of the Northern Cape Province (see Locality Map in **Appendix A1**).

Water, electricity, sewage and waste collection services will be obtained from the Phokwane Local Municipality. The Proponent will obtain approval from the Phokwane Local Municipality to be able to use the necessary bulk services; these letters will be added with the Final BAR.

#### 2. FEASIBLE AND REASONABLE ALTERNATIVES

"alternatives", in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the **property** on which or **location** where it is proposed to undertake the activity;
- (b) the **type of activity** to be undertaken;
- (c) the **design or layout** of the activity;
- (d) the **technology** to be used in the activity;
- (e) the **operational aspects** of the activity; and
- (f) the option of **not implementing** the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.

Paragraphs 3 – 13 below should be completed for each alternative.

Only one alternative was identified for the proposed Retail and Commercial Development.

A Layout Map showing the proposed development area is provided hereto as **Appendix A1**.

#### 3. **ACTIVITY POSITION**

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites if applicable.

#### Alternatives:

Alternative S1<sup>1</sup> (only site alternative) Alternative S2 (if any) Alternative S3 (if any)

Latitude (	S):	Longitude (E):			
27°	45.732'	24°	47.244'		
0	í	0	6		
0		0			

#### In the case of linear activities:

Alternative: Latitude (S): Longitude (E): Alternative S1 (preferred or only route alternative) Starting point of the activity 0 O Middle point of the activity End point of the activity Alternative S2 (if any)

Alternative of (ii arry)				
<ul> <li>Starting point of the activity</li> </ul>	0	ı	0	
<ul> <li>Middle point of the activity</li> </ul>	0	٤	0	
<ul> <li>End point of the activity</li> </ul>	0	٤	0	,
Alternative S3 (if any)				
<ul> <li>Starting point of the activity</li> </ul>	0	•	0	•

•	Starting point of the activity	0	•	0	•
•	Middle point of the activity	0	•	0	4
•	End point of the activity	0		0	

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

#### 4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative: Size of the activity: Alternative A1<sup>2</sup> (preferred activity alternative) 68 273 m<sup>2</sup> Alternative A2 (if any)  $m^2$ Alternative A3 (if anv)  $m^2$ or, for linear activities: Alternative: Length of the activity: Alternative A1 (preferred activity alternative) m

Alternative A2 (if any) m Alternative A3 (if any) m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

<sup>&</sup>lt;sup>1</sup> "Alternative S.." refer to site alternatives.

<sup>&</sup>lt;sup>2</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative:	Size site/serv	of itude:	the
Alternative A1 (preferred activity alternative)	m <sup>2</sup>		
Alternative A2 (if any)	m <sup>2</sup>		
Alternative A3 (if any)	m <sup>2</sup>		

#### 5. SITE ACCESS

Does ready access to the site exist? If NO, what is the distance over which a new access road will be built Describe the type of access road planned:

106 m

Access to the proposed retail and commercial facility will be provided by means of a roundabout which will be constructed to control traffic flow off Strydom Street to and/or from Pokwani Way.

See Site Plan included as Appendix A4, for the layout of the access road.

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

#### SITE OR ROUTE PLAN 6.

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document.

The site or route plans must indicate the following:

- the scale of the plan which must be at least a scale of 1:500; 6.1
- the property boundaries and numbers of all the properties within 50 metres of the site; 6.2
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site:
- the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure:
- 6.6 all trees and shrubs taller than 1.8 metres;
- walls and fencing including details of the height and construction material; 6.7
- servitudes indicating the purpose of the servitude; 6.8
- sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto): 6.9
  - rivers;
  - the 1:100 year flood line (where available or where it is required by DWA);

  - cultural and historical features;
  - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

A detailed site plan is included in <b>Appendix A4.</b>	

#### 7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable.

A full photograph record of the proposed development site is included in **Appendix B**.

#### 8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity.

The facility illustration is included in **Appendix C.** 

#### 9. ACTIVITY MOTIVATION

## 9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

What is the expected yearly income that will be generated by or as a result of the activity?

Will the activity contribute to service infrastructure?

Is the activity a public amenity?

How many new employment opportunities will be created in the development phase of the activity?

What is the expected value of the employment opportunities during the development phase?

What percentage of this will accrue to previously disadvantaged individuals?

How many permanent new employment opportunities will be created during the operational phase of the activity?

What is the expected current value of the employment opportunities during the first 10 years?

What percentage of this will accrue to previously disadvantaged individuals?

## Not known yet Not known vet YES YES Not known yet Not known yet Not known vet Not known yet Not known vet Not known yet

## 9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

Hartswater is one of the fastest growing small towns in South Africa. There are a number of housing and shopping developments being planned or already under construction within town, which reflects good growth expected for the area.

With the strong regional role Hartswater fulfils within the Vaalharts community and on a regional level, and the support from a number of adjacent towns, the demand for more retail goods and services within the area increases. A number of national chain stores are not represented in Hartswater or within the surrounding towns. The outflow of money to Kimberley, where most of the national chain stores are situated, will continue until more and better shopping facilities are provided closer to the demanding communities within the Hartswater region.

Based on the assessment of both the character of the surrounding area and the character of the site, the recommendation in accordance with the town planning principles is to develop the site for the purposes of a sub-regional service industrial and commercial or bulk retail development would more preferable than the development of a local shopping centre.

Therefore, Babereki Consulting Engineers CC, proposes the development of a retail and commercial centre on the western extent of Hartswater, on the western side of the N18, to contribute to the growing retail demand within Hartswater and the surrounding areas.

One issue to be addressed in terms of Land and Housing and Local Economic Development (LED), as identified within the Integrated Development Plan (IDP), is a lack of sites for business to stimulate economic growth within the local municipal area. The Municipality aims at the creation of business site projects to solve this issue through development of business areas.

It is believed that the proposed project will address demands in terms of access to retail and commercial centres from the N18. The proposed project will also provide area for business development which will contribute to local economic development.

Indicate any benefits that the activity will have for society in general:

Society will benefit from the proposed development by having easier access to retail and commercial facilities. Access to hotel facilities from the N18 road will attract more travellers or tourists to the area which will in turn provide a long term contribution to the local economy. Short term jobs will be created during construction activities, and during the operational phase, long term sustainable job and training opportunities will be provided.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The local community will benefit from the activity by having easier access to retail and commercial facilities. Access to hotel facilities from the N18 road will attract more travellers or tourists to the area which will in turn provide a long term contribution to the local economy. Short term jobs will be created during construction activities, and during the operational phase, long term sustainable job and training opportunities will be provided.

DESIRABILITY:							
1.	Does the proposed land use / development fit the surrounding area?	YES					
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES					
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES					
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / expl	anation:					
	N/A						

5.	Will the proposed land use / development impact on the sense of place?	NO
6.	Will the proposed land use / development set a precedent?	NO
7.	Will any person's rights be affected by the proposed land use / development?	NO
8.	Will the proposed land use / development compromise the "urban edge"?	NO
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / exp	lanation.
	N/A	

BENEFITS	1		
1.	Will the land use / development have any benefits for society in general?	YES	
2.	Explain:		
	Society will benefit from the activity by having easier access to retail and comme Access to hotel facilities from the N18 road will attract more travellers or tourists to the will in turn provide a long term contribution to the local economy. Short term jobs viduring construction activities, and during the operational phase, long term sustain training opportunities will be provided.	he area	which created
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
4.	Explain:		
	The local community will benefit from the activity by having easier access to retail an facilities. Access to hotel facilities from the N18 road will attract more travellers or area which will in turn provide a long term contribution to the local economy. Short be created during construction activities, and during the operational phase, long term job and training opportunities will be provided.	tourists term jo	to the

## 10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

Title of legislation, policy or guideline:	Administering authority:	Date:
Legislation		
National Environmental Management Act (Act No.	Department of Environment and	1998
107 of 1998) (NEMA)	Nature Conservation (DENC),	
	Northern Cape Province.	
National Environmental Management: Biodiversity	Department of Environmental	2004
Act (Act, No. 10 of 2004) (NEMBA)	Affairs (DEA) and South African	
	National Biodiversity Institute	
	(SANBI)	
National Roads Act (Act No. 7 of 1998)	South African National Roads	1998
	Agency	

Regulations		
Environmental Impact Assessment Regulations of	Department of Environment and	2010
2010 (Government Notice No. R. 543,544 and 546	Nature Conservation (DENC),	
as amended)	Northern Cape Province.	
Guidelines		
Public Participation Guideline, 2012	DEA	2010
Impact Assessment Guideline, 2002	DEA	2002
Specialist Studies Guideline, 2002	DEA	2002
Guidelines for Environmental Management Plans,	DEA	2004
2004		
Phokwane Local Municipality Integrated	Phokwane Local Municipality	2007
Development Plan (IDP) 2007 - 2011		
Phokwane Local Municipality Draft Integrated	Phokwane Local Municipality	2012
Development Plan (IDP) 2012 - 2017		
Frances Baard District Municipality Integrated	Frances Baard District	2012
Development Plan (IDP) 2012/13 – 2016/17	Municipality	
By-laws		
Refuse (Solid Waste) and Sanitary By-law	Phokwane Local Municipality	2000
Water Supply By-law	Phokwane Local Municipality	2000

## 11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

A Services Report is included in **Appendix D3**.

#### 11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

If yes, what estimated quantity will be produced per month?

± 50m³

How will the construction solid waste be disposed of (describe)?

Construction solid waste will be placed in skips until collected and disposed of by the Phokwane Local Municipality at the nearest registered municipal landfill site (details of the exact site will be included within the Final BAR). No burning or burying of solid waste will occur on site.

Letters from the Phokwane Local Municipality indicating that the municipality has sufficient capacity to provide the necessary waste services to the proposed development, will be included within the Final BAR.

Where will the construction solid waste be disposed of (describe)?

The EMPr includes specifications concerning the disposal of construction waste. Construction solid waste will be placed in skips until collected and disposed of by the Phokwane Local Municipality at the nearest registered municipal landfill site

Will the activity produce solid waste during its operational phase? If yes, what estimated quantity will be produced per month?

**YES** ± 150m<sup>3</sup>

How will the operational phase solid waste be disposed of (describe)?

Solid waste produced during the operational phase will be placed in skips until collected and dispose of by the Phokwane Local Municipality at the nearest registered municipal landfill site (details of the exact site will be included within the Final BAR). No burning or burying of solid waste will occur on site.

Letters from the Phokwane Local Municipality indicating that the municipality has sufficient capacity to provide the necessary waste services to the proposed development, will be included within the Final BAR.

Where will the solid waste be disposed of if it does not feed into a municipal waste stream (describe)?

N/A

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

YES NO

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

YES NO

If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

#### 11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

YES NO

If yes, what estimated quantity will be produced per month?

Will the activity produce any effluent that will be treated and/or disposed of onsite?

m³ YES **NO** 

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

YES

If yes, provide the particulars of the facility:

Facility name: Hartswater Wastewater Treatment Works

Contact Mr. Cidrass person:

Postal Private Bag x 3, Hartswater

address:

 Postal code:
 8570

 Telephone:
 053 - 474 9706
 Cell:

 E-mail:
 cidrass@pokwane.gov.za
 Fax:
 053 - 474 1768

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:

## Sewage:

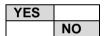
The closest Municipal sewer main is approximately 450m to the north of the proposed development area. This is the main outfall sewer from the town to the Hartswater Wastewater Treatment Works (WWTW) where the waste water will be treated for reuse.

A letter from the Phokwane Local Municipality confirming that the WWTW has sufficient capacity to accommodate the sewage produce the proposed development, will be included within the Final BAR.It is proposed to install a 160mm pipe at the minimum gradient of 1:300 along the proposed route shown on the Services Layout Plan attached as **Appendix A5**.

The proposed retail and commercial development will comply with the waste management plan entailed within the EMPr (see **Appendix F**).

### 11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere? If yes, is it controlled by any legislation of any sphere of government? If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.



If no, describe the emissions in terms of type and concentration:

The construction machinery used during the construction phase will emit exhaust fumes into the atmosphere.

#### 11(d) Generation of noise

Will the activity generate noise?

If yes, is it controlled by any legislation of any sphere of government? If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

YES	
	NO

If no, describe the noise in terms of type and level:

The construction machinery used during the construction phase will generate noise.

#### 12. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

municinal wat	water	groundwater	river, stream,	othor	the activity will not use
municipal	board	groundwater	dam or lake	other	water

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

Does the activity require a water use permit from the Department of Water Affairs?

litres NO

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

#### Water use:

Water will be sourced from the Phokwane Local Municipality. There is a 75mm uPVC municipal water main water pipe that runs along Strydom road up to the Ama-glug garage situated on the property adjacent to the proposed development.

The average daily water demand is estimated to be 91m³ (91 000ℓ) per day.

## Water Storage

As the water supply lines are dependent on the Vaalharts Irrigation scheme supplies, it will be influenced by the annual water stoppage during the maintenance activities of the canals. A water storage facility, consisting of three 5.5m³ elevated tanks, will be provided on site for the periods of short supply. Pressure pumps will be needed to supply the water.

#### • Fire Flows

As part of the development, a 110 mm uPVC Class 9 pipe will be installed to replace the existing 75mm pipe connecting to the existing 110 mm pipe at the entrance to the wine cellars, north of the proposed development area. This pipe can be laid in the same trench as the sewer pipe as the sewer is 6m deep and the water pipe 1,2m deep. Connection pipes will be 75 mm class 16 HDPC pipes for the collectors to each development. Fire Hydrant will be situated along the service road.

A letter from the Phokwane Local Municipality indicating that the municipality has sufficient capacity to provide the necessary water capacity to the proposed development, will be included within the Final BAR.

Refer to the Services Layout Plan (Appendix A5) and the Services Report (Appendix D3) for more details.

#### 13. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

Natural airflow and ventilation will be encouraged and additional energy saving measures will be incorporated into the building design as far as possible to minimize their carbon footprint.

All new buildings and infrastructure will also be designed in such a manner that rainwater can be harvested and stored for further use. Energy saving lighting, like CFLs (compact fluorescent lights) and LEDs (light emitting diodes) will be used for lighting wherever possible.

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:

Natural airflow and ventilation will be encouraged and additional energy saving measures will be incorporated into the building design as far as possible to minimize their carbon footprint.

All new buildings and infrastructure will also be designed in such a manner that rainwater can be harvested and stored for further use. Energy saving lighting, like CFLs (compact fluorescent lights) and LEDs (light emitting diodes) will be used for lighting wherever possible.

## SECTION B: SITE/AREA/PROPERTY DESCRIPTION

### Important notes:

1. For linear activities (pipelines, etc) as well as activities that cover very large sites, it may be necessary to complete this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section C and indicate the area, which is covered by each copy No. on the Site Plan.

Section	С	Сору	No.	۸
(e.g. A):				A

- 2. Paragraphs 1 6 below must be completed for each alternative.
  - 3. Has a specialist been consulted to assist with the completion of this section?

YES	

If YES, please complete form "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Details of specialist and declaration of interest attached in **Appendix D**.

#### 1. GRADIENT OF THE SITE

Indicate the general gradient of the site. Alternative S1:

Flat	1:50 1:20	-	1:20 1:15	_	1:15 – 1:10	1:10 1:7,5	_	1:7,5 – 1:5	Steeper 1:5	than
Alternative	S2 (if a	any):								
Flat	1:50 1:20	_	1:20 1:15	-	1:15 – 1:10	1:10 1:7,5	_	1:7,5 – 1:5	Steeper 1:5	than
Alternative	S3 (if a	any):								
Flat	1:50 1:20	<u> </u>	1:20 1:15	_	1:15 – 1:10	1:10 1:7,5	_	1:7,5 – 1:5	Steeper 1:5	than

#### 2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site
---

indicate the landioning) that best describes the site.								
2.1 Ridgeline		2.4 Closed valley		2.7 Undulating plain / low hills				
2.2 Plateau	X	2.5 Open valley		2.8 Dune				
2.3 Side slope of hill/mountain		2.6 Plain	X	2.9 Seafront				

See Locality Map included in Appendix A1.

#### 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

	Alternative S1:		Alternative S2 (if any):		Alternat (if any):	
Shallow water table (less than 1.5m deep)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas		NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies) Unstable rocky slopes or steep slopes with loose soil		NO	YES	NO	YES	NO
		NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)		NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)		NO	YES	NO	YES	NO
Any other unstable soil or geological feature		NO	YES	NO	YES	NO
An area sensitive to erosion		NO	YES	NO	YES	NO

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

## 4. GROUNDCOVER

Indicate the types of groundcover present on the site:

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

Natural veld - good condition <sup>E</sup>	Natural veld with scattered aliens <sup>E</sup>	Natural veld with heavy alien infestation <sup>E</sup>		Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

If any of the boxes marked with an "E "is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn't have the necessary expertise.

See Sensitivity Map included in Appendix A3.

Also refer to the Ecological Report included in Appendix D1.

#### 5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that does currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

5.1 Natural area	X
5.2 Low density residential	X
5.3 Medium density residential	
5.4 High density residential	
5.5 Informal residential <sup>A</sup>	
5.6 Retail commercial & warehousing	X
5.7 Light industrial	X
5.8 Medium industrial AN	
5.9 Heavy industrial AN	
5.10 Power station	
5.11 Office/consulting room	
5.12 Military or police base/station/compound	
5.13 Spoil heap or slimes dam <sup>A</sup>	
5.14 Quarry, sand or borrow pit	
5.15 Dam or reservoir	X
5.16 Hospital/medical centre	
5.17 School	
5.18 Tertiary education facility	
5.19 Church	
5.20 Old age home	
5.21 Sewage treatment plant <sup>A</sup>	
5.22 Train station or shunting yard N	
5.23 Railway line N	X
5.24 Major road (4 lanes or more) N	
5.25 Airport N	
5.26 Harbour	
5.27 Sport facilities	
5.28 Golf course	
5.29 Polo fields	
5.30 Filling station <sup>H</sup>	X
5.31 Landfill or waste treatment site	
5.32 Plantation	
5.33 Agriculture	X
5.34 River, stream or wetland	
5.35 Nature conservation area	
5.36 Mountain, koppie or ridge	
5.37 Museum	
5.38 Historical building	
5.39 Protected Area	
5.40 Graveyard	
5.41 Archaeological site	
5.42 Other land uses (describe)	

If any of the boxes marked with an " $^{\rm N}$ " are ticked, how this impact will / be impacted upon by the proposed activity.

If YES, specify and explain:	The railway line running parallel to the N18 road from Warrenton towards Vryburg will not be impacted by the proposed activity.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity.

YES, specify and
olain:

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:

The existing Ama-glug filling station, situated on Erf No.1709 north-east of the proposed development will benefit greatly from the proposed project, as the project will provide better access to the filling station by constructing left-in and left-out slip off access from the main access road to the proposed development for the existing station. The filling station does not currently have any access from any main roads.

See Sensitivity Map included in Appendix A3 and the Regional Map is included in Appendix A2.

#### 6. CULTURAL/HISTORICAL FEATURES

Are there any defined in section No. 25 of 1999		NO				
Archaeological site?	Archaeological or paleontological sites, on or close (within 20m) to the Unce					
If YES, explain:						
	If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site.					
Briefly explain the findings of the specialist:						
Will any building or structure older than 60 years be affected in any way? YES NO						
Is it necessary Resources Act,	YES	NO				

If yes, please submit or, make sure that the applicant or a specialist submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made.

## **SECTION C: PUBLIC PARTICIPATION**

A full Public Participation Report, giving a detailed explanation of the public participation process undertaken as part of the BA Process to date, is included as **Appendix E**.

#### 1. ADVERTISEMENT

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  - (i) the site where the activity to which the application relates is or is to be undertaken; and
  - (ii) any alternative site mentioned in the application;
- (b) giving written notice to-
  - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
  - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  - (v) the municipality which has jurisdiction in the area;
  - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
  - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in-
  - (i) one local newspaper; or
  - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  - (i) illiteracy;
  - (ii) disability; or
  - (iii) any other disadvantage.

#### 2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state-
  - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
  - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation:
  - (iii) the nature and location of the activity to which the application relates;
  - (iv) where further information on the application or activity can be obtained; and

(iv) the manner in which and the person to whom representations in respect of the application may be made.

See **Appendix E1** for examples of the advertisement and notice.

#### 3. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

Refer to the Public Participation Report included in **Appendix E** for further details of the measures taken to notify all potential I&APs of the proposed project.

#### 4. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

Proof of placement of the advertisement and notices are included in **Appendix E1**.

#### 5. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

A comments and response report is includes in **Appendix E3**.

#### 6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

- Taxpayers Association (Management of Business Affairs)
- South African National Road Agency Limited (SANRAL)

- Ward Councillor of Ward No. 5, Phokwane Local Municipality
- Phokwane Local Municipality Town Planning Division
- Phokwane Local Municipality Snr Land & Housing Officer
- Phokwane Local Municipality Chief: Environment
- Frances Baard District Municipality Planning and Development
- Frances Baard District Municipality Town Planning Division

See **Appendix E4** for proof of Authority and Organs of State notification.

List of authorities from whom comments have been received:

SANRAL (see Appendix E3 for comments)

#### 7. CONSULTATION WITH OTHER STAKEHOLDERS

See **Appendix E2** for proof of Stakeholder and I&AP notifications.

Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that sub regulation to the extent and in the manner as may be agreed to by the competent authority.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

YES

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

Mr Izak van Niekerk who is an adjacent landowner, had no objection to the project (refer to Comments and Response report attached as **Appendix E3**).

## SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2010, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

#### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

SANRAL stated that the concept of the project appears acceptable. They also stated that no direct access will be allowed from the N18. SANRAL also require a pedestrian management plan (to be included within the Final BAR).

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

See Comments and Response Report attached as Appendix E3.

# 2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/ operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

## **Alternative S1 (Only Alternative)**

PLANNING & DESIGN PHASE					
There are no potential impacts that are likely to occur during this phase.					
CONSTRUCTION PHASE					
Potential Impacts that are likely to occur during the Construction Phase:					
Nature of Impact	Direct/Indirect				
Ecological Disturbance:	Direct and Indirect				
Disturbance and loss of vegetation through the clearing of development footprints.					
Soil Erosion:	Direct and Indirect				
Erosion and consequent loss of topsoil through construction activities i.e. clearing of vegetation, stockpiling of top soil and channelling of storm water.					
Pollution of Topsoil:	Indirect and Indirect				
$Contamination \ of \ topsoil \ during \ construction \ activities \ i.e. \ builders' \ rubble, \ cement,$					
diesel, oil, etc.					
Solid Waste Generation:	Direct and Indirect				
Solid waste generation during construction activities i.e. builders rubble, cement,					
etc.					
Noise Pollution:	Direct				
Noise pollution created by construction activities and associated machinery could					
disrupt neighbouring residents.					
Dust Pollution:	Direct and Indirect				
Dust pollution created during construction activities could disrupt surrounding					
businesses and residents.					
Health and Safety:	Direct				

The health and safety of pedestrians due to construction vehicles using Strydom	
Street to gain access to the site as well as the presence of earth moving equipment	
on site.	
The health and safety of the construction workers during construction related	
activities	
Employment Opportunities:	Direct
The proposed project will create temporary employment opportunities during the	
construction phase.	
OPERATIONAL PHASE	
Potential Impacts that are likely to occur during the Operational Phase:	
Nature of Impact	Direct/Indirect
Nature of Impact Solid Waste Management:	Direct/Indirect  Direct and Indirect
· · · · · · · · · · · · · · · · · · ·	
Solid Waste Management:	
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste	
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a failure to collect and	
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a failure to collect and dispose of solid waste.	Direct and Indirect
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a failure to collect and dispose of solid waste.  Employment Opportunities:	Direct and Indirect
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a failure to collect and dispose of solid waste.  Employment Opportunities:  The proposed project will create permanent employment positions.	Direct and Indirect  Direct and Indirect
Solid Waste Management:  The capacity of the local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a failure to collect and dispose of solid waste.  Employment Opportunities: The proposed project will create permanent employment positions.  Economic Impacts:	Direct and Indirect  Direct and Indirect

### **DECOMMISSIONING AND CLOSING PHASE**

Potential Impacts that are likely to occur in the Decommissioning and Closure Phase.

No discernible impacts are envisaged as it is unlikely that any aspect of the project will be decommissioned or closed at this point in time.

### No-go Alternative

The 'no-go' alternative assumes that the proposed activity does not go-ahead, implying a continuation of the current situation or the status quo.

In the case of this project, the 'no-go' alternative would result in no retail and commercial centre being constructed. There are currently no activities taking place on the proposed development area, therefore the property is not being utilised to its full potential. Should the proposed project not go ahead it may also hinder the economic development in the form of short term employment, long term job creation, financial injection and future developments within the area.

## 2.1. METHODOLOGY APPLIED FOR ASSESSMENT OF POTENTIAL IMPACTS

The impacts were evaluated by applying the methodology as described below. The impact is defined and the **significance** is rated from Low to High as indicated in the table below with an explanation of the impact magnitude and a guide that reflects the extent of the proposed mitigation measures deemed necessary. Where positive impacts are rated, the significance level is rated in converse to that of a negative impact, whereby high is the most favourable category whilst low is of the least impact.

Table 2: EXPLANATION OF SIGNIFICANCE RATINGS AND ASSOCIATED REQUIRED ACTIONS

		Significance								
	Low	Low-Medium	Medium	Medium-High	High					
Impact Magnitude	Impact is of very low order and therefore likely to have very little real effect. Acceptable.	Impact is of low order and therefore likely to have little real effect. Acceptable.	Impact is real, and Potentially substantial in relation to other impacts. Can pose a risk to company	Impact is real and substantial in relation to other impacts. Poses a risk to the company. Unacceptable	Impact is of the highest order possible. Unacceptable. Fatal flaw.					
Action Required	Maintain current management measures. Where possible improve.	Maintain current Management measures. Implement monitoring and evaluate to determine potential increase in risk. Where possible improve.	Implement monitoring. Investigate mitigation Measures and improve management measures to reduce risk, where possible.	Improve management measures to reduce risk.	Implement significant mitigation measures or implement alternatives.					

Following is a short description of the assessment criteria as mentioned above:

## 2.1.1. Nature of impact

The **Nature of impact** is a broad indication of what is being affected and how.

**Severity** relates to the nature of the event, aspect or impact to the environment and describes how severe the impact on the biophysical and socio-economic environment may be.

Table 3: Relationship between the nature and the severity of impacts

	Significance						
	Low	Low- Medium	Medium	Medium-High	High		
Quantitative	0-20%	21-40%	41-60%	61-80%	81-100%		
Qualitative	Insignificant / Non-	Small /Potentially	Significant /	Great / Very	Disastrous /		
	harmful	Harmful	Harmful	harmful	Extremely harmful		
Social / Community	Acceptable / I&AP	Slightly tolerable /	Intolerable /	Unacceptable/	Totally		
response	satisfied	Possible	Sporadic	Widespread	unacceptable/		
		objections	complaints	complaints	Possible legal		
					action		
Irreversibility	Very low cost to	Low cost to	Substantial cost to	High cost to	Prohibitive cost to		
	mitigate / High	mitigate	mitigate /	mitigate	mitigate / Little or		
	potential to mitigate		Potential to		no mechanism to		
	impacts to level of		mitigate impacts /		mitigate impact		
	insignificance/		Potential to		Irreversible		
	Easily reversible		reverse impact				

	Significance									
	Low	Low- Medium	Medium	Medium-High	High					
Biophysical (Air quality, water quantity and quality, waste production, fauna and flora)	Insignificant change /deterioration or disturbance	Moderate change / Deterioration or disturbance	Significant change / / Deterioration or disturbance	Very significant change / deterioration or Disturbance	Disastrous change / Deterioration or disturbance					

## 2.1.2. Extent of impact

Extent refers to the spatial influence of an impact as local (extending only as far as the activity, or will be limited to the site and its immediate surroundings), regional (will have an impact on the region), national (will have an impact on a national scale) or international (impact across international borders).

Table 4: Explanation of extent ratings

Rating	Description
1: Low	Immediate, fully contained area
2: Low-Medium	Surrounding area
3: Medium	Within Business Unit area of responsibility
4: Medium-High	Within Local Boundary area
5: High	Regional, National, International

## 2.1.3. Frequency of impact

Frequency refers to how often the specific activity, related to the event, aspect or impact, is undertaken.

Table 5: Explanation of frequency ratings

Rating	Description
1: Low	Once a year or once / more during operation / LOM
2: Low-Medium	Once / more in 6 Months
3: Medium	Once / more a Month
4: Medium-High	Once / more a Week
5: High	Daily

## 2.1.4. Duration for impacts

Duration refers to the amount of time that the environment will be affected by the event, risk or impact, if no intervention e.g. remedial action takes place.

Table 6: Explanation of duration ratings

Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom / highly unlikely
3: Medium	Infrequent / unlikely / seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

## 2.1.5. Probability of impact

Probability considers the likelihood of an impact / incident occurring over time.

Table 7: Explanation of probability ratings

Rating	Description
1: Low	Almost never / almost impossible
2: Low-Medium	Very seldom / highly unlikely
3: Medium	Infrequent / unlikely / seldom
4: Medium-High	Often / regularly / likely / possible
5: High	Daily / highly likely / definitely

## 2.2. ASSESSMENT AND PROPOSED MITIGATION MEASURES OF THE POTENTIAL IMPACTS DURING THE CONSTRUCTION PHASE

The following impact assessments were done by the specialists in their different fields, they also suggested the relevant mitigation for identified issues.

## 2.2.1. Ecological Disturbance

## 2.2.1.1. Vegetation Loss

Project Phase: Construction Phase							
Status: Negative							
Nature of Impact				Impact	Mitigation		
Destruction of vegetation at the proposed development area.  Severity  Extent				5	5		
				1	1		
			Frequency	5	2		
			Duration	5	5		
			Probability	5	5		
Percentage & Category Rating (without Mitigation)	84%	Total Significance Rating		21/25	18/25		

## Significance: High

Due to the undertaking of construction activity and laying of facility foundations, some habitat which this site provides shall be lost temporary in these phases.

## Mitigation:

- Minimise the footprint to the smallest possible area by sticking to specific construction roads.
- To demarcate the large Camel Thorns trees and plan the layout in such a way that these trees can be protected.

With mitigation the significance rating shall be Medium-high.

72%

## 2.2.1.2. Impact on Fauna

Project Phase: Construction			
Status: Negative			
Nature of Impact		Impact	Mitigation
Impact on faunal community structures due to vegetation clearing and stripping	Severity	4	1
	Extent	4	1

			Frequency	3	1
			Duration	3	1
			Probability	3	1
Percentage & Category Rating (without Mitigation)	68%	Total Significa	nce Rating	17/25	5/25

#### Significance: Medium-high

Due to the undertaking of construction activity and laying of facility foundations, some habitat which this site provides shall be lost temporary in these phases.

#### Mitigation:

Where possible avoid habitat units known to support high diversity of faunal species

With mitigation the significance rating shall be **Low** 20%

## 2.2.1. Impact on Soil

#### 2.2.1.3. Soil Erosion

Project Phase: Construction							
Status: Negative							
Nature of Impact				Impact	Mitigation		
Loss of top soil and the promotion of soil activities i.e. clearing of vegetation, stockpilin	Severity	2	1				
storm water	Extent	2	1				
			Frequency	3	1		
			Duration	3	1		
			Probability	3	1		
Percentage & Category Rating (without Mitigation)	52%	Total Significa	nce Rating	13/25	5/25		

#### Significance: Medium

Bare areas may be disturbed due to construction activities. Runoff water can cause erosion of roads is expected to have a medium impact on the environment.

#### Mitigation:

- Minimise the footprint to the smallest possible area by sticking to specific construction roads.
- Construct berms to take water away from roads.
- Limit extent of vegetation clearing to development areas.
- No blanket clearing to take place.
- All topsoil that is removed from development footprints should be stockpiled in a manner that would prevent soil erosion.
- Sufficient and effective storm water drainage should be installed.
- Eroded areas should be rehabilitated.

With mitigation the significance rating shall be Low.

20%

#### 2.2.1.4. Pollution of Topsoil

Project Phase: Construction							
Status: Negative							
Nature of Impact		Impact	Mitigation				
Contamination of top soil during construction activities i.e. builders rubble, cement, diesel, oil, etc.	Severity	3	1				
	Extent	1	1				

			Frequency	1	1
			Duration	3	1
			Probability	2	1
Percentage & Category Rating (without Mitigation)	40%	Total Significa	nce Rating	10/25	5/25

#### Significance: Low-medium

Topsoil may be contaminated due to construction activities is expected to have a low to medium impact on the environment.

#### Mitigation:

- Implement the section of the site specific EMP that deals with all issues of waste management i.e. solid, effluent and hazardous waste.
- The EMP should include method statements as well as penalties for non-compliance by contractors

With mitigation the significance rating shall be Low.

20%

## 2.2.2. Solid Waste

#### 2.2.2.1. Solid Waste Generation

Project Phase: Construction									
Status: Negative									
Nature of Impact				Impact	Mitigation				
Solid waste generation during construction cement, etc.	Severity	1	1						
			Extent	1	1				
			Frequency	3	1				
			Duration	1	1				
	Probability	3	1						
Percentage & Category Rating (without Mitigation)	36%	Total Significa	nce Rating	9/25	5/25				

## Significance: Low-medium

Solid waste will be produced during the construction phase is expected to have a low to medium impact on the proposed development area.

#### Mitigation:

- Implement the section of the site specific EMPr that deals with all issues of waste management i.e. solid, effluent and hazardous waste.
- The EMPr should include method statements as well as penalties for non-compliance by contractors.

With mitigation the significance rating shall be **Low**.

20%

#### 2.2.3. Nuisance

## 2.2.3.1. Noise pollution

Project Phase: Construction Status: Negative			
Noise pollution created by construction activities and associated machinery could disrupt neighbouring residents and businesses.	Severity	1	1
	Extent	1	1
	Frequency	3	1

			Duration	3	2
			Probability	4	1
Percentage & Category Rating (without 80% Total Significance Rating Mitigation)		12/25	6/25		
Significance: Medium-high Only the construction machinery during the construction phase will generate noise.					
<ul> <li>Mitigation:</li> <li>Construction activities should take place during regular working hours.</li> <li>Construction machinery to be fitted with silencers to prevent excessive noise pollution</li> </ul>					
With mitigation the significance rating shall be <b>Low-medium</b> .			24%		

#### 2.2.4. Impact on Ambient Air Quality

2.2.4.1. Dust pollution

Project Phase: Construction					
Status: Negative					
Nature of Impact	Impact	Mitigation			
surrounding businesses.			Severity	2	1
			Extent	2	1
			Frequency	3	1
			Duration	3	1
			Probability	3	1
Percentage & Category Rating (without Mitigation)	52%	Total Significa	nce Rating	13/25	5/25

Significance: Medium

The frequent upwelling of dust as consequence of construction may impact on workers causing asthma and other respiratory conditions.

#### Mitigation:

• Regular dust suppression, by dampening construction sites, access roads, topsoil stockpiles etc. must take place in order to minimise dust generation.

With mitigation the significance rating shall be Low.

20%

#### 2.2.5. Health and Safety

Project Phase: Construction							
Status: Negative							
Nature of Impact		Impact	Mitigation				
The health and safety of pedestrians due to construction vehicles using	Severity	4	1				
Strydom Street to gain access to the site as well as the presence of earth							
moving equipment on site.	Extent	1	1				
The health and safety of the construction workers during construction related activities.	Frequency	3	1				
	Duration	3	1				
	Probability	2	1				

Percentage & Category Rating (without Mitigation)	52%	Total Significance Rating	13/25	5/25		
Significance: Medium						
Mitigation:						
A pedestrian management programme should be included within the EMPr.						
With mitigation the significance rating shall be <b>medium</b> .			20%			

# 2.2.6. Social impacts

2.2.5.1. Job creation

Project Phase: Construction						
Status: Negative						
Nature of Impact				Impact	Mitigation	
The proposed development will create judgment construction phase for mainly local labourers.	Severity	4	4			
			Extent	3	3	
			Frequency	3	3	
			Duration	1	1	
			Probability	3	3	
Percentage & Category Rating (without Mitigation)	52%	Total Significa	nce Rating	13/25	5/25	
Significance: Medium  The positive impact of the proposed development on job creation will be an advantage, in the community, with a current unemployment rate exceeding 30%.						
Mitigation: Local communities should be informed upfror	nt and in no un	ncertain terms that	the possibility of l	ocal employment is	s most unlikely so	

Local communities should be informed upfront and in no uncertain terms that the possibility of local employment is most unlikely so that unrealistic expectations are not created in terms of job opportunities.

With mitigation the significance rating shall be <b>medium</b> .	52%

#### 2.2.5.2. Conflict

Project Phase: Construction				
Status: Negative				
Nature of Impact		Impact	Mitigation	
Influx of construction workers, competing for available job community.	Severity	1	1	
		Extent	1	1
		Frequency	1	1
		Duration	1	1
		Probability	1	1
Percentage & Category Rating (without Mitigation)	Total Significa	nce Rating	5/25	5/25
Significance: Low				
An influx of construction workers into the local communities	s could cause conf	flict among the peo	ople looking for em	ployment.
Mitigation:				
Locals should be informed upfront that it is unlikely that the	e project will direc	tly employ commu	inity members to w	ork on the project
so that there are no unrealistic expectations on the part of	the community			

# 2.2.5.3. Influx of jobseekers

With mitigation the significance rating shall be low.

Project Phase: Construction					
Status: Negative					
Nature of Impact	Impact	Mitigation			
In-migration of jobseekers leading to expansion which in turn can place additional strain on a	Severity	1	1		
			Extent	1	1
	Frequency	2	1		
			Duration	4	3
			Probability	2	2
Percentage & Category Rating (without Mitigation)	40%	Total Significa	nce Rating	10/25	8/25
Significance: Low-medium				•	•
It is expected that the influx of construction w	orkers will hav	ve a relatively low	to medium impact	on the community	<b>'</b> .
Mitigation:					
Where unskilled labour is required, it should	be sourced fro	m the local comm	unities whichever	is the closest to the	e construction site
With mitigation the significance rating shall b	e low-mediun	n.		3	2%

## 2.2.7. Impact on Heritage

2.2.6.1. Discovery of heritage sites

Project Phase: Construction			
Status: Positive			
Nature of Impact		Impact	Mitigation
Destruction of any Heritage resources.	Severity	-	-
	Extent	-	-
	Frequenc	cy -	-
	Duration	-	-
	Probabili	ity -	-
Percentage & Category Rating (without Mitigation)	Total Significance Rating	-	-
Significance: None	•	1	1
Mitigation:			
Should substantial fossil remains be discovered duri wood, the ECO should safeguard these, preferably recording, sampling or collection) can be taken by a	in situ, and alert SAHRA as soon	•	
. coording, campling or consolion, can be taken by a	processial palacontologist.		

# 2.3. ASSESSMENT AND PROPOSED MITIGATION MEASURES OF THE POTENTIAL IMPACTS DURING THE OPERATIONAL PHASE

## 2.3.1. Ecological Disturbance

2.2.6.2. Vegetation Loss

Project Phase: Operational Phase					
Status: Negative					
Nature of Impact				Impact	Mitigation
Destruction of vegetation at within the proposed development area.  Severity			Severity	3	3
Extent Frequency Duration				1	1
				1	1
				1	1
			Probability	1	1
Percentage & Category Rating (without Mitigation)	28%	Total Significa	nce Rating	7/25	7/25
Significance: Low-medium					•
Due to the undertaking of construction activi	ity and laying o	of facility foundation	ons, some habitat	which this site prov	vides shall be lost
temporary in these phases.					
Mitigation:					
Keep as much as possible Camel Thorage	rn trees on the	site and protect th	nem from damage	by people.	
With mitigation the significance rating shall b	e Low-mediu	m		28	3%

## 2.3.2. Solid Waste

2.2.6.3. Solid Waste Management

Project Phase: Operational phase						
Status: Negative						
Nature of Impact	Impact	Mitigation				
The capacity of the Phokwane local municipality to deal with the increase in solid waste generation could be put under strain which could lead to a				1	1	
failure to collect and dispose of solid waste.			Extent	1	1	
	Frequency	3	1			
					1	
			Probability	3	1	
Percentage & Category Rating (without	52%	Total Significa	nce Pating	13/25	5/25	
Mitigation)	JZ /0	Total Significa	ince ivaling	15/25	3/23	
Significance: Medium						
Solid waste will be produced during the operational phase is expected to have a medium impact on the proposed development area.						
Mitigation:						
The Phokwane local municipality have agree	ed to collect an	d dispose of the s	solid waste.			
With mitigation the significance rating shall b	e Low.			20	)%	

# 2.3.3. Social impacts

#### 2.2.6.4. Influx of Jobseekers

Project Phase: Operational						
Status: Negative						
Nature of Impact	Impact	Mitigation				
In-migration of jobseekers leading to expansion which in turn can place additional strain on a	Severity	1	1			
			Extent	1	1	
			Frequency	2	1	
		Duration	4	3		
			Probability	2	2	
Percentage & Category Rating (without Mitigation)	40%	Total Significance Rating		10/25	8/25	
Significance: Low-medium					•	
It is expected that the influx of construction w	vorkers will hav	e a relatively low	to medium impact	on the community.		
Mitigation:						
Where unskilled labour is required, it should be sourced from the local communities whichever is the closest to the construction site.						
With mitigation the significance rating shall b	e low-medium	1.		32%		

## 2.2.6.5. Employment opportunities

Project Phase: Construction		
Status: Positive		
Nature of Impact	Impact	Mitigation

The proposed development will create operational phase for local community members.		ties during tl	e Severity	4	4
			Extent	3	3
			Frequency	3	3
			Duration	1	1
			Probability	3	3
Percentage & Category Rating (without Mitigation)	52%	Total Signif	cance Rating	13/25	5/25

#### Significance: Medium

The positive impact of the proposed development on job creation will be an advantage, in the community, with a current unemployment rate exceeding 30%.

#### Mitigation:

Local communities should be informed upfront and in no uncertain terms that the possibility of local employment is most unlikely so that unrealistic expectations are not created in terms of job opportunities.

With mitigation the significance rating shall be <b>medium</b> .	52%
With mitigation the significance rating shall be <b>medium.</b>	JZ /0

## 2.3.4. Economic Impact

2.3.5.1. Competition

Project Phase: Operational							
Status: Negative	Status: Negative						
Nature of Impact Impact Mitigation							
The proposed development could have a businesses and accommodation facilities in	3	2					
areas.  Extent  Frequency				4	4		
				5	3		
			Duration	5	3		
			Probability	3	1		
Percentage & Category Rating (without Mitigation)	80% Total Significance Rating			20/25	13/25		
Significance: Medium-high		_		•	•		
Mitigation:							
With mitigation the significance rating shall be	e Medium.			52%			

## 2.3.5. *Traffic*

2.3.5.2. Traffic Congestion

Project Phase: Operational							
Status: Negative							
Nature of Impact				Impact	Mitigation		
The proposed retail and commercial center commodity within Hartswater and it is likely	Severity	1	1				
levels of traffic within the area in and around Strydom Street and Pokwani Way.				1	1		
way.			Frequency	3	1		
			Duration	5	2		
			Probability	3	1		
Percentage & Category Rating (without 52% Total Significa			nce Rating	13/25	6/25		
Significance: Medium		_			•		
Mitigation:							
With mitigation the significance rating shall b	e Low-mediu	m.		24	1%		

## 2.3.6. No-go Alternative

"No-go" Alternative						
Nature of Impact		Impact	Mitigation			
The land use will not change and the site will remain unchanged, i.e. vacant and underutilized. No retail and commercial centre and the creation	Severity	0	0			
of job opportunities in the area.	Extent	1	1			
	Frequency	0	0			
	Duration	3	3			

			Probability	1	1
Percentage & Category Rating (without Mitigation)  Total Signification		nce Rating	5/25	5/25	
Significance: Low					
Mitigation:					
With mitigation the significance rating shall be Low.				20	1%

#### 3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

#### Alternative S1 (only alternative)

## **Impact Assessment Statement**

Table 8: Summary of Impact Significance pre- and post-mitigation.				
PLANNING & DESIGN PHASE				
There are no potential impacts that are likely to o	ccur during this phase	).		
CONSTRUCTION PHASE				
Potential Impacts that are likely to occur during the	e Construction Phase	):		
Nature of Impact	Direct/Indirect	Without	With	Rating
		Mitigation	Mitigation	Туре
Ecological Disturbance:	Direct and Indirect	High	Medium-high	Negative
Disturbance and loss of vegetation through the clearing of development footprints.				
Impact on faunal community structure	Direct and Indirect	Medium-high	Low	Negative
Soil Erosion:	Direct and Indirect	Medium	Low	Negative
Erosion and consequent loss of topsoil through construction activities i.e. clearing of vegetation, stockpiling of top soil and channelling of storm water.				
Pollution of Topsoil:	Direct and Indirect	Low-medium	Low	Negative
Contamination of topsoil during construction				
activities i.e. builders' rubble, cement, diesel, oil,				
etc.				
Solid Waste Generation:	Direct and Indirect	Low-medium	Low	Negative
Solid waste generation during construction				
activities i.e. builders rubble, cement, etc.				
Noise Pollution:	Direct	Medium-high	Low-medium	Negative

Noise pollution created by construction activities				
and associated machinery could disrupt				
neighbouring residents.				
Dust Pollution:	Direct and Indirect	Medium	Low	Negative
Dust pollution created during construction				
activities could disrupt surrounding businesses				
and residents.				
Health and Safety:	Direct	Medium	Low	Negative
The health and safety of pedestrians due to				
construction vehicles using Strydom Street to				
gain access to the site as well as the presence				
of earth moving equipment on site.				
The health and safety of the construction				
workers during construction related activities				
Employment Opportunities:	Direct	Medium	Medium	Positive
The proposed project will create temporary				
employment opportunities during the				
construction phase.				
Conflict:	Direct	Low	Low	Negative
Influx of construction workers, competing for				
available jobs with the local community.				
Influx of Jobseekers:	Direct	Low-medium	Low-medium	Negative
In-migration of jobseekers leading to expansion				
of the informal settlement which in turn can place				
additional strain on already limited resources.				
Heritage:	None	-	-	Positive
Discovery of heritage resources				
OPERATIONAL PHASE				
Potential Impacts that are likely to occur during the	e Operational Phase:			
Nature of Impact	Direct/Indirect	Without	With	Rating
		Mitigation	Mitigation	Туре
Ecological Disturbance:	Direct	Low-medium	Low-medium	Negative
Destruction of vegetation at within the proposed				
development area.				
Solid Waste Management:	Direct and Indirect	Medium	Low	Negative

	The capacity of the local municipality to deal with				
	the increase in solid waste generation could be				
	put under strain which could lead to a failure to				
	collect and dispose of solid waste.				
	Influx of Jobseekers:	Direct & Indirect	Low-medium	Low-medium	Negative
	In-migration of jobseekers leading to expansion				
	of the informal settlement which in turn can place				
	additional strain on already limited resources.				
	Employment Opportunities:	Direct and Indirect	Medium	Medium	Positive
	The proposed project will create permanent				
	employment positions.				
	Economic Impacts:	Indirect	Medium-high	Medium	Negative
	The proposed development could have an				
	impact on existing businesses and				
	accommodation facilities in Hartswater and				
	surrounding areas.				
	Traffic Congestion:	Direct	Medium	Low-medium	Negative
	The proposed retail and commercial center is				
	predicted to be a popular commodity within				
	Hartswater and it is likely that it will caused				
	increased levels of traffic within the area in and				
	around Strydom Street and Pokwani Way.				
-		ı.			

## **DECOMMISSIONING AND CLOSING PHASE**

Potential Impacts that are likely to occur in the Decommissioning and Closure Phase.

No discernible impacts are envisaged as it is unlikely that any aspect of the project will be decommissioned or closed at this point in time.

#### No-go Alternative

The 'no-go' alternative assumes that the proposed activity does not go-ahead, implying a continuation of the current situation or the status quo.

In the case of this project, the 'no-go' alternative would result in no retail and commercial centre being constructed. There are currently no activities taking place on the proposed development area, therefore the property is not being utilised to its full potential. Should the proposed project not go ahead it may also hinder the economic development in the form of short term employment, long term job creation, financial injection and future developments within the area.

The overall impacts are of a negative nature, whilst most impacts can be mitigated to reach acceptable significance levels. Some positive impacts, with low significance, may also occur from the social aspects point of view.

#### No-go alternative (compulsory)

The significance of the impact of the no-go alternative is anticipated to be low.

Although the impacts identified, such as ecological impacts, would not increase if the project did not go ahead, the socio-economic benefit of the proposed project should not be overlooked.

#### SECTION E. RECOMMENDATION OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

Is an EMPr attached?

YES	
YES	

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

N/A

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

#### Recommendations from the Ecologist:

- A permit must be obtained to prune or remove any Camel Thorn tree on site this is in terms of the Forest Act (Act 84 of 1998);
- Erosion control measures must be put in place during construction and operational phases.
- Dust control measures must be put in place during construction phases.

#### Recommendations from the Traffic Specialist:

- The proposed access to the site is on Strydom Street. The position of the proposed access point is directly
  opposite the intersection with Pokwani Way.
- Pedestrian and bicycle access to the site is proposed via the proposed access point. Due to the location and
  nature of the development it is expected to generate local pedestrian traffic and the appropriate pedestrian
  facilities recommended are: surfaced pedestrian sidewalk along Pokwani Way between Strydom Street and
  the N18 bridge,
  - surfaced pedestrian sidewalk along the internal road network, and
  - surfaced pedestrian sidewalk along Stydon Street between the N18 and Pokwani Way.
- No access control is proposed for the development.

#### Recommendations from the EAP:

Based on the information provided, it is the opinion of Enviroworks that no fatal flaws have been identified for the construction of a retail and commercial centre on Erf No. 2027 located in close proximity to the town of Hartswater, along the N18, between Kimberley and Vryburg in the northern part of the Northern Cape Province, and that this report is sufficient enough to allow the Department of Environment and Nature Conservation (DENC), Northern Cape Province to make an informed decision.

Enviroworks therefore recommends that Environmental Authorisation be granted for the proposed projects based on the following recommendations:

- Appointment of an independent Environmental Control Officer (ECO) during the construction phase to oversee implementation of the mitigation and management measures prescribed in the Environmental Management Programme.
- The facility, and compliance with the Environmental Management Programme (EMPr) should be monitored sporadically during the operational phase of the project.
- An independent Environmental Control Officer should be appointed to monitor the decommissioning of the facility, in accordance with the EMPr.
- That strict adherence to the mitigation measures contained within the EMPr be enforced in order to reduce the risk or significance of impacts to an acceptable level.

See EMPr attached as Appendix F.

#### **SECTION F: APPENDIXES**

The following appendixes must be attached as appropriate:

Appendix A: Maps and Site plan(s)

- 1. Locality Map
- 2. Regional Map
- 3. Sensitivity Map
- 4. Services Plan
- 5. Site Plan

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

- 1. Ecological Report
- 2. Traffic Impact Assessment
- 3. Services Report

Appendix E: Public Participation Report (Comments and Response report)

- 1. Proof of Advertisement, Site Notice and Background Information Document
- 2. Proof of Stakeholder Notification
- 3. Comments and Response Report
- 4. Proof of Authority and Organs of State Notification
- 5. Additional Information

Appendix F: Environmental Management Programme (EMPr)

1. Weed Eradication Programme

Appendix G: Other information - None

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