

<u>destea</u>

department of economic, small business development, tourism and environmental affairs FREE STATE PROVINCE

(For official use only)

File Reference Number: Application Number: Date Received:

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014, promulgated in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended.

Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended 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.
- This report format is current as of 07 April 2017. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is 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.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. 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.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.
- 11. 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.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.

- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section? YES NO If YES, please complete the form entitled "Details of specialist and declaration of interest" for the specialist appointed and attach in Appendix I.

1. PROJECT DESCRIPTION

a) Describe the project associated with the listed activities applied for

The proposed development will take place on the remaining extent of the farm Outspan 1960, Bloemfontein, which has an extent of 15.31 ha. The site is located along the R64 Dealesville road, approximately 1.5 km outside Bloemfontein. Refer to the Locality Plan in **Appendix A**.

The proposed development consists of an agricultural related sales area with a maximum footprint of 1 000 m², an agricultural related storage area with a maximum footprint of 2 000 m², a workshop with a maximum footprint of 500 m², an outside exhibition area with a maximum footprint of 200 m². offices with a maximum footprint of 2 000 m², a filling station, including a convenience store with a maximum footprint of 200 m² and a caretakers dwelling (Refer to the Site Development Plan in **Appendix C**). The agricultural storage area will store items such as animal feeds, fertilizer, seed, cement, plastic pipes, fencing, steel, plastic tanks and other related items. The sales area will sell primarily items such as hardware, pet food, irrigation equipment, paint, animal medicines, clothing, tools, gardening equipment and so forth. Activities that will take place at the workshop include tractor and implement repairs.

It is planned that the filling station will store approximately 120 000 L of dangerous goods in the form of 40 000 L (2×40 000 L tanks) of diesel and 40 000 L of petrol. These tanks will be located underground. It is planned that the filling station will operate from 6am to 6pm initially. In future, the applicant would like the filling station to be open 24 hours a day. Access will be gained to the site by connecting the proposed internal street with the R64 road. Along with this access road, an intersection is also planned.

Four erven are proposed with a total development footprint of 8.87 ha (clearance of an area of approximately 2.89 ha of indigenous vegetation on Erf 1 and approximately 5.29 ha of indigenous vegetation on Erf 2. Indigenous vegetation will also need to be cleared for the construction of an internal street of approximately 264 m in length and 0.69 ha in extent on Erf 3 and 4). Refer to the Layout Plan in **Appendix A** and the Site Development Plan in **Appendix C**.

The site falls within the Bloemfontein Dry Grassland (Gh 5) vegetation type, which is classified as Vulnerable according to the National List of Threatened Ecosystems (Notice 1477 of 2009) (National Environmental Management Biodiversity Act, 2004). There are no watercourses or wetlands present on the proposed site. However, there is a poorly defined channel present on site which may be construed as a drainage line, but which is most likely an artificial modification (Van Rensburg, 2019). The nearest waterbody to the site, which may possibly be a wetland, is situated approximately 340 m to the southeast of the site, on the other side of the R64 road on another property.

Refer to the Ecological Assessment in Appendix D

Services and infrastructure:

Water - According to the Services Report done an existing 150 mm water main is situated along the north eastern boundary of Outspan 1960 in the Van Vuuren Road. It was found that the water network has sufficient capacity to support the proposed development's normal operating pressure and that a connection should be made to the 150 mm water main. However, taking a fire demand in consideration, onsite water storage is required to satisfy the normal operational pressure and the minimum fire water requirements (Cilliers, 2019).

Refer to the Services Report in Appendix D.

Sewage - There is currently no municipal sewer network in the area. The proposed development will be serviced by means of a septic tanks/conservancy tanks and/or French drains. These tanks will be emptied and maintained at the cost of the developer. A contractor will be appointed by the developer to empty the conservancy tanks on a regular basis and dispose of the sewage at the municipal sewage works (Cilliers, 2018).

Refer to the Services Report in Appendix D.

Traffic – The traffic study concluded that a total of 71 new trips during the morning and 83 trips during the afternoon will be made during peak hours. It is not expected that the development will have a significant impact on the road network. To accommodate the development, the intersection of Van Vuuren road (T5023) with Kenilworth road will be closed and a new intersection will be established with the R64 road. This will improve spacing. The Kenilworth road and R64 road intersection is expected to experience capacity problems with latent rights. Signalisation may be required in the future. Change in land use is recommended from a traffic point of view (Marais, 2019).

Refer to the Traffic Impact Assessment in Appendix D.

Storm water – The storm water runoff from site drains in a north, north western direction and will drain toward the Abrahamskraal Road. The runoff will then drain along the road in a north western direction in the direction of the Modder River. No on-site storm water retention will be required for the proposed project. It is recommended that an upgrade be implemented alongside the Abrahamskraal road forming part of the overall storm water path in the form of an unlined open natural channel. (Cilliers, 2018).

The study area is located in an area with a medium Mean Annual Precipitation and Mean Annual Evaporation and therefore the amount of storm water that will be generated is relatively low. However, due to the nature of the operation (filling station that stores hazardous substances) storm water measures in the form of a trench around the site is recommended. This is recommended in order to divert clean storm water around the site into the natural drainage lines that drain toward the Abrahamskraal road and the Modder River. It is also advised that any wash water originating from the workshop during the operational phase must first go through an oil separator before draining into the storm water channels. It is also recommended that a monitoring borehole be drilled downstream from the site where the filling station will be located in order to monitor possible contamination of groundwater (Van Wyk, 2019).

Refer to the Services Report and the Storm Water Management Plan in Appendix D.

Geohydrological Aspects – The aquifer in the area is expected to be deep-seated (approximately 90 – 110 meters below ground level ("**mbgl**")) However, the static water level in the area is between 30 and 24 mbgl and is a combination of hydrostatic pressure from below and infiltration water from the surface. A monitoring borehole was drilled on site downstream from the proposed petrol and diesel storage tanks associated with the proposed filling station. The borehole was drilled to a depth of 61 mbgl. "The analysis of the geology indicates that water would have been found occurring naturally at around 30 mbgl, but it is estimated due to drought, development and use of the aquifer, that amount of water at this depth is significantly reduced." The aquifer is classified as being a minor aquifer that is expected to yield around 3000 L/hour. This aquifer will require a form of monitoring/protection as neighbouring groundwater users in the area rely heavily on this aquifer for cattle watering and domestic use.

"The first 30 mbgl consists of mainly red sand which has high permeability and is estimated that contaminates can spread as fast as 2 m/ day if it comes in contact with the groundwater. It is thus recommended that special precautions need to be taken to prevent surface contamination (spillages and runoff) from infiltrating into the permeable sand and end up in the groundwater. It is recommended that any form of contamination found during quarterly water sample analysis be treat with swift remedial action to avoid the creation of a pollution plume which will affect downstream groundwater users."

"In conclusion the aquifer system in the area is not specifically important on a large scale and also the aquifer is situated very deep at 90 mbgl making it difficult for contaminates to reach that depth. However, on local scale the aquifer is being utilized for important activities and strict monitoring and mitigation measures will determine whether the groundwater quality changes." (Van Wyk 2019).

Refer to the Geohydrological Assessment in Appendix D.

b) Provide a detailed description of the listed activities associated with the project as applied for

Listed activity as described in GN 327,325 and 324	Description of project activity
Example: GN 327 Item xx xx): The construction of a bridge where such construction occurs within a watercourse or within 32 metres of a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line.	A bridge measuring 5 m in height and 10m in length, no wider than 8 meters will be built over the Orange river
GN.R. 327 (7 April 2017) Activity 28: "Residential, mixed, retail, commercial, industrial or institutional developments where such land was used for agriculture, game farming, equestrian purposes or afforestation on or after 01 April 1998 and where such development: (i) will occur inside an urban area, where the total land to be developed is bigger than 5 hectares;	A footprint of approximately 8.87 ha will be developed for retail and commercial use. The site is currently zoned as Holdings.

or (ii) will occur outside an urban area, where the total land to be developed is bigger than 1 hectare; excluding where such land has already been developed for residential, mixed, retail, commercial, industrial or institutional purposes."	
GN.R. 327 (7 April 2017) Activity 27: "The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation".	Approximately 8.87 ha of indigenous vegetation will be cleared.
GN.R. 327 (7 April 2017) Activity 14 – "The development and related operation of facilities or infrastructure, for the storage, or storage and handling of a dangerous good, where such storage occurs in containers with a combined capacity of 80 cubic metres or more but not exceeding 500 cubic metres."	It is planned that the filling station will store approximately 120 000 L of dangerous goods in the form of 40 000 L (2×40 000 L tanks) of diesel and 40 000 L of petrol

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 as required by Appendix 1 (3)(h) of GN 326, Regulation 2014 as amended. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity (NOT PROJECT) 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.

The identification of alternatives should be in line with the Integrated Environmental Assessment Guideline Series 11, published by the DEA in 2004. Should the alternatives include different locations and lay-outs, the co-ordinates of the different alternatives must be provided. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

a) Site alternatives

Note:

There are no location alternatives for the proposed project. The applicant owns the proposed property. The proposed development, which includes a filling station and agricultural sales and storage area, will serve the entire area (Bainsvlei and Groenvlei agricultural holdings) and will be the only one in the immediate vicinity. The area is also earmarked for future development according to the Mangaung Metropolitan Municipality Spatial Development Framework (**"SDF**") (2019). Thus, an increase in residential developments is expected in the near future, which contributes towards the feasibility of the proposed development. In terms of environmental suitability, the proposed site has no natural watercourses within 100 m of the site and falls within a degraded area according to the Free State Biodiversity Management Plan (2015).

	Alternative 1 (preferred alternative)			
Description		Coordinate	Lat (DDMMSS)	Long (DDMMSS)
_		Points		
Outspan RE/1	960	Centre	29° 4'16.49"S	26° 8'34.75"E
		Point		
	AI	ternative 2		
Description			Lat (DDMMSS)	Long (DDMMSS)
N/A				
Alternative 3				
Description			Lat (DDMMSS)	Long (DDMMSS)
N/A				

Latitude (S):

In the case of linear activities:

Alternative:

Alternative S1 (preferred)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S2 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

Alternative S3 (if any)

- Starting point of the activity
- Middle/Additional point of the activity
- End point of the activity

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.

In the case of an area being under application, please provide the co-ordinates of the corners of the site as indicated on the lay-out map provided in Appendix A of this form.

7

N/A	
	-

Longitude (E):

N/A	

N/A	

b) Lay-out alternatives

Note:

There are also no layout alternatives due to traffic regulations in the provision of the proposed internal street.

Alternative 1 (preferred alternative)				
Description	Coordinate	Lat (DDMMSS)	Long (DDMMSS)	
	Points			
Outspan RE/1960	А	29° 4'4.55"S	26° 8'18.45"E	
	В	29° 4'8.39"S	26° 8'27.58"E	
	С	29° 4'17.96"S	26° 8'40.28"E	
	D	29° 4'26.12"S	26° 8'47.21"E	
	E	29° 4'15.41"S	26° 8'30.64"E	
	Alternative 2			
Description		Lat (DDMMSS)	Long (DDMMSS)	
N/A				
	Alternative 3			
Description		Lat (DDMMSS)	Long (DDMMSS)	
N/A				

c) Technology alternatives

Alternative 1 (preferred alternative)

The preferred alternative is connecting all the services (water and electricity) to available municipal lines.

There is an existing 150 mm water main along the north eastern boundary of Outspan 1960 in the Van Vuuren Road. However, taking a fire demand in consideration, onsite water storage is required to satisfy the normal operational pressure and the minimum fire water requirements. There is currently no municipal sewer network in the area. The proposed development will be serviced by means of septic tanks/conservancy tanks and/or French drains (Cilliers, 2019).

Alternative 2
N/A
Alternative 3
N/A

d) Other alternatives (e.g. scheduling, demand, input, scale and design alternatives)

Alternative 1 (preferred alternative)			
N/A			
	Altern	native 2	
	Alter	native 3	

e) No-go alternative

The "no-go" alternative will be considered throughout the assessment of the proposed project. If the project is not authorised, it will result in the following:

- Loss of employment opportunities.
- Loss of potential business opportunity.

However, no vegetation will be cleared and the site will remain in its current state.

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

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:

Alternative A1¹ (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

or, for linear activities:

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

Length of the activity:

Size of the activity:

88 600 m²/8.87 ha

 m^2

 m^2

m²

m²

N/A m
m
m

Size of the site/servitude:

153 100 m²/15.31 ha

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

Alternative:

Alternative A1 (preferred activity alternative) Alternative A2 (if any) Alternative A3 (if any)

4. SITE ACCESS

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

YES ✓ NO

¹ "Alternative A.." refer to activity, process, technology or other alternatives. 9

Describe the type of access road planned:

The site is situated directly next to the R64 road and the Van Vuuren Road.

However, an internal access road of approximately 264 m is planned that will connect with the R64 road and enter at approximately the middle of the proposed site. An intersection is also planned where this access road connects with the R64.

It is planned that the entrance to Van Vuuren Road from Kenilworth Road be closed. Residents of the properties in Van Vuuren Road will gain access to their properties via the new access road. A right of way (Row Servitude) will be created for the properties on the Eastern part of Van Vuuren Road.

This plan has been approved by the Free State Department of Police, Roads and Transport. Please refer to the Layout Plan in **Appendix A**.

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.

5. LOCALITY MAP

An A3 locality map must be attached to the back of this document, as Appendix A. The scale of the locality map must be relevant to the size of the development (at least 1:50 000. For linear activities of more than 25 kilometres, a smaller scale e.g. 1:250 000 can be used. The scale must be indicated on the map.). The map must indicate the following:

- an accurate indication of the project site position as well as the positions of the alternative sites, if any;
- indication of all the alternatives identified;
- closest town(s;)
- road access from all major roads in the area;
- road names or numbers of all major roads as well as the roads that provide access to the site(s);
- all roads within a 1km radius of the site or alternative sites; and
- a north arrow;
- a legend; and
- locality GPS co-ordinates (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.

6. LAYOUT/ROUTE PLAN

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 property boundaries and numbers of all the properties within 50 metres of the site;
- the current land use as well as the land use zoning of the site;

- the current land use as well as the land use zoning each of the properties adjoining the site or sites;
- the exact position of each listed activity applied for (including alternatives);
- servitude(s) indicating the purpose of the servitude;
- a legend; and
- a north arrow.

7. SENSITIVITY MAP

The layout/route plan as indicated above must be overlain with a sensitivity map that indicates all the sensitive areas associated with the site, including, but not limited to:

- watercourses;
- the 1:100 year flood line (where available or where it is required by DWS);
- ridges;
- cultural and historical features;
- areas with indigenous vegetation (even if it is degraded or infested with alien species); and
- critical biodiversity areas.

The sensitivity map must also cover areas within 100m of the site and must be attached in Appendix A.

8. 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 report. It must be supplemented with additional photographs of relevant features on the site, if applicable.

9. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of at least 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.

10. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?	YES	NO√	Please explain	
Currently the site is zoned as "Holdings". This does not make provision for the proposed development/activity. The applicant intends to rezone the site to "Special Use" to include all the uses as indicated in the project description. Environmental Authorisation needs to be obtained first in order to apply for rezoning.				
2. Will the activity be in line with the following?				
(a) Provincial Spatial Development Framework (PSDF)	YES✓	NO	Please explain	
According to the PSDF this project fulfils the following criteria as set out	in the P	SDF:		
PILLAR 1: INCLUSIVE ECONOMIC GROWTH AND SUSTAINABLE GROWTH JOB CREATION. Driver 1: Diversify and expand agricultural development and food security. This project will expand the agri-industry development by establishing an agricultural related sales and storage area that will cater for the surrounding agricultural area (Bainsvlei and Groenvlei Small Holdings). This will also indirectly improve food security.				
(b) Urban edge / Edge of Built environment for the area	YES√	NO	Please explain	
The proposed site for the development is located within the urban edge specifically within the urban fringe, which is set out for urban expansion.		unicipal	SDF,	
 (c) Integrated Development Plan (IDP) and Spatial Development Framework (SDF) of the Local Municipality (e.g. would the approval of this application compromise the integrity of the existing approved and credible municipal IDP and SDF?). 	YES✓	NO	Please explain	
The proposed project is in line with the IDP and SDF of the Mangaung Metro Municipality, as the developmental area falls within the urban edge, which is earmarked for future development. However, the area is earmarked for future residential development and not specifically special use development.				
(d) Approved Structure Plan of the Municipality	YES✓	NO	Please explain	
Building plans for the proposed development will still be submitted to the municipality.				

(e) An Environmental Management Framework (EMF) adopted by the Department (e.g. Would the approval of this application compromise the integrity of the existing environmental management priorities for the area and if so, can it be justified in terms of sustainability considerations?)	YES√	NO	Please explain	
The proposed project is in line with the EMF of the Mangaung Metro Municipality. The proposed site does fall within one of the threatened vegetation types (Bloemfontein Dry Grassland) as indicated in the EMF. However, with the help of an Environmental Assessment Practitioner, it will be ensured that the development conforms to the NEMA principles and duty of care as well as other environmental legal requirements.				
(f) Any other Plans (e.g. Guide Plan)	YES	NO✓	Please explain	
All applicable plans have been discussed.		[
3. Is the land use (associated with the activity being applied for) considered within the timeframe intended by the existing approved SDF agreed to by the relevant environmental authority (i.e. is the proposed development in line with the projects and programmes identified as priorities within the credible IDP)?	YES√	NO	Please explain	
The development will expand agri-industry, which is in line with the Man and falls within an area earmarked for future urban development.	gaung N	letro Mu	unicipality IDP	
4. Does the community/area need the activity and the associated land use concerned (is it a societal priority)? (This refers to the strategic as well as local level (e.g. development is a national priority, but within a specific local context it could be inappropriate.)	YES√	NO	Please explain	
The proposed development/activity will provide agricultural related produsurrounding agricultural community (Bainsvlei and Groenvlei Small Hold numerous job opportunities for local people. The development may also area, which may positively affect the other businesses in the area.	ings), as	s well as	s create	

5. Are the necessary services with adequate capacity currently available (at the time of application), or must additional capacity be created to cater for the development? (Confirmation by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES	NO√	Please explain
The site's internal services are not developed, but municipal services are available and can be connected to. There is an existing 150 mm water main situated along the north eastern boundary of the site in the Van Vuuren road. The water network has adequate capacity to accommodate the proposed development's normal operating pressure. However, taking water for fire demand in consideration, on-site water storage will need to be investigated. There is currently no municipal sewer network in the area and septic tanks and/or French drains will need to be implemented at the cost of the developer. Please refer to Appendix D for the Services Report.			
6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)? (Comment by the relevant Municipality in this regard must be attached to the final Basic Assessment Report as Appendix I.)	YES√	NO	Please explain
Adequate municipal services and infrastructure are available for the dev currently no municipal sewer network in the area and septic tanks and/o be implemented at the cost of the developer.			
7. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO√	Please explain
This project is not of national concern.			
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES√	NO	Please explain
The proposed location is ideal due to the proximity to the surrounding agricultural community (Bainsvlei and Groenvlei Small Holdings). The proposed property also belongs to the applicant. Although the proposed site falls within a Vulnerable vegetation type (Bloemfontein Dry Grassland), the majority of the site is classified as degraded by the Free State Biodiversity Management Plan (2015).			

Q In the development the best presticable environmental ention			
9. Is the development the best practicable environmental option for this land/site?	YES✓	NO	Please explain
The proposed site falls within a Vulnerable vegetation type (Bloemfontei	n Dry Gra	assland	d), however,
the majority of the site is classified as degraded by the Free State Biodiv		Ŭ	
(2015). Apart from this, the proposed site has no discernible environme			-
special attention. This location is also the only viable location for this de	velopme	nt, bec	ause the
applicant owns the property.			1
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES√	NO	Please explain
The only significant negative impact on the environment includes the clevegetation of a Vulnerable vegetation type.	arance o	findige	enous
Positive impacts of this development include agricultural related services	s being si	upplied	I to the
surrounding agricultural community (Bainsvlei and Groenvlei Small Hold	•	•••	
opportunities and a possible increase in the number of people to the are	a, which	may p	ositively affect
other businesses in the area, and in turn the Bloemfontein economy.			
11. Will the proposed land use/development set a precedent for similar activities in the area (local municipality)?	YES	NO√	Please explain
It is not expected that a precedent will be set, as there are numerous oth	her busine	esses	present in the
area.			
12. Will any person's rights be negatively affected by the proposed activity/ies?	YES	NO√	Please explain
It is not expected that there will be an infringement on any person's right	s as this	develo	pment will
take place on private land owned by the applicant. However, this will de during the public participation process.	pend on	comme	ents received
13. Will the proposed activity/ies compromise the "urban edge" as defined by the local municipality?	YES	NO√	Please explain
The proposed development/activity will not compromise the urban edge edge and the area is earmarked for future development.	as it falls	s withir	the urban
14. Will the proposed activity/ies contribute to any of the 17 Strategic Integrated Projects (SIPS)?	YES	NO√	Please explain
15. What will the benefits be to society in general and to communities?	the lo	ocal	Please explain
The proposed development will provide agricultural related products and	l services	to the	surrounding
local community (which consists of Bainsvlei and Groenvlei Small Holdin	ngs) and i	t will a	lso provide
job opportunities for local people. The development may also attract mo	ore people	e to the	e area, which
may positively affect other businesses in the area, as well as the Bloem			

16. Any other need and desirability considerations related to the proposed activity?	Please explain		
Besides providing products and services to the local community, creating job opportur	nities and		
contributing to the local economy, the proposed project also indirectly contributes to the	ne food security		
in the area, by providing services and products that are used in the agricultural sector.	•		
17. How does the project fit into the National Development Plan for 2030?	Please explain		
The National Development Plan sets out the following objectives:			
Chapter 6: Inclusive Rural Economy			
<u>Objectives:</u>			
 An additional 643 000 direct jobs and 326 000 indirect jobs in the agriculture, agro- processing and related sectors by 2030. 			
 Maintain a positive trade balance for primary and processed agricultural products. 			
The proposed project fits into the above objectives of the NDP 2030, as the proposed development will provide agricultural related products and services and will create job opportunities for local people.			
18. Please describe how the general objectives of Integrated Environmental M set out in section 23 of NEMA have been taken into account.	lanagement as		
An assessment has been undertaken to evaluate potential impacts and give mitigat lower the impacts on the environment, social conditions and cultural heritage due establishment of an agricultural related sales and storage area. A public participati undertaken in terms of the 2014 EIA Regulations as amended in 2017.	to the proposed on process was		
Consideration of environmental attributes in management and decision-making wh	ich may have a		

Consideration of environmental attributes in management and decision-making which may have a significant effect on the environment will be ensured; and the modes of environmental management best suited to ensuring that a particular activity is pursued in accordance with the principles of environmental management set out in section 2 of the NEMA will be identified and employed.

19. Please describe how the principles of environmental management as set out in section 2 of NEMA have been taken into account.

The following principles have been taken into account:

- Avoiding or minimizing the disturbance to ecosystems;
- That pollution and degradation of the environment are avoided, or, where they cannot be altogether avoided, are minimized and remedied;
- That the disturbance of landscapes and sites that constitute the nation's cultural heritage is avoided, or where it cannot be altogether avoided, is minimized and remedied;
- That waste is avoided, or where it cannot be altogether avoided, minimized and re-used or recycled where possible and otherwise disposed of in a responsible manner;
- That the use and exploitation of non-renewable natural resources is responsible and equitable, and takes into account the consequences of the depletion of the resource;
- That the development, use and exploitation of renewable resources and the ecosystems of which they are part do not exceed the level beyond which their integrity is jeopardized;
- That a risk-averse and cautious approach is applied, which takes into account the limits of current knowledge about the consequences of decisions and actions;
- That negative impacts on the environment and on people's environmental rights be anticipated and prevented, and where they cannot be altogether prevented, are minimized and remedied.
- Promotion of community participation through an extensive and open public participation process with I&APs;
- Delivery of high-quality information to government and other decision-makers in order to enable them to make inform decisions.

11. 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	Applicability to the project	Administering authority	Date
National Water Act (Act No. 36 of 1998)	The proposed site is located approximately 340 m from a possible wetland/waterbody. Comment is needed from DWS in this regard.	Free State Department of Water and Sanitation.	1998
National Building Regulations and Building Standards Act (Act No. 103 of 1977)	The developer must comply with building regulations during the construction phase of the project.	National Regulator for Compulsory Specifications	1977
National Environmental Management Act (Act No. 107 of 1998)	Competent authority on the project. Consultation with DESTEA regarding the project.	Department of Economic, Small Business Development, Tourism	1998

		and Environmental Affairs	
Occupational Health and Safety Act (Act No. 85 of 1993)	Comply to OHSA during construction phase	Department of Labor	1993
National Heritage Resources Act (Act No. 25 of 1999)	A potential grave was identified on site. A specialist recommended that a 5m no-go buffer zone be maintained around it. A follow-up investigation was undertaken by the specialist, who concluded that the feature is not a grave. Comment is needed form SAHRA.	SAHRA Free State Heritage Authority	1999

12. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

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?

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

Minimal construction solid waste will be produced, as there are no buildings or structures that will be demolished. The contractor who will be appointed for the construction phase of the project will be responsible for the regular cleaning and removal of waste from the site. If possible, the construction solid waste (e.g. concrete, bricks, etc.) will be used for filling.

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

Construction solid waste will be disposed of at a registered landfill site in Bloemfontein (Landfill site in the North of Bloemfontein) or used as filling material.

Will the activity produce solid waste during its operational phase? If YES, what estimated quantity will be produced per month? How will the solid waste be disposed of (describe)?

Some general waste will be produced during the operational phase of the development. Bins will be placed at the filling station and agricultural sales and storage area where general waste will be disposed of. This waste will be that of business and public general waste. The developer will appoint a contractor to dispose of this general waste, if the area is not serviced by the municipality.

YES√	NO
	±12 m ³

YES√

NO

2 m³

If the solid waste will be disposed of into a municipal waste stream, indicate which registered landfill site will be used.

General solid waste will be disposed of at a registered landfill site in Bloemfontein (Landfill site in the North of Bloemfontein).

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

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 NEM:WA? YES NOV If YES, inform the competent authority and request a change to an application for scoping and EIA. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

Is the activity that is being applied for a solid waste handling or treatment facility? YES NO \checkmark 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. An application for a waste permit in terms of the NEM:WA must also be submitted with this application.

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?		m ³
Note:		III°
N/A		

Will the activity produce any effluent that will be treated and/or disposed of on site? YES NO \checkmark 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	VEO	
facility?	1EQ	NUY

If YES, provide the particulars of the facility:

Facility name:		
Contact		
person:		
Postal		
address:		
Postal code:		
Telephone:	Cell:	
E-mail:	Fax:	

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

No reuse or recycling of wastewater will occur. However, rainwater harvesting (rainwater tanks) will be considered during the operational phase in order to minimize water usage.

c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere other that exhaust emissions YES and dust associated with construction phase activities?

If YES, is it controlled by any legislation of any sphere of government?

If YES, the applicant must 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 only emissions will be those associated with dust during construction activities and emissions form vehicles during the construction and operational phases.

d) Waste permit

Will any aspect of the activity produce waste that will require a waste permit in terms of the NEM:WA?

If YES, please submit evidence that an application for a waste permit has been submitted to the competent authority

e) Generation of noise

Will the activity generate noise?

If YES, is it controlled by any legislation of any sphere of government?

Describe the noise in terms of type and level:

The only noise that will be generated is noise associated with construction activities and operational activities. This will be minimised by construction activities only taking place during normal daylight working hours. Noise associated with the operational phase will mostly be from vehicle movement and the presence of people.

13. WATER USE

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

Municipal Vater board Groundwate	River, stream, dam or lake	Other	The activity will not use 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 authorisation (general authorisation or water use license) from the Department of Water Affairs?

If YES, please provide proof that the application has been submitted to the Department of Water Affairs.

20

 a mana ta ma l	

NO

NO√

NO√

NO

NO√

YES

YES

YES∽

YES

14. ENERGY EFFICIENCY

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

As far as possible, only modern construction techniques will be used to minimize the use of energy for both electrical and fuel during the construction phase. During the operational phase, energy saving bulbs, automatic switches for lighting and automatic switches on geysers will be implemented to save energy,

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

The implementation of solar panels will be considered to conserve energy.

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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. 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✓ NO If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property	Province	Free State	
description/physi	District	Mangaung Metropolitan Municipality	
cal address:	Municipality		
	Local Municipality	Mangaung Metropolitan Municipality	
	Ward Number(s)	48	
	Farm name and	Outspan 1960	
	number		
	Portion number	RE	
	SG Code	F003000000019600000	
	Where a large number	of properties are involved (e.g. linear activities), please	
	attach a full list to this	application including the same information as indicated	
	above.		
-			
Current land-use	,	oned as "Holdings". This does not make provision for the	
zoning as per	· · ·	t. The applicant has confirmed that they will apply to	
local municipality	rezone the site to "Special Use". Environmental Authorisation is needed before		
IDP/records:	 application can be made for rezoning. In instances where there is more than one current land-use zoning, please attach a list of current land use zonings that also indicate which portions each use pertains to, to this application. 		

Is a change of land-use or a consent use application required?

YES	NO
\checkmark	

1. GRADIENT OF THE SITE

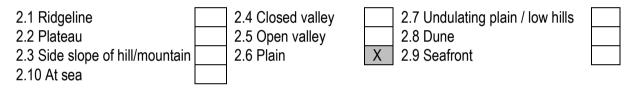
Indicate the general gradient of the site.

Alternative S1:

Allemative 01	•							
Flat√	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper		
						than 1:5		
Alternative S2	(if 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		
						than 1:5		
Alternative S3	Alternative S3 (if 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		
						than 1:5		

2. LOCATION IN LANDSCAPE

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



3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

	Alternative S1:		Altern	Alternative S2		native S3
			<u>(if any</u>):	(if any	():
Shallow water table (less than 1.5m deep)	YES	NO√	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO√	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO✓	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO✓	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO√	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO✓	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO√	YES	NO	YES	NO
An area sensitive to erosion	YES	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 ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation ^E √	Veld dominated by alien species ^E	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.

5. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites?

Perennial River	YES	NO√	UNSURE
Non-Perennial River	YES	NO√	UNSURE
Permanent Wetland	YES	NO√	UNSURE
Seasonal Wetland	YES	NO√	UNSURE
Artificial Wetland	YES	NO√	UNSURE
Estuarine / Lagoonal wetland	YES	NO√	UNSURE

If any of the boxes marked YES or UNSURE is ticked, please provide a description of the relevant watercourse.

NOTE: According to the Ecological Assessment (refer to **Appendix D**) a longitudinal, poorly defined channel is present on site, but this is most likely an artificial modification due to road construction of storm water ditches (Van Rensburg, 2019).

6. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that 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:

Natural area ✓ Dam or reservoir Polo fields

BASIC ASSESSMENT REPORT

Low density residential ✓	Hospital/medical centre	Filling station ^H
Medium density residential	School	Landfill or waste treatment site
High density residential	Tertiary education facility	Plantation
Informal residential ^A	Church	Agriculture
Retail commercial & warehousing	Old age home	River, stream or wetland✓
Light industrial	Sewage treatment plant ^A	Nature conservation area
Medium industrial AN	Train station or shunting yard N	Mountain, koppie or ridge
Heavy industrial AN	Railway line ^N	Museum
Power station	Major road (4 lanes or more) ^N ✓	Historical building
Office/consulting room	Airport ^N	Protected Area
Military or police	Harbour	Crovovord
base/station/compound	Harbour	Graveyard
Spoil heap or slimes dam ^A	Sport facilities	Archaeological site
Quarry, sand or borrow pit	Golf course	Other land uses (describe)

If any of the boxes marked with an "N "are ticked, how will this impact / be impacted upon by the proposed activity? Specify and explain:

The proposed activity is located directly next to the R64 road. The new access road for the proposed activity will connect with the R64 road and an intersection will be built at this connection.

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

N/A

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

N/A

Does the proposed site (including any alternative sites) fall within any of the following:

Critical Biodiversity Area (as per provincial conservation plan)	YES	NO√
Core area of a protected area?	YES	NO√
Buffer area of a protected area?	YES	NO√
Planned expansion area of an existing protected area?	YES	NO√
Existing offset area associated with a previous Environmental Authorisation?	YES	NO√
Buffer area of the SKA?	YES	NO√

If the answer to any of these questions was YES, a map indicating the affected area must be included in Appendix A.

7. CULTURAL/HISTORICAL FEATURES

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including Archaeological or palaeontological sites, on or close (within 20m) to the site? If YES, explain:

YES**√**NO

An isolated feature, which resembles a rubble dump, but which could also be the remnants of an informal grave, was discovered on site. A follow-up investigation was undertaken by the specialist, who concluded that the feature is not a grave.

If uncertain, conduct a specialist investigation by a recognised specialist in the field (archaeology or palaeontology) to establish whether there is such a feature(s) present on or close to the site. Briefly explain the findings of the specialist:

According to the Heritage Impact Assessment (refer to **Appendix D**) "The site is located within an outcrop area of moderately sensitive sedimentary rocks of the Adelaide Subgroup. However, no outcrops were observed during the inspection of the site which indicated that the underlying geology is capped by well-developed superficial deposits that are largely made up of (palaeontologically sterile) Quaternary wind-blown sands and residual soils" (Rossouw, 2019). There was no aboveground evidence of historically significant structures, rock art, prehistoric structures or clearly marked graves. Historical maps also showed no evidence of buildings, homesteads or associated structures on the site. "However, one isolated feature, which resembles a rubble dump, but what could also be the remnants of an informal grave, has been recorded" (Rossouw, 2019).

The specialist recommends that the potential grave be avoided at this stage by a 5m no-go buffer zone, pending further investigation and confirmation by a professional archaeologist.

A follow-up investigation was conducted by the specialist who indicated that the feature does not bear the same characteristics as those previously identified, unmarked grave sites found around Bloemfontein. "The feature appears to consists of discarded modern building debris (concrete rubble) that has been partially raised by an underground termite mound." The specialist concluded that it is not a grave.

Will any building or structure older than 60 years be affected in any way? Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)? YES NO✓ YES NO✓

If YES, please provide proof that this permit application has been submitted to SAHRA or the relevant provincial authority.

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

Please provide details on the socio-economic character of the local municipality in which the proposed site(s) are situated.

Level of unemployment:

According to Stats SA (2011) the unemployment rate in Mangaung is 27.7%, while the youth unemployment is 37.2%.

Economic profile of local municipality:

Mangaung Metro Municipality has a total population of 747 431, of which 292 971 of working age (15-64) are economically active (employed or unemployed but looking for work). 211 746 are employed, 81 225 unemployed and 18 244 are discouraged work seekers (Stats SA 2011).

Level of education:

14.1% of the population has higher education, while 30.1% has matric. 4.3% has no schooling (Stats SA 2011).

b) Socio-economic value of the activity

 What is the expected capital value of the activity on completion?
 R60 r

 What is the expected yearly income that will be generated by or as a result of the activity?
 R100 turnor

 Will the activity contribute to service infrastructure?
 YES

Is the activity a public amenity?

How many new employment opportunities will be created in the development and construction phase of the activity/ies?

What is the expected value of the employment opportunities during the development and construction 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?

9. BIODIVERSITY

Please note: The Department may request specialist input/studies depending on the nature of the biodiversity occurring on the site and potential impact(s) of the proposed activity/ies. To assist with the identification of the biodiversity occurring on site and the ecosystem status consult http://bgis.sanbi.org or BGIShelp@sanbi.org. Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used. A map of the relevant biodiversity information (including an indication of the habitat conditions as per (b) below) and must be provided as an overlay map to the property/site plan as Appendix D to this report.

	R60 millio	n					
)	R100	million					
	turnover						
	YES	NO√					
	YES√	NO					
	60						
)	R2 000 000						
	75%						
)	75						
)	R40 000	000					
	60%						

a) Indicate the applicable biodiversity planning categories of all areas on site and indicate the reason(s) provided in the biodiversity plan for the selection of the specific area as part of the specific category)

Systematic Biodiversity Planning Category				If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA) ✓	No Natural Area Remaining (NNR) ✓	

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	20%	Only patches of the natural vegetation remain on site.
Near Natural (includes areas with low to moderate level of alien invasive plants)	20%	
Degraded (includes areas heavily invaded by alien plants)	60%	The vegetation is considered to be largely transformed. Disturbance has caused encroachment of trees and shrubs and well as numerous exotic weeds and invasive species (refer to the Ecological Assessment in Appendix D)
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	0%	

c) Complete the table to indicate:

- (i) the type of vegetation, including its ecosystem status, present on the site; and
- (ii) whether an aquatic ecosystem is present on site.

Terrestrial Ecosystems		Aquatic Ecosystems		
Ecosystem threat	Critical	Wetland (including rivers,		
status as per the Endangered		depressions, channelled and unchanneled wetlands, flats,	Fetuary	Coastline
Environmental	Vulnerable✓	seeps pans, and artificial	Estuary	Coastime
Management:	Least	wetlands)		

Terrestrial Ecosystems		Aquatic Ecosystems						
Biodiversity Act (Act No. 10 of 2004)	Threatened	YES	NO√	UNSURE	YES	NO√	YES	NO ✓

d) Please provide a description of the vegetation type and/or aquatic ecosystem present on site, including any important biodiversity features/information identified on site (e.g. threatened species and special habitats)

The vegetation type present on site consists of the Bloemfontein Dry Grassland (Gh 5) vegetation type. This vegetation type is classified as Endangered according to Mucina *et al.* (2006) and as Vulnerable under the National List of Threatened Ecosystems (Notice 1477 of 2009) (National Environmental Management Biodiversity Act, 2004). The vegetation on site largely consists of indigenous species. However, only patches of the natural vegetation remain, which consists mostly of grassland. Disturbance and modification to the site has led to encroachment by trees and shrubs and numerous exotic weeds and invasive species. Two protected plant species were identified on site, namely *Aloe jeppeae* and *Raphionacme hirsute*. It has been concluded that it will not be possible to retain these two species on site and that a permit needs to be obtained to remove them. Due to the site being isolated, within small holdings and degraded, it is unlikely that any animal species of concern will occur here (Van Rensburg, 2019).

There are no watercourses or wetlands present on site. However, a longitudinal, poorly defined channel is present on site which can be a drainage line but is most likely an artificial modification. The vegetation along this channel is dominated by terrestrial species and it can therefore be concluded that this channel does not form part of a continuous watercourse and is isolated without any significant function (Van Rensburg, 2019). Please refer to the Ecological Assessment in **Appendix D**.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	Bloemfontein Courant and the Express				
Date published	14 March 2019 (Bloemfontein Courant) and 13 March 2019 (the Express)				
Site notice position	Latitude Longitude				
	29° 4'16.49"S	26° 8'34.75"E			
Date placed	27 February 2019				

Include proof of the placement of the relevant advertisements and notices in Appendix E1.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 326

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 326

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or e-mail address)
Mr. André Sander	Registered as I&AP on the Site Notice.	084 500 2456 (Cell) <u>melissa@law.co.za</u> (E-mail)
T. Wu	Adjacent Landowner - Plot 1786	P.O. Box 1509 Ladybrand 9745
Lemaro Construction (Mr. L. Pieters)	Adjacent Landowner – Erfenis RE/1672 Registered as I&AP on BID.	P.O. Box 1525 Bloemfontein 9300 <u>leon@lemaro.co.za (</u> E-mail)
Avoca Ranch & Katalina House (Ms. Cora Joubert and Mr. Herman Joubert)	Adjacent Landowner – Avoca 2/1791 Avoca 3/1791	P.O Box 37200 Lagenhovenpark 9330 083 437 3374 (Cell) <u>favorita@intekom.co.za</u> (E-mail)
FF Potgieter en LF Jacobs (Mr. Lesley Jacobs)	Adjacent Landowner – Gardenia 1894	Private Bag X01 Suite 276 Brandhof 9324 051 451 9122 (Tel) <u>chef@fbibfn.co.za</u> (E-mail) <u>ffjacobs1@gmail.com</u> (E-mail)
Mr. L. J. Coetzee	Resident in the area. Registered as I&AP on the Site Notice.	083 262 3604 (Cell) <u>Sakkiecoetzee1@gmail.com</u> (E- mail)
Fourleaf Gold (Pty) Ltd and Dormell Properties 568 (Pty)	Adjacent Landowner – Van der Walt's Rust RE/1793	P.O. Box 38333 Bloemfontein

Ltd	Van der Walt's Rust 1/1793	9300
(Mr. Tielman O'Reilly)	Registered as I&AP on the Site Notice.	072 310 7646 (Cell)
(tielman@fourleaf.co.za (E-mail)
		P.O. Box 17592
		Bainsvlei
Mr. J. P. J. Snyman	Adjacent Landowner –	9338
	De Goedes Rust 2088	Cutman43@gmail.com (E-mail)
		cutmando@mweb.co.za (E-mail)
	Adjacent Landowner –	P.O. Box 583
Planet Waves 515 (Pty) Ltd	Aliacent Landowner – Alexandra RE/1746	Schweizer-Reneke
	Alexandra RE/1740	2780
Brenjust Buildings CC		P.O. Box 100947
(Jumpers Lane – Ms. M.	Adjacent Landowner –	Brandhof
Fouché)	Alexandra 3/1746	9324
		info@jumperslane.co.za (E-mail)
		PO Box 3704
		Bloemfontein
		9300
Mangaung Metro Municipality	Adjacent Landowner –	Bram Fischer Building,
Mangaang Moto Manopanty	Outspan 1/1960	Nelson Mandela Drive &
		Markgraaff Street
		Bloemfontein
		051 405 8911 (Tel)
		P.O. Box 17704
Springbok Pets Import (Pty)	Adjacent Landowner –	Bainsvlei
Ltd	Avenmore 1951	9338
(Mr. Theoniel Pieterse)		082 820 1312 (Cell)
		theoniel@live.com (E-mail)
L. D. Snyman	Resident in the area.	L snyman@mweb.co.za (E-mail)
	Registered as I&AP on 25 March 2019.	084 519 6806 (Cell)
Ms. Marie-Elize Venter	Resident in the area.	ferplie@gmail.com (E-mail)
	Registered as I&AP on 3 April 2019.	082 963 0685 (Cell)

Include proof that the key stakeholder received written notification of the proposed activities as Appendix E2. This proof may include any of the following:

- e-mail delivery reports;
- registered mail receipts;
- courier waybills;
- signed acknowledgements of receipt; and/or
- or any other proof as agreed upon by the competent authority.

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	Summary of response from EAP
Ms. Mpolokeng Ramongalo from the Mangaung	The Draft BAR was submitted to the Mangaung
Metro Municipality requested more information	Metro Municipality Environmental Department.
and that the Basic Assessment Report ("BAR")	1. The contractor will comply with conditions of

[· · · · · · · · · · · · · · · · · · ·	
be submitted to her department. Ms. Ramongalo made the following comments on the Draft BAR: 1. Waste management plan must be complied to facilitate compliance with the condition of NEMA waste Act number 59 of 2008 and also to provide guidance to ensure that domestic, industrial and hazardous wastes are managed at the proposed development in a way that is protective of health, safety and the environment. 2. The use of shiny materials in structure must be avoided where possible. Shiny metal structure should be darkened or screened to prevent glare. Night-time light source must be directed away from residential area. The buildings that are to be erected should be aesthetically pleasing and blend into the area as far as possible. Material and colours used in the construction of the building and infrastructure must give preference to natural and eco-friendly choice in order to minimize visual impact on the surrounding areas. 3. Material Safety Data Sheet (MSDS) shall be readily available on site for all chemicals and hazardous substance to be used on site. Where possible and available MSDS should additionally include information on measure to minimize negative environmental impacts during accidental releases or escapes. 4. If trenches will be dug to bury for the proposed water pipes and electricity lines, they should not be left open for extended period as fauna may fall in and become trapped in them. Trenches which are exposed should contain soil ramps allowing fauna to escape. 5. The facility must register with the local Fire Fighters Organization and periodically conduct drill in conjunction with the local fire fighter's unit. 6. In light of the above, all documents illustrating compliance to the conditions should be forwarded to this office for record keeping and compliance.	the National Environmental Management Waste Act, 2008 (Act No. 59 of 2008) ("NEMWA"). The management of waste on the site will occur as per the Environmental Management Plan submitted to the Mangaung Metro with the BAR. It is not specified in your letter what condition of the NEMWA is referred to when it is stated that the "waste management plan must be complied to facilitate compliance with", but the contractor will comply to all conditions of the NEMWA. Our office would appreciate your specific reference in this regard. The appointed contractor will provide specific details on the management and disposal of waste from the site. 2. Turn 180 Environmental Consultants take note. The use of shiny materials in the structure of the proposed development will be avoided as far as practicable possible. All night-time light sources will be directed away from the surrounding residences, as well as away from the R64 road. The applicant has indicated that the buildings that are to be erected will be aesthetically pleasing as they intend for the proposed development to be a flagship branch. 3. Turn 180 Environmental Consultants take note. The contractor will provide a Material Safety Data Sheet that will always be available on site. 4. Turn 180 Environmental Consultants take note. Any trenches that are dug will not be left open for an extended period. 5. Turn 180 Environmental Consultants take note. Firefighting equipment will also always be available on site. 6. Turn 180 Environmental Consultants take note. All documents illustrating compliance to the above-mentioned conditions will be forwarded to your office once available.
SAHRA indicated that the area has a high palaeontological sensitivity and that a Heritage Impact Assessment ("HIA") and a Palaeontological Impact Assessment ("PIA") must be included in the BAR.	 A HIA and PIA is attached in Appendix D in the BAR. 1. Turn 180 takes note. If any deep excavations are planned, a palaeontologist will be contacted to do monitoring.

 SAHRA then made the following comments on the Draft BAR: 1. If any excavations exceed 1 m into bedrock, freshly exposed sedimentary rock will require appropriate monitoring for fossil remains by a professional palaeontologist. 2. The possible remnants of an informal grave must be avoided by a 50m no-go buffer zone pending further investigation and confirmation by a professional archaeologist. Any enquiries with regard to this condition must be directed to the SAHRA Burial Grounds and Graves Unit. 3. Should any objects of archaeological or palaeontological remains be found during construction activities, work must immediately stop in that area and the Environmental Control Officer (ECO) must be informed. 4. The ECO must inform the South African Heritage Recourse Agency (SAHRA) and contact an archaeologist and/or palaeontologist, depending on the nature of the find, to assess the importance and rescue them if necessary (with the relevant SAHRA permit). No work may be resumed in this area without the permission from the ECO and SAHRA. 5. If the newly discovered heritage resource is considered significant a Phase 2 assessment may be required. A permit from the responsible heritage authority will be needed. 6. A Chance Finds Procedures must be developed for the project to ensure that standard protocols and steps are followed should any heritage and/or fossil resources be uncovered during all phases of the project. These procedures should outline the steps and reporting structure to be followed in the instance that heritage resources are found. This must be included in the Environmental Awareness Plan. 7. The final BAR and appendices must be submitted to SAHRA upon submission to DEA. Should the project be granted Environmental Authorisation, SAHRA provide the case file. 	 2. A follow-up investigation was undertaken by the specialist, who concluded that the feature is not a grave. The specialist confirmed that the sensitivity is low and a buffer of 50 m is not necessary. Please refer to Appendix D. 3. Turn 180 takes note. If any objects of archaeological or palaeontological remains are found during construction activities, work will stop and the ECO will be notified. 4. In the event of the above, SAHRA and a specialist will also be notified. 5. Please refer to point 2. 6. A Chance Finds Procedure will be included in the Final BAR. 7. The Final BAR and its appendixes will be submitted to SAHRA.
of Police, Roads and Transport indicated that the	responded and indicated that the Background

application for Environmental Authorisation ("EA") is premature on the grounds that no formal application has been made to them. They listed numerous principles and requirements that must be adhered to. Mr. Mtakati then later confirmed in a letter that he noted that informing their department of the project was mainly part of the prescribed Environmental Authorisation process. He indicated that the application and documents for the change in land use and development is receiving their attention.	Information Document only served as a notification of the intention to apply for EA and that no formal application for this has been submitted yet. It was also indicated that a formal application to the Department of Police, Roads and Transport will be handled by the Town Planners. Turn 180 thanked Mr. Mtakati for his comments and confirmed that he will receive all future environmental reports regarding the project.
Mr. Leon Pieters from Lemaro Construction commented that the development is good news. He is just concerned about what is going to happen to the two existing roads (The R64 and Van Vuuren Road). He stated that his property has two entrances that are used by heavy machinery. The ease of access was the main reason the he bought the property 7 years ago. Therefore, the impact on the existing road is a great concern to him.	It was confirmed that a part of Van Vuuren Road falls within the developer's property. It is planned that this road be deproclamated and that this part of the road will be closed off. Entrance to the site and all adjacent properties will be gained from the new road that will connect with the R64 road. An intersection will also be constructed here. These issues were also discussed in the meeting that was held on 5 April 2019 (refer to Appendix E6).
Mr. O'Reilly wanted to know exactly what activities would take place at the development. He also wanted to know whether the project would be commercial or industrial. He noted that a commercial project would be good for him as it might bring more people to the area and to his business (guesthouse). He also wanted to know how many trucks would be associated with the operational phase of the project and what impact this would have on the road. He was also concerned of the possible pollution of groundwater, as the groundwater is being used for drinking water in the area. He also commented that the layout plan in the BID is confusing as it does not clearly show the development area in relation to the Van Vuuren Road and the adjacent properties. He noted that	Turn 180 responded by confirming that the development is commercial and not industrial and that a Traffic Impact Assessment will be done to assess the impact on the road. Turn 180 also responded by saying that the impacts on groundwater will be discussed in detail in the reports. All hazardous substance will be stored above ground in bunded areas. A new map was also made to indicate Van Vuuren Road and the development boundaries more clearly. It was confirmed that his entrance actually falls within the developer's property boundaries. However, the developer confirmed that they will not develop on the other side of the road and his entrance should not be affected. These issues were also discussed in the
 it looks like the development will close off the entrances to the properties in Van Vuuren Road. He was concerned about what will happen to his entrance. Ms. Venter raised numerous concerns. Firstly, she was concerned about the noise pollution generated by the development, as well as how 	meeting that was held on 5 April 2019 (refer to Appendix E6). Turn 180 responded by saying that noise levels will increase during construction, but it is not expected that there will be much noise pollution

the traffic will be impacted. She was also concerned about the increase in crime due to the fact that more people will be visiting the area. She also commented that there will be air pollution generated as a result of the development.	pollution that is expected is dust associated with construction activities and vehicle movement. A Traffic Impact Assessment will be conducted and
Mr. L. J. Coetzee registered as an I&AP after seeing the Site Notice. He requested more information regarding the project.	The BID was sent to him and all future reports will be sent to him.

4. COMMENTS AND RESPONSE REPORT

The practitioner must record all comments received from I&APs and respond to each comment before the Draft BAR 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 the Final BAR as Appendix E3.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Orga n of State	Contact person (Title, Name and Surname)	Tel No	Fax No	e-mail	Postal address
Mangaung Metro Municipality – Municipal Manager	Adv. Tankiso Mea	051 405 8911		Lethole.monyeke@mangaung.co .za	P.O. Box 3704 Bloemfontein 9300
Mangaung Metro Municipality – Ward 48 Ward Councillor	Mr. J. Pretorius	072 2 26 0222		xgrafies@gmail.com	7 Dias Crescent Dan Pienaar Bloemfontein 9301
Mangaung Metro Municipality – Environmental Department	Ms. Mpolokeng Ramongalo	051 405 8577		Mpolokeng.Ramongalo@manga ung.co.za	P.O. Box 3704 Bloemfontein 9300
Mangaung Metro Municipality – Environmental Department	Mr. Collin Dihemo	051 405 8740		collin.dihemo@mangaung.co.za	P.O. Box 3704 Bloemfontein 930

Department of Economic, Small Business Development, Tourism and Environmental Affairs	Ms. G. Mkhosana	051 4 00 4812	mkhosana@destea.gov.za	Private Bag X20801 Bloemfontein 9300
SAHRA	Ms. Ragna Redelstorff	021 462 4502	rredelstorff@sahra.org.za	P.O. Box 4637 Cape Town 8000
Free State Heritage Authority	Ms. L. Philips	078 4 48 9307	loudinep@gmail.com / loudine.philip@nasmus.co.za	National Museum Bloemfontein 9301
SANRAL Eastern Regional Office	Ms. Stacy Canham	033 3 92 8100	<u>canhams@nra.co.za</u>	P.O. Box 100410 Scotsville 3209
Free State Department of Police, Roads and Transport	Mr. S.S. Mtakati (HOD)	051 4 09 8850	dominiquefreetrans@gmail.com	45 Charlotte Maxeke Street Perm Building Bloemfontein 9301
TELKOM	Mr. Chris Schutte	083 7 79 3718		Nelson Mandela Drive College Square Centre Bloemfontein 9301
Department of Water and Sanitation	Mr. Willem Grobler Mr. George Nel Dr Ntili	051 405 9000	groblerw@dws.gov.za NelG@dws.gov.za	P.O. Box 528 Bloemfontein 9300

Include proof that the Authorities and Organs of State received written notification of the proposed activities as appendix E4.

In the case of renewable energy projects, Eskom and the SKA Project Office must be included in the list of Organs of State.

6. CONSULTATION WITH OTHER STAKEHOLDERS

Note that, for any activities (linear or other) 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.

Proof of any such agreement must be provided, where applicable. Application for any deviation from the regulations relating to the public participation process must be submitted prior to the commencement of the public participation process.

A list of registered I&APs must be included as appendix E5.

Copies of any correspondence and minutes of any meetings held must be included in Appendix E6.

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended 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. 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

Provide a summary and anticipated significance of the potential direct, indirect and cumulative impacts 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. This impact assessment must be applied to all the identified alternatives to the activities identified in Section A(2) of this report.

Activity	Impact summary	Significance	Proposed mitigation
	preferred alternative)		
Construction	Phase		
Clearance of	Direct impacts:	Medium -	- Clearance of vegetation will
vegetation and removal and stockpiling of topsoil.	 Vegetation clearance and loss thereof Removal of topsoil and potential loss thereof Noise elevation due to clearance of vegetation through the use of machinery Nuisance due to dust generation Possible change in the natural storm water drainage pattern 	Negative	 be limited to the site under construction. The surface of the site will be levelled to ensure freedraining to prevent ponding of surface water. Storm water measures such as channels, diversion berms, etc will be constructed around the site in order to limit and/or prevent erosion.
	 Unearthing of significant heritage artefacts Negative aesthetic impact 		 A speed limit will be enforced on construction vehicles.
	Indirect impacts:	Low-Medium	- Construction will be limited
	 Potential erosion of exposed soil Potential establishment of alien vegetation Possible dumping of general waste on site Petrochemical spills may take place that may lead to contamination of surface and 	- Negative	 to daytime working hours to limit any disturbance to neighbouring landowners. Dust control measurements will be investigated if nuisance dust generation proves to be problematic Alien vegetation should be removed regularly

Activity	Impact summary	Significance	Proposed mitigation
	groundwater.		- A permit should be
			obtained to remove
	Cumulative impacts:	Low –	protected plant species.
	Deterioration of the site's natural	Negative	- SAHRA will be notified
	vegetation and exposure to		should traces of any
	erosion factors.		palaeontological/archaeolo
			gical heritage be found
			during construction.
			- Quarterly water sample
			analysis must be
			conducted on the
			monitoring borehole in
			order to test for
			groundwater
			contamination.
			- Receptacles should be
			placed on site for the
			collection of general waste.
			These receptacles should
			be emptied on a regular
			basis and waste be
			disposed of at the
			authorised landfill site in
Construction	Direct impacts:	Low-Medium	the area. The site will be levelled in
of	- Possible change in the	- Negative	such a manner to allow
infrastructure	natural storm water drainage	- Negalive	storm water to be diverted
and buildings	pattern		around the site and drain
and buildings	- Noise elevation due to		into the surrounding storm
	construction activities		water channels.
	- Nuisance due to dust		- Storm water measures
	generation		such as channels,
	- Unearthing of significant		diversion berms, etc will be
	heritage artefacts		constructed on the site.
	- Negative aesthetic impact		- A speed limit will be
	Indirect impacts:	Low -	enforced on construction
	- Construction noise and dust	Negative	vehicles.
	fallout could adversely affect	5	- Construction will be limited
	the immediate environment		to daytime to limit any
	through the deterioration of		disturbance to
	vegetation density and the		neighbouring landowners.
	animals abandoning the		- Dust control measurements
	immediate site.		will be investigated if
	- Deterioration of the R64 road		nuisance dust generation
	as a result of an increase of		proves to be problematic
	construction vehicles to the		- SAHRA will be notified

Activity	Impact summary	Significance	Proposed mitigation
	site.	-	should traces of any
	Cumulative impacts:	Low –	palaeontological/archaeolo
	Deterioration of the site's natural	Negative	gical heritage be found
	vegetation and exposure to	lioguito	during construction
	erosion factors		- All building rubble will be
			•
			removed by the contractor
			on a regular basis and
			disposed of at an
			authorized landfill site in
			the area or used as filling
			material.
			 Receptacles should be
			placed on site for the
			collection of general waste.
			These receptacles should
			be emptied on a regular
			basis and waste be
			disposed of at the
			authorised landfill site in
			the area.
			- Keep construction to the
			designated areas.
			- Operate during normal
			working hours.
Ou constitue of D			- No hunting of animals
Operational P Operation of	Direct impacts:	Low-Medium	- Storm water management
filling station	- Potential pollution to storm		0
•	•	- Negative	
and	water if proper storm water		implemented and
agricultural	management measures are		maintained.
related sales	not maintained.		- The site will always be kept
and storage	- Potential pollution to the		clean and neat through
area.	groundwater and soil due to		correct housekeeping and
	seepage of the untreated		waste disposal.
	effluent or petrol/diesel from		- Receptacles should be
	storage tanks at the filling		placed on site for the
	station to the groundwater		collection of general waste.
	aquifer in the event of any		These receptacles should
	spillage and / or failure of the		be emptied on a regular
	system.		basis and waste be
	- Possible dumping of general		disposed of at the
	waste on site and open		authorised landfill site in the
	properties close to the site.		area.
	Indirect impacts:	Low -	- The R64 road will have to
	- Accumulation of waste that	Negative	be upgraded when
			10
	may pose health risks if not		necessary.

Activity	Impact summary	Significance	Proposed mitigation
	 managed properly and not removed on a regular basis. Negative aesthetic impact due to possible dumping of waste. Deterioration of the R64 road due to increased traffic. Increase in noise due to the high number of people visiting the site. 		 Potentially hazardous substances relating to the filling station will be stored inside a bunded area with an impermeable surface which has the capacity to store more than 110% of the volume of the substance. Any spills of hazardous
	Cumulative impacts: Increase in traffic on the R64 road may lead to deterioration of the road.		 substances should be cleaned immediately by removing the contaminated soil and disposing of it as hazardous waste. Tanks/pipes will be inspected for leaks regularly. If leaks are recorded, they will be repaired. Quarterly water sample analysis must be conducted on the monitoring borehole in order to test for groundwater contamination.
	pperty and this property being in the i an Groenvlei small holdings commu		r the development to service the
	no layout alternatives due to traffic re		provision of the proposed internal
street.	· · · · · · · · · · · · · · · · · · ·	0	
Technology A	Iternatives		
Preferred Alte	rnative (Alternative 1) – Connecting	g of services to	municipal lines
Constructing internal water, sewage and electrical lines and	 Direct impacts: Noise elevation due to construction activities Nuisance due to dust generation Unearthing of significant 	Low-Medium - Negative	 Storm water management measures should be implemented and maintained. Any spills of hazardous substances should be
linking them to municipal lines	heritage artefacts Negative aesthetic impact 	Low-Medium	cleaned immediately by removing the contaminated soil and disposing of it as
	 Indirect impacts: Potential pollution to storm water if proper storm water management measures are not maintained. Potential pollution to the 	- Negative	 Soli and disposing of it as hazardous waste. Tanks/pipes will be inspected for leaks regularly. If leaks are recorded, they will be

Activity	Impact summary	Significance	Proposed mitigation
	groundwater due to seepage of the untreated effluent or petrol/diesel from storage tanks at the filling station to the groundwater aquifer in the event of any spillage and / or failure of the system. Cumulative impacts: None		 repaired. Construction will be limited to daytime to limit any disturbance to neighbouring landowners. Dust control measurements will be investigated if nuisance dust generation proves to be problematic SAHRA will be notified should traces of any palaeontological/archaeolog ical heritage be found during construction Quarterly water sample analysis must be conducted on the monitoring borehole in order to test for groundwater contamination.
No-go option			I
Not establishing a filling	Direct impacts: - Loss of a potential business opportunity	Medium - Negative	
station and agricultural	 Preservation of the site's natural state 	Low - Positive	
related sales and storage area.	Indirect impacts: - Loss of potential job opportunities during the construction and operational phase	Medium - Negative	

A complete impact assessment in terms of Regulation 19(3) of GN 326 must be included as Appendix F.

2. 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 <u>after</u> 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 A (preferred alternative)

Impacts during the Construction Phase:

42

Loss of topsoil and vegetation:

The development will involve the clearance of approximately 8.87 ha of indigenous vegetation to establish four "Special Use" erven –Erf 1 of approximately 2.89 ha, Erf 2 of approximately 5.29 ha and Erf 3 and 4 of approximately 0.69 ha for the construction of an internal road.

The vegetation type is classified as Vulnerable according to the National List of Threatened Ecosystems and two protected plant species could be identified on site (refer to the Ecological Assessment in Appendix D). However, the natural vegetation is greatly modified, and numerous exotic weeds could be observed. Thus, if these protected species are removed from site, the impact is expected to be Medium and can even be lowered to Low – Medium with the correct mitigation and management measures.

Topsoil will also have to be removed and stockpiled during construction. However, this topsoil will not be used for any construction purposes but will be used for levelling and in the gardens.

Clearance of vegetation and removal of topsoil will not take place outside the development boundaries in order to limit the impact. Permits should also be obtained in order to remove any protected plant species.

Aesthetic impact:

Construction activities may lead to a negative aesthetic impact. However, this will be temporary (only during construction) and if mitigation and management measures are implemented in the form of keeping the site clean through correct waste disposal etc., this impact is expected to be Low.

Dust and noise generation:

Construction activities will lead to an increase in dust and noise generation. However, this is temporary and only expected during the construction phase.

Dust control measurements will be investigated if nuisance dust generation proves to be problematic and construction activities will only take place during normal daylight working hours. There will also be some generation of emissions from construction vehicles, but this is negatable.

Contamination of groundwater and surface water resources:

Groundwater and surface water resources may be contaminated through runoff from the construction site or spills of hazardous substances

The impact on surface water is expected to be Low. The closest surface water feature is located approximately 340 m southeast of the proposed site, on the other side of the R64 road. Appropriate storm water management measures will be implemented to divert storm water around the construction area. Please refer to the Storm Water Management Plan in **Appendix D**.

The impact on groundwater is expected to be Low, as potentially hazardous substances will be stored inside a bunded area with an impermeable surface which has the capacity to store more than 110% of the volume of the substance. Any spills will be cleaned immediately by removing the contaminated soil and disposing of it as hazardous waste.

Deterioration of the road (R64 road):

Large construction vehicles may lead to the deterioration of the road.

<u>Heritage</u>

A follow-up investigation was conducted by the specialist who indicated that the feature does not bear the same characteristics as those previously identified, unmarked grave sites found around Bloemfontein. "The feature appears to consists of discarded modern building debris (concrete rubble) that has been partially raised by an underground termite mound." The specialist concluded that it is not a grave. (Rossouw, 2019).

Impacts during the Operational Phase:

Aesthetic impact:

There may be a negative aesthetic impact during operation of the development due to littering. Receptacles should be placed on site for the collection of general waste. These receptacles should be emptied on a regular basis and waste be disposed of at the authorised landfill site in the area.

Emissions and Noise generation:

There may be an increase in noise levels due to the presence of more people and vehicles in the area. However, this impact is expected to be Low as most of these people and vehicles will only be present during normal daylight working hours when the agricultural related sales and storage area is open. Some noise associated with vehicles visiting the filling station may be present. However, the development is not surrounded by high density residential areas.

There will also be some generation of emissions from vehicles, but this is negatable.

Deterioration of the road (R64 road):

There may be a significant impact (Medium) on the road, due to increased traffic to the area.

Contamination of groundwater and surface water resources:

Surface water resources may be contaminated through runoff from the operational site or spills of hazardous substances. Appropriate storm water management measures will be implemented to divert storm water around the operational area. Please refer to the Storm Water Management Plan in **Appendix D**.

As the development will include the storage of hazardous substances at the filling station in the form of petrol and/or diesel, groundwater resources may be contaminated due to leakages. Groundwater may also become contaminated due to leakages from sewage systems.

However, this impact is expected to be Low-Medium, as potentially hazardous substances will be stored inside a bunded area with an impermeable surface which has the capacity to store more than 110% of the volume of the substance and tanks/pipes will be checked regularly for leakages and fixed immediately if detected.

Heritage:

A follow-up investigation was conducted by the specialist who indicated that the feature does not bear the same characteristics as those previously identified, unmarked grave sites found around Bloemfontein. "The feature appears to consists of discarded modern building debris (concrete rubble)

44

that has been partially raised by an underground termite mound." The specialist concluded that it is not a grave. (Rossouw, 2019).

Thus, all impacts during the construction and operational phases are expected to be Low or Medium (impact on vegetation and impact on the road may be Medium) if mitigation and management measures are implemented.

Alternative B

Note: As mentioned previously, there are no feasible location alternatives due to the applicant owning the property and this property being in the ideal location for the development to service the whole Bainsvlei and Groenvlei small holdings area.

Alternative C

No-go alternative (compulsory)

If a no-go alternative is enforced the following will apply:

- The site will remain as it is, and no further development will take place.
- The potential business opportunity will be lost.
- Potential job opportunities will be lost.

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)?

YES NO

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).

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.

- All construction activities must be kept within the designated areas to preserve the natural state of the surrounding environment.
- Topsoil must be stockpiled appropriately, and no topsoil may be used for construction purposes.
- Permits must be obtained to remove the two identified protected plant species. This must be done by a specialist (Van Rensburg, 2019).
- Storm water management measures must be implemented in order to divert storm water around the construction site and to prevent runoff from the construction site entering the waterbody to the southeast of the site.
- The artificial channel on the site may still have some function in terms of storm water management and the development should design and incorporate and adequate storm water management system which feeds into the surrounding system (Van Rensburg, 2019).
- The hunting, capturing or trapping of fauna on site should be strictly prohibited during construction (Van Rensburg, 2019).
- Adequate monitoring of weed establishment and their continued eradication must be maintained (Van Rensburg, 2019).
- Any excavations required for laying foundations or installation of underground fuel tanks, that exceeds 1m into the bedrock will impact in situ sedimentary strata which could be paleontologically sensitive. In this case, exposed sedimentary rock will require appropriate monitoring for fossil remains by a specialist (Rossouw, 2019).
- Construction activities may only take place during normal daylight working hours.
- Quarterly water sample analysis must be conducted on the monitoring borehole in order to test for groundwater contamination.

Is an EMPr attached?

The EMPr must be attached as Appendix G.

The details of the EAP who compiled the BAR and the expertise of the EAP to perform the Basic Assessment process must be included as Appendix H.

If any specialist reports were used during the compilation of this BAR, please attach the declaration of interest for each specialist in Appendix I.

Any other information relevant to this application and not previously included must be attached in Appendix J.

46

YES√

NO

Louis de Villiers NAME OF EAP

SIGNATURE OF EAP

DATE

SECTION F: APPENDIXES

The following appendixes must be attached:

Appendix A: Maps

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports (including terms of reference)

Appendix E: Public Participation

Appendix F: Impact Assessment

Appendix G: Environmental Management Programme (EMPr)

Appendix H: Details of EAP and expertise

Appendix I: Specialist's declaration of interest

Appendix J: Additional Information

www.edtea.fs.gov.za