



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2010

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

	(For official use only)
File Reference Number:	
NEAS Reference Number:	
Date Received:	
Due date for acknowledgement:	
Due date for acceptance:	
Due date for decision	
Kindly note that:	

1. The report must be compiled by an independent Environmental Assessment Practitioner.
2. 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.
3. Where applicable **tick** the boxes that are applicable in the report.
4. 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 Department of Economic Development, Environment and Tourism as the competent authority (Department) for assessing the application, it may result in the rejection of the application as provided for in the regulations.
5. An incomplete report may be returned to the applicant for revision.
6. Unless protected by law, all information in the report will become public information on receipt by the department. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.

7. The Act means the National Environmental Management Act (No. 107 of 1998) as amended.
8. Regulations refer to Environmental Impact Assessment (EIA) Regulations of 2010.
9. The Department may require that for specified types of activities in defined situations only parts of this report need to be completed. No faxed or e-mailed reports will be accepted.
10. This application form must be handed in at the offices of the Department of Economic Development, Environment and Tourism:-

<p>Postal Address: Central Administration Office Environmental Impact Management P. O. Box 55464 POLOKWANE 0700</p>	<p>Physical Address: Central Administration Office Environmental Affairs Building Cnr Suid and Dorp Streets POLOKWANE 0699</p>
<p>Queries should be directed to the Central Administration Office: Environmental Impact Management:-</p> <p>For attention: Mr E. V. Maluleke Tel: (015) 291 1315 / (015) 291 5640 Fax: (015) 295 5015 Email: malulekeev@ledet.gov.za</p>	

View the Department's website at <http://www.ledet.gov.za/> for the latest version of the documents.

SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

YES	<input checked="" type="checkbox"/>
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If YES, please complete the form entitled "Details of specialist and declaration of interest" or appointment of a specialist for each specialist thus appointed: **Find attached specialist declarations and Declaration of Interest by EAP**

Any specialist reports must be contained in Appendix D. **Find attached specialist reports (Appendix D)**

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail¹:

The activity entails the development of a township to be known as Polokwane Eastern Boulevard or Motor City (Polokwane X124). Development will consist of 12 erven that will be zoned special for motor dealership, motor industry and related businesses. One erf will be zoned as municipal. Roads and flood retention dams will also form part of the development as well as Public and Private Open Spaces.

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; - currently the most appropriate method of producing organic fertilizer
- (c) the design or layout of the activity; - the most appropriate design/layout for the proposed activity has been chosen
- (d) the technology to be used in the activity – the most practical technology has been chosen for the activity
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. After receipt of this report the Department 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.

a) Description of alternative site for proposed activity: The proposed site was put out on tender by the Polokwane Municipality as the Municipality is the legal owner of this property and therefore no alternative site was considered.

¹ Please note that this description should not be a verbatim repetition of the listed activity as contained in the relevant Government Notice, but should be a brief description of activities to be undertaken as per the project description.
LEDET BA Report, EIA 2010: Project Name: Polokwane Eastern Boulevard (Polokwane X124) _____ - 3

b) The type of activity to be undertaken; - Various alternatives for the types of zoning required was considered during the planning process. As a result of objections (submitted during the township application process) to specific zonings it was decided that the erven will be zoned as follow:

- 12 erven with special zoning for motor dealership, motor industry and related businesses.
- 4 public open space erven
- 2 private open space erven
- 1 municipal erf

c) The design or layout of the activity; - the most appropriate layout including road infrastructure for the proposed activity has been chosen after several draft layouts have been considered. The lay out was done according to specialist reports which include mainly the ecological report as well as the flood line report. **(Refer to layout plan for proposed facility – Appendix A to BA report).**

d) The technology to be used in the activity – technology alternatives such as solar heating, and greening of buildings has been incorporated.

e) The operational aspects of the activity – No alternatives are applicable in terms of the operational plan.

f) The option of not implementing the activity. – The proposed activity will contribute to the development of Polokwane, relieve pressure on the CBD with regards to parking and space for motor dealerships that have grown larger than their buildings and available parking, stimulate local job creation and skills development. The option of not implementing the activity will only come into effect when a fatal flaw is applicable to the proposed activity. If the development does not proceed then that property will continue to give rise to unlawful activities such as quad bike racing and illegal dumping of waste.

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

3. ACTIVITY POSITION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates should be in degrees, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

Latitude (S):

Longitude (E):

Alternative:

Alternative S1² (preferred or only site alternative)

23°	88'	7.28"	29°	49'	6.13"
°	'	"	°	'	"

Alternative S2 (if any)

² "Alternative S.." refer to site alternatives.

Alternative S3 (if any)

°	'	"	°	'	"
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In the case of linear activities:

Alternative:

Latitude (S):

Longitude (E):

Alternative S1 (preferred or only route alternative)

- 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.

4. PHYSICAL SIZE OF THE ACTIVITY (S1 AND S2)

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

Alternative:

Size of the activity:

Alternative A1³ (preferred activity alternative)

194 570m ²

Alternative A2 (if any)

m ²

Alternative A3 (if any)

m ²

or,

for linear activities:

Length of the activity:

Alternative:

Alternative A1 (preferred activity alternative)

m

Alternative A2 (if any)

m

³ "Alternative A.." refer to activity, process, technology or other alternatives.

Alternative A3 (if any)

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

Alternative:

Size of the site/servitude:

Alternative A1 (preferred activity alternative)

	m ²
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Alternative A2 (if any)

	m ²
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Alternative A3 (if any)

	m ²
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5. SITE ACCESS (S1 AND S2)

Does ready access to the site exist?

YES	
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If NO, what is the distance over which a new access road will be built

	m
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Describe the type of access road planned:

A traffic impact study was conducted by Siyazi and access and access roads to the proposed development was evaluated and assessed. See Appendix D.

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.

6. SITE OR 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:

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

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

7. SITE PHOTOGRAPHS – SEE ATTACHED PHOTOS OF S1 (APPENDIX B)

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

8. FACILITY ILLUSTRATION (S1)

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

11. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity (S1)

What is the expected capital value of the activity on completion?	R45 000 000
What is the expected yearly income that will be generated by or as a result of the activity?	R12 000 000
Will the activity contribute to service infrastructure?	YES <input checked="" type="checkbox"/>
Is the activity a public amenity?	<input checked="" type="checkbox"/> NO
How many new employment opportunities will be created in the development phase of the activity?	450
What is the expected value of the employment opportunities during the development phase?	R450 000 000
What percentage of this will accrue to previously disadvantaged individuals?	90%
How many permanent new employment opportunities will be created during the operational phase of the activity?	903
What is the expected current value of the employment opportunities during the first 10 years?	R758 250 000
What percentage of this will accrue to previously disadvantaged individuals?	85%

9(b) Need and desirability of the activity

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

NEED: (S1) – Preferred Site			
i.	Was the relevant municipality involved in the application?	YES	<input checked="" type="checkbox"/>
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	YES	<input checked="" type="checkbox"/>
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

NEED: (S2)		
Was the relevant municipality involved in the application?	YES	NO
Does the proposed land use fall within the municipal Integrated Development Plan?	YES	NO
If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		

DESIRABILITY: (S1) – Preferred Site			
i.	Does the proposed land use / development fit the surrounding area?	YES	<input checked="" type="checkbox"/>
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?	YES	<input checked="" type="checkbox"/>
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	<input checked="" type="checkbox"/>
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
v.	Will the proposed land use / development impact on the sense of place? The proposed land use will have an impact only in the vicinity directly surrounding the proposed site.	YES	<input checked="" type="checkbox"/>
vi.	Will the proposed land use / development set a precedent?	<input checked="" type="checkbox"/>	NO
vii.	Will any person’s rights be affected by the proposed land use / development? People’s rights may be affected by the undertaking of the proposed activity. Kindly refer to ix below	YES	<input checked="" type="checkbox"/>
viii.	Will the proposed land use / development compromise the “urban edge”?	<input checked="" type="checkbox"/>	NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		
	(vii) <u>Persons Rights</u>		

	<p>(v) The proposed development will affect the sense of place in the following regard:</p> <ul style="list-style-type: none"> • A degraded natural area will be converted to a township development and man-made structures will be in place of a seemingly natural area. . • Current illegal activities like dumping of rubble and quad bike tracks will be stopped. • The corridor to the Mall of the North will be further developed. • Although to a lesser extent, there will be an increase in traffic flow to the area. <p>(vii) People whose rights could possibly be infringed upon are those in the city of Polokwane planning the same type of (or similar) developments</p>

DESIRABILITY: (S2)			
i.	Does the proposed land use / development fit the surrounding area?	YES	NO
ii.	Does the proposed land use / development conform to the relevant structure plans, Spatial development Framework, Land Use Management Scheme, and planning visions for the area?	YES	NO
iii.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	NO
iv.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
v.	Will the proposed land use / development impact on the sense of place?	YES	NO
vi.	Will the proposed land use / development set a precedent?	YES	NO
vii.	Will any person's rights be affected by the proposed land use / development?	YES	NO
viii.	Will the proposed land use / development compromise the "urban edge"?	YES	NO
ix.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		

BENEFITS: (S1 - preferred site)			
i.	Will the land use / development have any benefits for society in general?	YES	<input checked="" type="checkbox"/>
ii.	Explain:		
	Job opportunities and rendering of motor related services will be created.		
	A relaxed shopping experience for motors and related activities will be created without the traffic		

	pressure of the CBD. There is convenient and safe road access to the site.		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	<input type="checkbox"/>
iv.	Explain:		
	Job opportunities will be created.		
	Travel distances to the proposed motor dealers and associated services will be greatly reduced for the nearby communities. The site is easily accessible from both the Polokwane CBD as well as rural areas in and around Polokwane.		

BENEFITS: (S2)		
Will the land use / development have any benefits for society in general?	YES	NO
Explain		
Will the land use / development have any benefits for the local communities where it will be located?	YES	NO
Explain:		

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES (BOTH ALTERNATIVES (S1 AND S2))

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

Title of legislation, policy or guideline:	Administering authority:	Date:
National Environmental Management Act	Environmental Affairs	1998
Environmental Impact Assessment Regulations	Environmental Affairs	2006
National Heritage Resources Act	SAHRA	1999
Occupational Health and Safety Act	Department of Labor	1993
National Veld and Forest Fires Act	DWAF	1998
National Water Act	DWA	1998
National Environmental Management: Waste Act	Environmental Affairs	2008
Conservation of Agricultural Resources Act	Department of Agriculture	1983
Health Act	Department of Health	1977
National Forest Act	Department of Forestry	1998

Constitution of South Africa	Minister	1996
National Environmental Air Quality Act	Environmental Affairs	2004

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT (S1 AND S2)

11(a) Solid waste management

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

YES	<input checked="" type="checkbox"/>
Approximately 100 m ³	

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

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

Will be disposed of at the Polokwane Landfill site.

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

At the Polokwane Municipal Landfill site

Will the activity produce solid waste during its operational phase?

YES	<input checked="" type="checkbox"/>
50 m ³	

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

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

Will be disposed of at the Polokwane Municipal Landfill site.

Where will the solid waste be disposed 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 department to determine whether it is necessary to change to an application for scoping and EIA.

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

<input checked="" type="checkbox"/>	NO
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If yes, inform the department and request a change to an application for scoping and EIA.

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

<input checked="" type="checkbox"/>	NO
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If yes, then the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent (S1 and S2)

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

<input checked="" type="checkbox"/>	NO
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If yes, what estimated quantity will be produced per month?

m ³	
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Will the activity produce any effluent that will be treated and/or disposed of on site?

<input checked="" type="checkbox"/>	NO
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If yes, the applicant should consult with the Department to determine whether it is necessary to change to an application for scoping and EIA.

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

<input checked="" type="checkbox"/>	NO
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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:

.

11(c) Emissions into the atmosphere (S1 and S2)

Will the activity release emissions into the atmosphere?

<input type="checkbox"/>	NO
YES	<input type="checkbox"/>

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

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

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

11(d) Generation of noise

Will the activity generate noise?

YES	<input type="checkbox"/>
<input type="checkbox"/>	NO

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

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

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

Medium noise during construction – typical construction noise
Low – noise levels during operation - vehicles

12. WATER USE

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

municipal	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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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:

<input type="text"/>
<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

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

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

13. ENERGY EFFICIENCY (S1 AND S2)

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

Solar heating of water will reduce electricity use.
Buildings will be designed in such a manner as to make use of natural light as much as possible in order to limit electricity use for lighting purposes.
Other measures include automatic lighting (if there are no persons in the room the lights switch off automatically and switches on again if someone enters the room.).

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

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

Section C 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: **Find attached specialist declarations**

All specialist reports must be contained in Appendix D. (**Find attached specialist reports (Ecology, Heritage, Geo- technical and flood line) – Appendix D**)

Property description/physical address:

A Portion of the Remainder of the farm Krugersburg 993 LS

(Farm name, portion etc.) Where a large number of properties are involved (e.g. linear activities), please attach a full list to this application.

In instances where there is more than one town or district involved, please attach a list of towns or districts to this application.

Current land-use zoning:

Agriculture

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	<input checked="" type="checkbox"/>
YES	<input checked="" type="checkbox"/>

Must a building plan be submitted to the local authority?

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 indication of the project site position as well as the positions of the alternative sites, if any;
- 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, minutes and seconds. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

1. GRADIENT OF THE SITE (site alternative)

Indicate the general gradient of the site.

Alternative S1: (Preferred site)

Flat	1:50 – 1:20	1:20 – 1:15	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
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Alternative S2 (if any): (Alternative)

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
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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
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2. LOCATION IN LANDSCAPE (S1 AND S2)

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

2.1 Ridgeline		2.6 Plain	
2.2 Plateau		2.7 Undulating plain / low hills	
2.3 Side slope of hill/mountain	X	2.8 Dune	
2.4 Closed valley		2.9 Seafront	
2.5 Open valley			

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

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

	Alternative S1:		Alternative S2 (if any):		Alternative S3 (if any):	
Shallow water table (less than 1.5m deep)	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	<input checked="" type="checkbox"/>	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	<input checked="" type="checkbox"/>	NO	YES	NO	YES	NO
An area sensitive to erosion	<input checked="" type="checkbox"/>	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).

Summary of findings and recommendations -Geo – Technical Report – Appendix D

General

- It is imperative to note that suitable damp-proofing measures be incorporated in the footings and beneath floor slabs to prevent structural damage due to rising damp from seasonal pockets of saturated material at relatively shallow depth.
- It is recommended that suitable precautionary measures be taken to prevent long-term corrosion of steel in contact with the natural soil.

- Design- and construction of the proposed structures should incorporate suitable precautionary measures to prevent structural damage due to the inferred seismicity of the area.
- *In situ* inspection of the foundation trenches by an engineering geologist or geotechnical engineer is recommended in order to identify geotechnical characteristics in variance with those observed during this study, and to verify the geotechnical classification of each erf.
- Wet services (i.e.: water supply pipes and sewers) should be designed and maintained to prevent leaks and blockages, and proper backfilling should be enforced to reduce storm water inflow.
- Water-loving plants and trees should not be placed within 15 m of any structure or wet services, and gardening directly next to structures founded on topsoil should not be allowed.

Surface drainage

- It is recommended that an efficient surface drainage system be installed around all structures and along roads and parking areas mainly to prevent the ponding of water at the surface next to structures directly after heavy precipitation events, as this may lead to differential settlement under the footings or paved areas as the saturated material undergoes densification, and to aid the flow of surface water after heavy precipitation events.
- The precautionary measures should ideally include the sealing of open ground surfaces by means of either the cultivation of a natural soil cover (e.g.: grass), compaction of the soil surface, or bitumen or concrete paving, and the implementation of a system of storm water run-off canals and pipes along all roads. A soil berm can also be constructed directly upstream of the site to channel surface water (i.e.: sheet wash) from the ridge to the east around the development.

Sub-surface drainage

- The results of this geotechnical study did not reveal any evidence of significant groundwater seepage that will require the implementation of a sub-surface drainage system.

Slope stability

- It must be noted that although these areas exhibit gentle slopes, use may have to be made of limited cut-and-fill landscaping that will yield relatively low cuts into the natural soil material. It is recommended that the faces of these cuts be stabilized either by lowering the slope angle or shoring by means of gabions or retaining walls featuring sub-surface drains to prevent a build-up of soil moisture behind the walls.

Vehicle mobility

- In the light of the relatively high plasticity and low permeability of the overburden, as well as the inferred localized ponding of surface water in some areas, it is expected that a heavy downpour may cause localized slippery conditions, hampering the movement of wheeled vehicles over the natural soil material during construction.

Re-use of excavated materials

- The overburden, excluding the potentially expansive hillwash, and weathered bedrock to be removed during construction, classify as suitable for use in compacted fills (G6-type material in its natural state). The ferruginized hillwash occurring at depth in Zone B compacted to at least 93% MOD AASHTO-standard at or near its optimum moisture content yields a compacted fill with a bearing strength of roughly 160 kPa in its natural state, while the weathered bedrock yields a material with a minimum bearing strength of 265 kPa. Stabilization of ferruginized hillwash with at least 2.5% cement yields a suitable subbase material (classifying as a COLTO C4-type material), with a minimum strength of approximately 700 kPa when compacted to 97% MOD AASHTO density.

- The hillwash to be removed during construction can be stockpiled on site, and re-used for landscaping purposes.
- The natural soils present within the study area generally contain too much fines particles to be suitable for use as pipe bedding material as per the SABS 1200 LB specifications, as a relatively large volume of material will have to be removed in order to extract the relevant sand portion thereof.

4. GROUNDCOVER (S1 – PREFERRED SITE)

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			

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.

Summary of findings and recommendations within the Ecological Report – Appendix D (S1)

Vegetation

- An important aspect relating to the proposed development should be to protect and manage the biodiversity (structure and species composition) of the Polokwane Plateau Bushveld vegetation type which is represented on the proposed development site.
- A buffer section of the more natural outcrop and foot slope areas in the larger area should be protected to prevent any negative impact on the surrounding natural areas and to preserve this area as a corridor.
- Vegetation removal should rather be kept to a minimum along the corridor zones. The unnecessary removal of tall indigenous tree species (>3m) during construction should be avoided as far as possible, and where possible incorporated as part of the landscaping of the site.
- Considering that the footprint of the proposed development is largely through already impacted areas and inside the urban edge, the impact on the vegetation of the larger area would be low if one considers that sufficient representation of the Polokwane Plateau Bushveld in its pristine state occur outside the study area in the Polokwane Game Reserve and other area outside the urban edge.

Fauna

- Monitoring of the environmental aspects is recommended for the future phases of the proposed development should the authorities approve the application. The monitoring phase would ensure that negative impacts on the fauna of the area are limited to a minimum during the constructional and operational phases.
- The removal of vegetation (fauna habitat) should be confined to the footprints of the proposed development and power cable corridor. This will be on small, degraded sections in relation to the total available surrounding habitat for fauna. Development also won’t influence the natural feeding and movement patterns of the existing fauna in the area.
- The protection of sensitive habitat types (outcrops) in the area south of the proposed development will be important to ensure the survival of the different animals due to each species’ individual needs and requirements. Sufficient natural corridor sections should be protected around the proposed development footprints to allow fauna to move freely between the different vegetation units on the property.

- The few taller (>3m) indigenous trees within this area also provide resting/perching sites for larger birds, arboreal reptiles and mammals that might occur/pass through the area and should preferably be preserved. These larger trees should be protected as far as possible and be incorporated into the proposed development if possible.
- Where trenches pose a risk to animal safety, they should be adequately cordoned off to prevent animals falling in and getting trapped and/or injured. This could be prevented by the constant excavating and backfilling of trenches during construction.
- No animals may be poached. Many animals are protected by law and poaching or other interference could result in a fine or jail term.
- Poisons for the control of problem animals should rather be avoided since the wrong use thereof can have disastrous consequences for the raptors occurring in the area. The use of poisons for the control of rats, mice or other vermin should only be used after approval from an ecologist.
- Roads in the area should be designed without vertical pavements to allow for the movement of small mammals. Small culverts underneath the road could provide easy migration of smaller fauna.

(Kindly refer to the attached Ecological Report – Appendix D).

5. LAND USE CHARACTER OF SURROUNDING AREA

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

S1 (Preferred Site)

5.1 Natural area	√	5.22 School	
5.2 Low density residential	√	5.23 Tertiary education facility	
5.3 Medium density residential	√	5.24 Church	
5.4 High density residential		5.25 Old age home	
5.5 Medium industrial ^{AN}		5.26 Museum	
5.6 Office/consulting room	√	5.27 Historical building	
5.7 Military or police base/station/compound		5.28 Protected Area	
5.8 Spoil heap or slimes dam ^A		5.29 Sewage treatment plant ^A	
5.9 Light industrial		5.30 Train station or shunting yard ^N	
5.10 Heavy industrial ^{AN}		5.31 Railway line ^N	
5.11 Power station		5.32 Major road (4 lanes or more)	√
5.12 Sport facilities		5.33 Airport ^N	
5.13 Golf course		5.34 Harbour	
5.14 Polo fields		5.35 Quarry, sand or borrow pit	
5.15 Filling station ^H	√	5.36 Hospital/medical centre	
5.16 Landfill or waste treatment site		5.37 River, stream or wetland	√

5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture		5.39 Mountain, koppie or ridge	√
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	√
5.21 Dam or Reservoir	√	5.42 Other land uses (describe)	

6. CULTURAL/HISTORICAL FEATURES (S1 – PREFERRED SITE)

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?

	NO
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If YES, explain:

Nothing was found on the development site.

Remains from a small stone walled site were noted on the power cable route which will have a direct impact on it. Mitigation measures are included in the Heritage Report.

There is also a protected Northern Ndebele site located on a hill 600m from the development area. This will however not be impacted upon as it has been excluded from the development area, completely. See Heritage Impact report – Appendix D.

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

Briefly explain the findings of the specialist:

Will any building or structure older than 60 years be affected in any way?

	NO
	NO

Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

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

Summary of Findings within the Heritage Report – Appendix D (S1 – preferred site)

No formal graves were recorded in the area; however the possibility of subterranean graves still exists, especially in the area near the archaeological sites on the hill.

Remains from a small stone walled site (Iron Age) were noted. It appears as if the power cable will have a direct impact on it. There is also a protected Northern Ndebele site located on a hill 60m from the development area. This will however not be impacted upon.

Recommendations:

- It is recommended that the power cable be laid under the supervision of an archaeologist, thus monitoring is highly recommended as the area is sensitive.
- Should the above mitigation measure be adhered to, there is no objection to the development taking place.

Please refer to the attached Heritage Impact Report – Appendix D
SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

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

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

2. CONTENT OF ADVERTISEMENTS AND NOTICES

A notice board, advertisement or notices must:

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

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

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

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

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

5. COMMENTS AND RESPONSE REPORT

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

6. AUTHORITY PARTICIPATION

Please note that a complete list of all organs of state and or any other applicable authority with their contact details must be appended to the basic assessment report or scoping report, whichever is applicable.

Kindly find attached a list of authorities with their contact details at the end of this report.

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input.

Name of Authority informed:	Comments received (Yes or No)
Department of Agriculture, Forestry & Fisheries - DAFF (National)	No
Department of Water Affairs - DWA	No
Polokwane Local Municipality	No
Limpopo Department of Economic Development, Environment and Tourism (LEDET)	No

7. CONSULTATION WITH OTHER STAKEHOLDERS

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

Proof of any such agreement must be provided, where applicable.

Has any comment been received from stakeholders?

YES	<input checked="" type="checkbox"/>
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If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

- Hannes Lerm Town and Regional Planner – Registered as I&AP and attended the public meeting
- Leon de Villiers - Registered as I&AP and attended the public meeting

- Rowan Albertyn Town and Regional Planner - Registered as I&AP and attended the public meeting. Also submitted the following comments:
 - In principle, the Polokwane Eastern Boulevard Motor City can be supported, **but priority must be given to ensure the protection of the threatened plant species** that exists in close proximity and **cognizance should be taken of the R.o.D. of 29 June 2006 and the directives related. Ref no: 16/1/1-460 (A).**
 - Significant deterioration has taken place on certain portions of the subject land over the past 3 years, despite the directives of the above mentioned R.O.D. Such deterioration was caused among others by unsolicited dumping of building rubble despite the Polokwane Municipality being notified about this illegal activity; and uncontrolled quad biking, cycling and woodcutting.
 - As a prerequisite, the protection of the remainder of the Farm Krugersburg 993 LS or what is left of the buffer area as directed in the 2006 R.O.D. should enjoy preference. Preferably in terms of Section 18 of the National Environmental Management: Protected Areas Act 57 of 2003, before the proposed development can be allowed to proceed.
 - There may have been talks about proclaiming certain erven/erf in Ster Park as a Protected area, but proof needs to be provided that the area would be sufficient in size and locality (i.e. does it coincide with the footprint of *Euphorbia clivicola* and its buffer zone) to ensure the preservation of *Euphorbia clivicola*.

SECTION D: IMPACT ASSESSMENT

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

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

Kindly refer to the Draft comments and responses report (Appendix E) with regard to comments received from registered Interested and Affected Parties (Appendix E7) as well as responses to such comments. The following comments have been received thus far:

- Rowan Albertyn Town and Regional Planner - Registered as I&AP and attended the public meeting. Also submitted the following comments:
 - In principle, the Polokwane Eastern Boulevard Motor City can be supported, **but priority must be given to ensure the protection of the threatened plant species** that exists in close proximity and **cognizance should be taken of the R.O.D. of 29 June 2006 and the directives related. Ref no: 16/1/1-460 (A).**
 - Significant deterioration has taken place on certain portions of the subject land over the past 3 years, despite the directives of the above mentioned R.O.D. Such deterioration was caused among others by unsolicited dumping of building rubble despite the Polokwane Municipality being notified about this illegal activity; and uncontrolled quad biking, cycling and woodcutting.
 - As a prerequisite, the protection of the remainder of the Farm Krugersburg 993 LS or what is left of the buffer area as directed in the 2006 R.O.D. should enjoy preference. Preferably in terms of Section 18 of the National Environmental Management: Protected Areas Act 57 of 2003, before the proposed development can be allowed to proceed.
 - There may have been talks about proclaiming certain erven/erf in Ster Park as a Protected area, but proof needs to be provided that the area would be sufficient in size and locality (i.e. does it coincide with the footprint of *Euphorbia clivicola* and its buffer zone) to ensure the preservation of *Euphorbia clivicola*.

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

- AGES evaluated the impacts of the proposed Motor City Development and recommended that if the buffer area between the development and the *E clivicola* population (700m) is protected as well as the population itself the current negative impacts on the *E clivicola* population will be drastically reduced. The protection of this area was brought to the attention of Polokwane Municipality several years ago.
- The Polokwane Municipality Council resolved on 5 December 2012 that the area excluding the 20ha for the Motor City development will be proclaimed an environmental sensitive area – see extract of the minutes of the said Council Meeting attached as Appendix G.

See also attached Comments and Response Report – Appendix E to this report. Kindly refer to Appendix E7 of the Draft Comments and Response Report in this regard.

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

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

IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN PHASE

Alternative (S1 -preferred alternative)
<p>Direct impacts:</p> <ul style="list-style-type: none"> • Impacts resulting from the positioning of the proposed project on the hill area, <i>E clivicola</i> population and adjacent properties. • Increased impacts or reduced impacts on the properties north-east of the road through the improved management of storm water (creation of storm retention dams). <p>Indirect impacts:</p> <ul style="list-style-type: none"> • No impacts are expected during the design and planning phase of the proposed project <p>Cumulative impacts:</p> <ul style="list-style-type: none"> • No impacts are expected during the design and planning phase of the proposed project.

IMPACTS THAT MAY RESULT FROM THE CONSTRUCTION PHASE

Alternative (S1-preferred alternative)

Direct impacts:

❖ **Air Quality and Noise:**

- Dust, smoke (fumes) and noise generation due to vegetation clearance, and movement of construction vehicles on site.
- Smoke due to the burning of plant material (vegetation clearance) and solid waste.

❖ **Surface and Groundwater pollution:**

- Water pollution due to sanitation seepage from temporary chemical toilets.
- Water pollution due to spillages of oil/fuel and other lubricants.
- Siltation (excessive sediment deposits) of nearby watercourses and damage to downstream properties due to storm water run-off from cleared areas and changes to the drainage line.

❖ **Water Use (Available resources):**

- Over consumption of available water resources during construction and dust suppression measures.

❖ **Archaeology/Heritage:**

- Possible destruction of archaeological/heritage findings during site clearance.

❖ **Ecology (Fauna and Flora):**

- Loss of indigenous flora and fauna due to site clearance.
- Loss of indigenous fauna due to killing, snaring or collection of animals.
- Loss of indigenous fauna and flora due to the inappropriate use of herbicides and pesticides.
- Loss of indigenous flora and fauna due to accidental fires.
- Animal mortalities due to movement of construction vehicles on site.
- Injuries to fauna falling in trenches.
- Loss of indigenous flora due to the cutting and collection of firewood.
- Introduction of alien invasive plant species – distribution of seeds.

❖ **Soil Pollution and Degradation:**

- Soil pollution due to oil and diesel spillages during the operation of construction vehicles.
- Soil pollution due to spillages from chemical toilets.
- Loss of topsoil (erosion) due to storm water over cleared areas and changes to the drainage line.

❖ **Visual:**

- Visual impact due to removal of indigenous vegetation.

❖ **Safety, Security and Fire Hazard:**

- **Increased risk to the safety of people due to:**
 - (1) Construction activities
 - (2) Construction machines on site
 - (3) Burning of removed vegetation – can lead to veld fires
 - (4) Crime – trespassing onto neighbouring properties

❖ **Socio- Economic:**

- Positive impact on job creation (construction/site preparation phase)

Indirect impacts:

- Socio economic benefits to the area through job creation and skills development.
- Loss of valuable topsoil through erosion.
- Loss of larger sections of indigenous veld through possible uncontrollable veld fires.
- Storm water damage to downstream properties.

Cumulative impacts:

- Reduction of natural area.
- Increase in water consumption
- Added pressure on sewerage works and electricity supply
- Added pressure on road network

MITIGATION MEASURES THAT MAY ELIMINATE OR REDUCE THE POTENTIAL IMPACTS LISTED ABOVE: (CONSTRUCTION PHASE)

Alternative (S1 - preferred alternative)

Direct impacts:

❖ **Air Quality and Noise:**

- Construction areas must be dampened on a regular basis to prevent excessive dust formation.
- Dust suppressant (water /biodegradable soil stabilisation agent) to be used for dust suppression on internal roads and construction/preparation areas.
- Vehicles used on or entering the site to be maintained in order to reduce excessive smoke or fumes.
- All noise levels must be controlled at source.
- The applicant must comply with provincial noise regulations. Construction machinery must be fitted with noise mufflers and be maintained properly.
- All employees must be given the necessary ear protection gear.
- Construction/site preparation should only take place during the hours between sunrise and sunset on weekdays and Saturdays.
- No plant material may be burnt on site. Collected material must be removed from site to the approved and licensed land fill site or used alternatively for soil stabilization measures.
- Open fires for cooking is only to be made at designated safe areas.
- The necessary fire breaks (at least 8 meters in width) must be in place around the perimeters of the site. The local fire department must be notified and asked to assist in this regard if necessary.

❖ **Surface and Groundwater pollution:**

- Chemical toilets must be placed on level ground and not closer than 100 metres from any water source.
- These toilets (chemical) must be emptied on a weekly basis by an approved contractor and taken to the Polokwane sewage treatment facility. Proof of the weekly removal of sewage to the licensed sewage treatment facility must be provided.
- Regular inspection for any damages to the chemical toilets must also take place.
- Nearby natural areas may not be used as toilets – strict measures to be implemented in this regard.
- Machinery to be maintained to prevent oil and fuel leaks.
- Drip pans are to be used during the servicing of construction machinery and used oil must be stored in suitable containers. Used parts, including oil filters are to be contained and disposed of at a site suitably licensed for such waste products. The storage of fuel, oils and lubricants must only take place at a designated storage area which is adequately bunded/sealed. The servicing or refueling of vehicles or machinery must only take place at a designated area/workshop at the construction camp.
- Diesel tanks on site must be less than 80 000 litres and well bunded.
- Oil spillages must be remediated. Large spillages must be reported to the relevant authorities.
- Building rubble must be stockpiled further than 100m from any watercourse and then removed to a licensed disposal site on a regular basis.
- No contaminants (soaps, detergents, lime, glues, paints, cement, or fuels to be discharged in nearby drainage sections, storm water canals or flood retention dams.
- Ensure strict compliance that no foreign matter is deposited in trenches. Any foreign matter must be removed immediately.
- Solid waste must be kept in adequate wind and animal proof waste bins and disposed of weekly at the Polokwane landfill site.
- Removal of vegetation to be limited to the construction site. Removed vegetation can also be used to stabilize exposed and, especially steeper sloping sections.
- Regular maintenance (stabilization) of and the implementation of adequate erosion control measures.
- Storm water berm and retention dams must be phased with the clearing to prevent storm water damage to downstream residents and areas.
- Excessive slopes caused by clearing activities must be avoided wherever possible.

❖ **Water Use (Available resources):**

- Water use should be kept to a minimum. Ensure that pipes, taps or water tanks are not leaking. Construction workers must be educated on the importance and ways to use water sparingly.
- Clean drinking water must be made available to construction workers at all times.

❖ **Archaeology/Heritage:**

- Care must be taken during the construction/preparation process to ensure that anything of archaeological value which is unearthed is recorded.
- A suitably qualified archaeologist must be notified whenever anything of importance is discovered and the work in that area must cease immediately.
- A GPS reading of the site where findings were made must be taken
- Under no circumstances may the applicant, contractors or employees remove, destroy or interfere with archaeological artefacts.

- A qualified archaeologist must oversee the installation of the power cable.

❖ **Ecology (Fauna and Flora):**

- The area south of the development must be proclaimed as an ecological sensitive area as resolved by the Polokwane Municipality. The sensitive area must be fenced to control access to the site and prevent dumping and trespassing.
- If any protected tree (*Sclerocarya birrea* and *Boschia albitrunca*) has to be removed the necessary permits to do so must be obtained from DAFF prior to the removal of the trees.
- No indigenous trees on adjacent areas may be cut or wood be collected for firewood or any other purposes. Removal of vegetation to be confined to the site. Only the removal of vegetation that is essential is to be allowed.
- Woody vegetative cover that is removed during site preparation must either be randomly spread throughout the surrounding veldt to provide biomass for micro-organisms and habitats for small mammals and birds or it may be used as stabilization measures at steep and exposed sections.
- Strict rules and penalties against the snaring, killing, catching or poaching of any animals will be enforced for all personnel and temporary workers. This restriction includes collection of fauna as pets, food or for use as muti.
- The use of poisons for the control of any animals or plant species may only be done with the written input and consent from an ecologist/specialist.
- Staff must be educated on the dangers of accidental fires. The necessary safety measures must be in place on site. This includes fire extinguishers, backup water tanks and the regular removal of stockpiled plant material.
- Any accumulated plant material must be removed on a weekly basis to an approved and licensed landfill or waste disposal facility as indicated by the Polokwane Local Municipality or alternatively used for soil stabilization.
- Vehicles must only use existing access roads to and from the site. No new roads are allowed to be constructed.
- No trees may be cut for firewood. Only removed vegetation (wood) during site clearance can be used for this purpose. Fires may only be made on designated areas on site.
- The necessary firebreaks must in place around the site before the start of construction. The necessary safety measures must also be in place during the preparation of such firebreaks.
- The applicant is responsible for the eradication of alien invasive species during the construction phase. Control of such plants will involve killing the plants present, killing the seedlings and establishing and introducing alternative plant cover to suppress regrowth. Strict control measures must be implemented regarding the introduction of materials into the area/ brought onto the site which should be inspected for potential invasive invertebrates and steps to be taken to eradicate these species before introduction to the site.

❖ **Soil Pollution and Degradation:**

- Machinery to be maintained to prevent oil and fuel leaks.
- Drip pans are to be used during the servicing of construction machinery and used oil must be stored in suitable containers. Used parts, including oil filters are to be contained and disposed of at a site suitably licensed for such waste products. Servicing of vehicles should only be done at the construction camp.
- Chemical toilets must be emptied on a weekly basis by an approved contractor to a licensed sewage treatment facility.
- Contain and clean up when sanitation effluent is spilled.
- Regular inspection for any damages to the chemical toilets must also take place.
- Removal of vegetation to be limited to the construction site. Removed vegetation can also

be used to stabilize exposed sections, especially steeper sloping sections.

- The soil berm on the southern side must be constructed in such a way that no erosion can take place.
- Storm water retention dams must be phased with the clearing to prevent erosion by storm water.
- Regular maintenance (stabilization) of and the implementation of adequate erosion control measures for cleared areas and roads must be done.
- Excessive slopes caused by clearing activities must be avoided wherever possible.

❖ **Visual:**

- Vegetation removal must be confined to the site. Large indigenous trees and especially protected trees which might occur on site should be incorporated into the site layout as far as possible – especially between Munnik road and the development.
- Any stockpiled vegetation must be removed on a weekly basis or alternative be spread out in the surrounding veld or be used as a soil stabilization measure.
- Gardens along the streets and around the flood retention dams must be designed in such a way to enhance the visual attributes of the area.
- Green development principles should be included in the design of the streets and buildings.

❖ **Safety, Security and Fire Hazard:**

- Safety act (Act 85 of 1993) and the Regulations applicable at the time of the tender. The Act requires the designation of a Health and Safety representative when more than 20 employees are employed.
- Fire breaks should comply with the National Veld and Forest Fire Act 101 of 1998 (Chapter 4: Duty to Prepare and maintain firebreaks). Firebreaks must be made around the perimeter of the site. An emergency plan must be in place so that any uncontrolled fire can be combatted in the most efficient manner.
- Speed control of vehicles on the site must be exercised for the safety of people.
- No vegetation may be burnt on the premises or surrounding areas.
- No trespassing by construction workers onto neighbouring properties must be allowed. Strict measures must be implemented in this regard.

❖ **Socio- Economic:**

- Local labor must be employed wherever possible during the construction phase.

IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

Alternative (S1 -preferred alternative)

Direct impacts:

❖ **Air Quality and Noise:**

- Air and Noise pollution (fumes and exhaust gasses) from vehicle movement.
- Burning of solid waste and garden refuse.
- Noise nuisance to neighbouring residents.

❖ **Surface and Groundwater pollution:**

- Groundwater pollution from leakages of the sanitation system.
- Surface and groundwater pollution due to leakages of fuel/oil or other lubricants from vehicles and workshops.
- Surface and groundwater pollution from vehicle wash bays.
- Accumulation of domestic waste and dumping of waste in the flood retention dams.

❖ **Water Use (Available resources):**

- Wasting of water.

❖ **Ecology (Fauna and Flora):**

- Loss of fauna due to the inappropriate use of pesticides and herbicides on site
- Loss of fauna due to human activities like the killing or snaring of animals.
- Loss of habitat and fauna – accidental fires.
- Loss of flora – cutting of trees on adjacent area.
- Spreading of alien invasive species.

❖ **Soil Pollution and Degradation:**

- Controlled release of storm water will reduce flooding and erosion.
- Pollution of soil by fuel and oil from vehicles and workshops.
- Pollution of soil due to the inappropriate use of fertilizers, herbicides and pesticides
- Soil pollution due to malfunctioning of sanitation system

❖ **Visual/Apearances:**

- Visual pollution if buildings and gardens are not well maintained.

❖ **Socio Economic, Security and Health:**

- Positive impact - job creation
- Change in value of neighbouring properties (positive or negative).

Indirect impacts:

❖ **Surface and Groundwater pollution:**

- Contamination of nearby/adjacent groundwater sources

❖ **Health (Safety and Security)::**

- Possible occurrence of fires – spread to adjacent properties
- Drowning of people in flood retention dams.
- Crime related incidents.

Cumulative impacts:

- Added pressure on services (water supply, sewerage works, electricity & traffic network.
- Impact on the adjoining natural area and endangered species.
- Increased pollution load to storm water.

MITIGATION MEASURES THAT MAY ELIMINATE OR REDUCE THE POTENTIAL IMPACTS LISTED ABOVE: OPERATIONAL PHASE

Alternative (S1 -preferred alternative)

Direct impacts:

❖ **Air Quality and Noise:**

- No solid waste or garden refuse must be burned on site

❖ **Surface and Groundwater pollution:**

- The water retention dams must be cleaned regularly from solid waste accumulating in it.
- The sanitation system must be inspected regularly to ensure that there are no leakages.
- Waste oil and filters from the workshops must be collected by an authorised agent for recycling or disposal at a hazardous waste dumping site.
- Wash water from wash bays must flow through a water /oil separator before release. Oil traps must be cleaned regularly by an approved agent.
- Bio-degradable shampoo and engine cleaners must be used in the workshops and wash bays.
- Recycling of plastics, cans, glass & paper should be promoted.
- The domestic waste must be collected by the Polokwane Local Municipality.

❖ **Ecology (Fauna and Flora):**

- Only ecologically friendly pesticides may be used if necessary for the control vermin or problem insects. The advice of an ecologist should be obtained in this regard.
- Alien invasive species must be eradicated.

❖ **Soil Pollution and Degradation:**

- There must be an active programme to separate the metals, bottles and plastics in the solid waste and send it to a reputable recycling program. This has the effect of reducing soil pollution while at the same time promoting the preservation of valuable resources by recycling and/or reusing the materials.
- Maintain storm water system and ensure that there are no blockages.
- Cleared areas must be kept covered by vegetation or paving to limit the effect of erosion and siltation.
- Road maintenance must be kept up to standard to prevent and reduce the incidence of erosion next to the roads.
- Erosion monitoring and management program should be compiled and implemented.

❖ **Visual/Apearances:**

- The site must be kept neat at all times and buildings must be well maintained.

❖ **Socio Economic (Job creation):**

- Local labor should be employed wherever possible during the operational phase.

❖ **Safety, Security and Health:**

- No fires may be made on the area.

- Clear signage must be displayed at flood water retention dams indicating that no swimming is allowed. This must be enforced by the security guards.
- Security guards must be appointed to safeguard the area.

IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE
<i>Alternative S1 (preferred alternative)</i>
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>
<u>S2 (Alternative site):</u>
<i>Direct impacts:</i>
<i>Indirect impacts:</i>
<i>Cumulative impacts:</i>

ENVIRONMENTAL IMPACT DETERMINATION AND EVALUATION

An environmental impact is defined as a change in the environment, be it the physical/chemical, biological, cultural and or socio-economic environment. Any impact can be related to certain aspects of human activities in this environment and this impact can be either positive or negative. It could also affect the environment directly or indirectly and the effect of it can be cumulative.

METHODOLOGY TO ASSESS THE IMPACTS

To assess the impacts on the environment, the process will be divided into two main phases namely the Construction phase and the Operational phase. The activities, products and services present in these two phases will be studied to identify and predict all possible impacts.

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

However, the tendency is always towards a system of quantifying the significance of the impacts so that it is a true representation of the existing situation on site. This will be done by using where ever possible, legal and scientific standards which are applicable

The significance of the aspects/impacts of the process will be rated by using a matrix derived from Plomp (2004) and adapted to some extent to fit this process. These matrixes use the consequence and the likelihood of the different aspects and associated impacts to determine the significance of the impacts.

The *consequence matrix* use parameters like *severity, duration and extent* of impact as well as *compliance* to standards. Values of 1-5 are assigned to the parameters that are added and averaged to determine the overall LEDET BA Report, EIA 2010: Project Name: Polokwane Eastern Boulevard (Polokwane X124)_____ - 35

consequence. The same process is followed with the *likelihood* that consists of two parameters namely *frequency* and *probability*. The overall consequence and the overall likelihood are then multiplied to give values ranging from 1 to 25. These values as shown in the following table are then used to rank the significance. It must be said however that in the end, a subjective judging of an impact can still be done, but the reasons for doing so must be qualified.

Table 1: Significance ratings (Plomp 2004)

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

Description of the parameters used in the matrixes

Severity

- Low Low cost/high potential to mitigate. Impacts easily reversible, non-harmful insignificant change/deterioration or disturbance to natural environments
- Low-medium Low cost to mitigate Small/ potentially harmful Moderate change/deterioration or disturbance to natural environment.
- Medium Substantial cost to mitigate. Potential to mitigate and potential to reverse impact. Harmful Significant change/ deterioration or disturbance to natural environment
- Medium-high High cost to mitigate. Possible to mitigate Great/Very Harmful Very significant change/deterioration or disturbance to natural environment
- High Prohibitive cost to mitigate. Little or no mechanism to mitigate. Irreversible. Extremely Harmful Disastrous change/deterioration or disturbance to natural environment

Duration

- Low Up to one month
- Low-medium One month to three months
- Medium Three months to one year
- Medium-high One to ten years
- High Beyond ten years

Extent

- Low Footprint area
- Low-medium Motor City site
- Medium Adjacent properties
- Medium-high Polokwane area
- High Limpopo area

Frequency

- Low Once/more a year or once/more during operation
- Low-medium Once/more in 6 months
- Medium Once/more a month
- Medium-high Once/more a week
- High Daily

Probability

- Low Almost never/almost impossible
- Low-medium Very seldom/highly unlikely
- Medium Infrequent/unlikely/seldom
- Medium-high Often/Regularly/Likely/Possible
- High Daily/Highly likely/definitely

Compliance

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

- Low Best Practise
- Low-medium Compliance
- Medium Non-compliance/conformance to Policies etc-Internal
- Medium-high Non-compliance/conformance to Legislation etc-External
- High Directive, prosecution of closure or potential for non-renewal of licences or rights

S1 (Preferred Site)

Project Phase	Environmental aspect :Atmospheric Pollution and noise								
	Activity that causes impact	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Movement of vehicles on site and vegetation clearance	Dust, smoke (fumes) and noise generation	Low	Low	Low	High	High	Low	Low- medium
	Vegetation clearance (burning of plant material)	Excessive smoke	Medium	Low	Medium	Low	Low-medium	Low	Medium - High
Operation	Movement of vehicles on the site	Fumes and exhaust gasses	Low	High	Low-medium	Medium - High	High	Low	Low-medium
	Operation of businesses	Noise	Medium	Low-medium	Medium	High	Medium	Low	Medium

Project Phase	Environmental aspect: Groundwater and Surface water Pollution								
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Sanitation seepage from temporary chemical toilets	Possible Water Pollution	Low-medium	Low	Low	Low	Low - medium	Low	Low-medium
	Spillages of fuel/oils and other lubricants	Possible Water Pollution	Low-medium	Low	Low	Low-medium	Medium	Low	Low-medium
	Storm water run-off from cleared areas	Possible siltation of water courses & damage to downstream properties	Medium	Low-medium	Low-medium	Low-medium	Medium	Low	Medium
Operation	Leakages from sanitation network	Possible groundwater pollution	Low	Low-Medium	Low-Medium	Low	Low-Medium	Low	Low-Medium
	Leakages of fuel/oil or other lubricants from vehicles Incorrect storage of oil and lubricants and disposal thereof	Possible Surface and groundwater pollution	Low	Low	Low	Medium	Medium	Low	Low-medium
	Wash water from car washes and workshops	Possible Surface and groundwater pollution	Low	Low	Low	Medium	Medium	Low	Low-medium
	Dumping of waste in flood retention dams	Possible Surface and groundwater pollution	Low	Low	Low	Medium	Medium	Low	Low-medium

Project Phase	Environmental aspect: Water use									
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance		
								With Mitigation	Without Mitigation	
Construction	Site preparation and dust suppression measures)	Possible over consumption of available water resources	Low-medium	Low-medium	Low-medium	Medium high	High	Low-medium	Low - medium	
Operation	Gardens development	Possible reduction in groundwater sources.	Low-medium	Low-medium	Low-medium	Medium high	High	Low-medium	Medium	

Project Phase	Environmental aspect : Loss of Archaeological, Cultural and social features									
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance		
								With Mitigation	Without Mitigation	
Construction	Site preparation (vegetation clearance)	Possible destruction of archaeological/heritage findings	Medium	Low-medium	Low	Low	Low	Low	Low-medium	

Project Phase	Environmental aspect : Ecology (Fauna and Flora)								
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Site preparation (vegetation clearance)	Loss of grazing and habitat	Low-medium	High	Low	High	High	Low-medium	Medium-high
	Killing, snaring or collection of animals	Loss of indigenous fauna	Low	Medium	Low-medium	Medium	Medium	Low	Low-medium
	Inappropriate use of herbicides and pesticides	Loss of indigenous fauna and flora	Low	Medium	Low-medium	Medium	Medium	Low	Low-medium
	Accidental fires	Loss of indigenous flora and fauna	High	Low	Medium	Low	Medium	Low-medium	Medium
	Distribution of alien invasive seeds	Possible introduction of alien invasive plants	Low-medium	Medium	Low	Medium	Medium	Low	Low-medium
Operation	Inappropriate use of herbicides and pesticides	Loss of indigenous fauna and flora	Low	Low	Low	Medium	Medium	Low	Low-medium
	Killing or snaring of animals	Possible loss of fauna	Low	Low	Low-medium	Medium-High	Medium-High	Low	Low-medium
	Accidental fires	Loss of habitat and fauna	High	Low	Medium	Low	Medium	Low-medium	Medium
	Cutting and collection of trees for firewood	Loss of flora	High	Low	Medium	Low	Medium	Low-medium	Medium
	Alien seed introduction	Possible spread of alien invasive species,	Low-medium	Medium	Low	Medium	Medium	Low	Low-medium

Project Phase	Environmental aspect: Soil degradation								
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Operation of construction vehicles – oil and diesel spillages	Soil pollution	Low	Low	Low	Low-medium	Medium	Low	Low-medium
	Temporary sanitation facilities (chemical toilets) - spillages	Soil pollution	Low	Low	Low	Low-medium	Medium	Low	Low-medium
	Storm water over roads and cleared areas	Loss of topsoil (erosion)	Low	Medium	Low-medium	Medium	Medium	Low	Medium
Operation	Storm water	Loss of topsoil (erosion)	Low	Low-medium	Low	Medium	Medium	Low	Low-medium
	Inappropriate use of herbicides or pesticides	Soil pollution	Low	Low	Low	Medium	Medium	Low	Low-medium

Project Phase	Environmental aspect: Visual disturbance								
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Removal of vegetation (site preparation) & construction	Visual	Low-medium	Low	Low	High	High	Low-medium	Medium
Operation	Buildings and gardens	Visual	Low	High	Low	High	Low	Low-medium	Medium

Project phase	Environmental aspect: Safety, security and fire hazards, Health								
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	Significance	
								With Mitigation	Without Mitigation
Construction	Construction activities	Increased risk to the safety of people	Low-medium	Low-medium	Low-medium	High	Medium	Low - medium	Medium
	Possible occurrence of accidental fires	Increased risk to the safety to people	Medium	Low-medium	Medium	Low	Low-medium	Low-medium	Medium
	Speeding on site	Increased risk to the safety of people	Medium	Low-medium	Low-medium	Medium-high	Medium-high	Low - medium	Medium-High
	Crime – trespassing onto private land	Increased risk to the safety of people	Medium-High	Low-medium	Low-medium	Low-medium	Medium	Low-medium	Medium-High
Operation	Speeding on site	Increased risk to the safety of people	Medium	Medium-high	Low-medium	Medium-high	Medium-high	Low - medium	Medium-High
	Crime – trespassing onto private land	Increased risk to the safety of people	Medium-High	Medium-high	Low-medium	Low-medium	Medium	Low-medium	Medium-High
	Possible occurrence of veld fires – spread to adjacent properties	Safety risk and health	Medium	Medium- high	Medium	Low	Low-medium	Low-medium	Medium

Project phase	Environmental aspect: Socio - Economic								Significance	
	Activity/Aspect	Specific impact	Severity	Duration	Extent	Frequency	Probability	With Mitigation	Without Mitigation	
Construction	Construction/site preparation	Job creation and skills development	Medium-High	Low-medium	Low-medium	Medium	High	Medium (Positive)	Low – medium (Positive)	
Operation	Operational phase	Job creation	Medium-High	Low-medium	Low-medium	Medium	High	Medium (Positive)	Low-medium (Positive)	
	Operational phase	Possible devaluation of nearby properties	Medium	Medium-high	Low-medium	Low-medium	Low-medium	Low-medium	Low-Medium	

PROPOSED MANAGEMENT OF IMPACTS AND MITIGATION

Indicate how identified impacts and mitigation will be monitored and/or audited.

Alternative (S1 preferred alternative)

- Appointment of an Environmental Monitoring Officer to conduct visual inspections to ensure implementation of preventative and mitigation measures during the construction (site preparation) and operational phases of the proposed activity
- Compulsory monitoring reports during the construction period.
- The necessary amendments to the EMPR through monitoring and also advice obtained from the environmental monitoring officer

3. ENVIRONMENTAL IMPACT STATEMENT

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

ENVIRONMENTAL IMPACT STATEMENT: (Preferred site for the proposed activity – S1)

Preferred site for proposed activity (S1):

- The proposed activity will significantly impact on the footprint area (planned construction/site preparation area) in terms of the removal of vegetation (approximately 20 hectares) and consequently the loss of a section of habitat for fauna and flora occurring in the area.

- The removal of vegetation must only take place within the planned area for construction, and the unnecessary removal of vegetation must be avoided. Where possible, large indigenous trees should be retained and incorporated into the design. Protected trees which might occur on the site can only be removed once the necessary permits have been obtained from DAFF (Department of Agriculture, Forestry and Fisheries). It will be the responsibility of the applicant to obtain such permits prior to removal.
- All the necessary measures as pertained above and within the EMPR must be implemented in terms of the possible spreading of alien invasive species.
- Local labour must be employed during the construction (site preparation) and operational phases of the proposed project.
- Firebreaks (at least 8meters in width) must be established and maintained around the proposed site.
- In the event of a heritage object being unearthed, construction/site preparation work that could impact on the object should be stopped and the discovery must be reported to the Limpopo Authority or the appropriate archaeologist/s and may require further mitigation measures. Heritage objects are not to be moved or destroyed without the necessary permits in place.
- All the appropriate storm water control measures as indicated within the flood line report must be implemented.
- The remaining potentially significant negative impacts that have been identified for the construction and operational phases must be mitigated through the proper implementation of the mitigation measures included in this report as well as pertained within the EMPR.

Alternative A (preferred alternative (S1)

Kindly refer to the tables above (Environmental impact assessment tables for impact ratings)

<p>S1 (Preferred Site)</p> <p>No –go alternative (Planning and design Phase)</p> <ul style="list-style-type: none"> • No impacts are expected during the design and planning phase for the proposed project
<p>No –go alternative (Construction Phase/Site Preparation Phase)</p> <ul style="list-style-type: none"> • The loss of vegetative cover (trees, herbaceous layer) – clearing of the site will not take place. (low-medium significance with implementation of mitigation measures) • Possible surface and groundwater pollution through oil or diesel spillages during the construction/site preparation and operational phases will be decreased.(low significance with implementation of mitigation measures) • Possible risk of fires which can spread to adjacent properties can be decreased.(Low significance with implementation of mitigation measures) • The benefit of local job creation and skills development through the undertaking of the proposed activity will be lost (medium positive). • The illegal dumping and other activities in the area will continue to degrade the area.
<p>No –go alternative (Operational Phase)</p> <ul style="list-style-type: none"> • Loss of topsoil (erosion) due to storm water flow over the cleared site and internal roads will be

reduced. (Low significance with the implementation of mitigation measures)

- Possible surface and groundwater pollution through oil or diesel spillages during the operational phase will be decreased. (Low significance with the implementation of mitigation measures)
- Positive impact - job creation (operation of compost facility) will be lost. (Medium positive)
- Risk of accidental fires will be decreased (Low- medium significance with the implementation of mitigation measures)
- Possible spread of alien/invasive species will be reduced. (Low significance with the implementation of mitigation measures)
- Possible devaluation of nearby properties as a result of the undertaking of the activity will not take place. (Low-medium significance with mitigation measures)

No –go alternative (Decommissioning and Closure Phase)

- The loss of vegetative cover (trees, herbaceous layer) – clearing of the site will not take place
- Possible surface and groundwater pollution through oil or diesel spillages during the construction/site preparation and operational phases will not occur
- Loss of topsoil (erosion) due to storm water flow over the cleared site will not happen
- Positive impact - job creation will be lost
- **Also see No Go for operational phase above**

For more alternatives please continue as alternative D, E, etc.

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	<input checked="" type="checkbox"/>
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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 department in respect of the application:

Preferred site for proposed activity (S1):

- *The proposed activity will significantly impact on the footprint area (planned construction/site preparation area) in terms of the removal of vegetation (approximately 20 hectares) and consequently the loss of a portion of habitat for fauna and flora occurring in the area.*

- **The area south of the development** must be proclaimed as an ecological sensitive area as resolved by the Polokwane Municipality. The sensitive area must be fenced to control access to the site and prevent dumping and trespassing.
- **All comments from interested and affected parties** must be taken into consideration during the decision making process. (Also see Comments and Responses Report – Appendix E to this report). Concerns from registered interested parties that was obtained during the public participation process must be taken into consideration.
- **The removal of vegetation** must only take place within the planned construction area and the unnecessary removal of vegetation must be avoided. Where possible, tall/large indigenous trees should be retained and incorporated into the preparation site. Protected trees (marula and shepherd's trees) on the site can only be removed once the necessary permits have been obtained from DAFF (Department of Agriculture, Forestry and Fisheries). It will be the responsibility of the applicant to obtain such permits prior to removal.
- **All the necessary measures** as pertained above and within the EMPR must be implemented in terms of the possible spreading of alien invasive species.
- **Local labour** must be employed during the construction (site preparation) and operational phases of the proposed project. Proof of the employment of local labour must be provided by the owner
- **Firebreaks** (at least 8meters in width) must be established and maintained around the proposed site The Fire Department must be notified and ask to assist in this regard.
- **In the event of a heritage object being unearthed**, construction/site preparation work that could impact on the object should be stopped and the discovery must be reported to the Limpopo Authority or the appropriate archaeologist/s and may require further mitigation measures. Heritage objects are not to be moved or destroyed without the necessary permits in place
- **All the appropriate erosion control measures** as indicated within the Environmental Management Program must be implemented and monitored at regular intervals – especially the construction of the storm water control berm and flood retention dams.
- The remaining potentially significant negative impacts that have been identified for the construction and operational phases must be mitigated through the proper implementation of the mitigation measures included in this report as well as pertained within the EMPR.

Is an EMPr attached?
The EMPr must be attached as Appendix F.

YES	<input checked="" type="checkbox"/>
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SECTION F: APPENDIXES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s) - Attached

Appendix B: Photographs – Attached

Appendix C: Facility illustration(s) - Attached

Appendix D: Specialist reports – Attached

Appendix E: Comments and responses report – Attached

Appendix F: Environmental Management Programme (EMPr) – Attached

Appendix G: Other information

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, _____

- (a) act as the independent environmental practitioner in this application;
- (b) do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the Environmental Impact Assessment Regulations, 2010;
- (c) do not have and will not have a vested interest in the proposed activity proceeding;
- (d) have no, and will not engage in, conflicting interests in the undertaking of the activity;
- (e) undertake to disclose, to the competent authority, any material information that has or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the Environmental Impact Assessment Regulations, 2006;
- (f) will ensure that information containing all relevant facts in respect of the application is distributed or made available to interested and affected parties and the public and that participation by interested and affected parties is facilitated in such a manner that all interested and affected parties will be provided with a reasonable opportunity to participate and to provide comments on documents that are produced to support the application;
- (g) will ensure that the comments of all interested and affected parties are considered and recorded in reports that are submitted to the Department in respect of the application, provided that comments that are made by interested and affected parties in respect of a final report that will be submitted to the Department may be attached to the report without further amendment to the report;
- (h) will keep a register of all interested and affected parties that participated in a public participation process; and
- (i) will provide the Department with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not.

Signature of the Environmental Assessment Practitioner:

Name of company:

Date: