



LIMPOPO

PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

Gra-Mampa
final EIA

DEPARTMENT OF ECONOMIC DEVELOPMENT, ENVIRONMENT & TOURISM

BASIC ASSESSMENT REPORT - EIA REGULATIONS, 2014

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

File Reference Number:

NEAS Reference Number:

(For official use only)	
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.

Cnr Suid & Dorp Streets, POLOKWANE, 0700, P O Box 55464, POLOKWANE, 0700
Tel: 015 290 7138/ 7167, Fax: 015 295 5015, website: <http://www.ledet.gov.za>

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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 2014.
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><u>Postal Address:</u></p> <p>Central Administration Office Environmental Impact Management P. O. Box 55464 POLOKWANE 0700</p>	<p><u>Physical Address:</u></p> <p>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</p> <p>Tel: (015) 290 7138/ (015) 290 7167</p> <p>Fax: (015) 295 5015</p> <p>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	NO
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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:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

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

It is proposed that an existing, damaged low-level stream crossing be upgraded in order to improve access between Ga-Mampa village and surrounding towns and transportation routes. Currently, access is regularly cut off for a few days at a time, when the river floods following heavy rainfall. Furthermore, erosion protection is required to control the erosion around the access bridge, as the whole area is known for its severe erosion due to poor soil conditions.

The design proposed by the engineers for the upgrading of the bridge includes extensive erosion protection, and the bridge has been designed to accommodate the 1:20 year flood.

The project is proposed to consist of the following:

- Construction of a low-level access bridge which will allow the river to flow underneath the structure.
- Erosion control measures immediately upstream and downstream of the crossing.
- Providing drainage channels along the road to channel storm water.
- Re-gravelling of the road leading towards the bridge on both sides.
- Adjustment of the vertical alignment of the road, and construction of the road as a class 3 road (only the section forming part of the project site on both sides of the bridge).
- Providing pedestrian access on the bridge.
- Four weirs (two upstream and two downstream) for further erosion protection.

The bridge is proposed to consist of 4 culverts of 3mx3m each. Gabions, reno mattresses and dump rock is proposed to be installed on the upstream and downstream sides of the bridge for the purpose of erosion protection. Furthermore, four weirs (two upstream and two downstream) are also proposed for further erosion protection, as the geotechnical study indicated a need for this due to the severe erosion risk in the area.

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.

2. FEASIBLE AND REASONABLE ALTERNATIVES

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

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

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

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

No project or site alternatives were investigated, as the express purpose of this proposed project is to upgrade a damaged existing low-level bridge that is already located in this position and which already services the community located along this route. The project is aimed at improving access for this community. No other project type would meet this goal, and implementation of the project at any other site would also not meet the goal of improving this particular community's access. Furthermore, the site is already impacted by the existing road and stream crossing, and upgrading of the crossing would be preferable to establishing an entirely new crossing and road on a greenfield site.

No other designs were considered in detail, as the type and size of structure was very much dictated by the constraints and needs of the site, e.g. founding conditions and erosion risk, and by standard requirements of the flood intervals that need to be accommodated. The proposed design was the only viable one that warranted detailed design.

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 Hartebeeshoek94 WGS84 spheroid in a national or local projection.

Note: Positions are indicated first for the weirs for erosion control, and then for the proposed bridge upgrade (under "linear activities").

List alternative sites, if applicable.

	Latitude (S):			Longitude (E):		
Alternative:						
Preferred Site – Weir 1	24°	20'	36.12"	30°	01'	39.17"
Preferred Site – Weir 2	24°	20'	38.16"	30°	01'	41.05"
Preferred Site – Weir 3	24°	20'	41.70"	30°	01'	43.93"
Preferred Site – Weir 4	24°	20'	43.72"	30°	01'	45.52"
Alternative S2 (if any)	°	'	"	°	'	"
Alternative S3 (if any)	°	'	"	°	'	"

In the case of linear activities:

	Latitude (S):			Longitude (E):		
Alternative:						
Alternative S1 (preferred or only route alternative)						
• Starting point of the activity	24°	20'	39.26"	30°	01'	43.66"
• Middle/Additional point of the activity	24°	20'	40.02"	30°	01'	42.30"
• End point of the activity	24°	20'	40.76"	30°	01'	39.93"
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

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

Alternative:

Alternative A1² (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

or,

for linear activities:

Size of the activity:

	m ²
	m ²
	m ²

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

Length of the activity:

	112 m
	m
	m

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

Size of the site/servitude:

Alternative:

Alternative A1 (preferred activity alternative)

Alternative A2 (if any)

Alternative A3 (if any)

	m ²
	m ²
	m ²

5. SITE ACCESS

Does ready access to the site exist?

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

n/a

Describe the type of access road planned:

n/a

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

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.

² "Alternative A.." refer to activity, process, technology or other alternatives.

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 – **refer to Appendix C for the layout;**
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site – **refer to locality map under Appendix A;**
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites – **refer to Appendix A;**
- 6.4 the exact position of each element of the application as well as any other structures on the site – **refer to proposed layout plan under Appendix C;**
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, streetlights, sewage pipelines, storm water infrastructure and telecommunication infrastructure - **none;**
- 6.6 all trees and shrubs taller than 1.8 metres – **None within the proposed construction footprint;**
- 6.7 walls and fencing including details of the height and construction material – **no walls or fencing proposed;**
- 6.8 servitudes indicating the purpose of the servitude – **no known servitudes;**
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - Rivers – **refer to locality map under Appendix A;**
 - the 1:100 year flood line (where available or where it is required by Department of Water Affairs) – **no flood line determination required in this case. As part of the design, the engineers determined the catchment and did runoff calculations in order to design the bridge to accommodate the required flood interval;**
 - ridges – **n/a;**
 - Cultural and historical features – **none recorded during heritage scoping study;**
 - areas with indigenous vegetation (even if it is degraded or invested with alien species) – **refer to Appendix A;**
- 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 – **indicated on design drawings under Appendix C;** and
- 6.11 the positions from where photographs of the site were taken – **refer to Appendix B.**

7. SITE PHOTOGRAPHS

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

8. FACILITY ILLUSTRATION

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

Please refer to Appendix C.

11. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

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

±R8,9 million

What is the expected yearly income that will be generated by or as a result of the activity?	None directly, but the bridge will contribute to supporting economic activities along the route	
Will the activity contribute to service infrastructure?	YES	NO
Is the activity a public amenity?	YES	NO
How many new employment opportunities will be created in the development phase of the activity?	At least 6	
What is the expected value of the employment opportunities during the development phase?	±R580 000	
What percentage of this will accrue to previously disadvantaged individuals?	100%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	0	
What is the expected current value of the employment opportunities during the first 10 years?	0	
What percentage of this will accrue to previously disadvantaged individuals?	n/a	

9(b) Need and desirability of the activity

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

NEED:			
i.	Was the relevant municipality involved in the application? The municipality is the beneficiary who will be taking over the bridge after construction, and the applicant has been working closely with them during the planning process.	YES	NO
ii.	Does the proposed land use fall within the municipal Integrated Development Plan?	YES	NO
iii.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation: n/a		

DESIRABILITY:			
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: n/a		
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.		
	n/a		

BENEFITS:			
i.	Will the land use / development have any benefits for society in general?	YES	NO
ii.	Explain: Benefits will be felt locally. The bridge will be used by all member of the public, mostly local community members.		
iii.	Will the land use / development have any benefits for the local communities where it will be located?	YES	NO
iv.	Explain: - Benefits will be felt locally, in terms of improved accessibility (long term) as well as short-term, small-scale job creation during construction.		

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

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

Title of legislation, policy or guideline:	Administering authority:	Date:
The Constitution Act (No 108 of 1996), Chapter 2, Section 24	Dept of Water and Sanitation (DWS) & Dept of Environmental Affairs (DEA)	1996
National Environmental Management Act (No 107 of 1998) and amended	In this case LEDET	19 Nov 1998
Environmental Impact Assessment (EIA) Regulations as amended	In this case LEDET	2014, as amended 2017
Conservation of Agricultural Resources Act (1983), Section 5	Department of Agriculture, Forestry and Fisheries (DAFF)	21 April, 1983
National Heritage Resources Act (No 25 of 1999), Section 34 – 36	South African Heritage Resources Agency (SAHRA)	28 April, 1999
Occupational Health and Safety Act (No 85 of 1993), Sections 8 and 9	Department of Labour	1993
National Water Act (No 36 of 1998), Section 19 and 20 and Chapter 4 (Sections 21 – 55)	DWS	26 August 1998
National Environmental Management: Air Quality Act	DEA	2004
Limpopo Environmental Management Act	LEDET	2003

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management figured out

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

YES	NO
<1m ³ /month	

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

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

The contractor will take the solid waste to a nearby landfill site, likely Burgersfort. Solid waste is anticipated to consist mostly of packaging materials (e.g. empty cement bags) and a negligible amount of domestic-type waste generated by workers (e.g. used food packaging).

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

Waste generated onsite during construction phase will be disposed of at the local municipal landfill site. A minimal amount of solid waste is expected to be generated.

Will the activity produce solid waste during its operational phase?

YES	NO
n/a	

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

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

n/a

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

n/a

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the 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?

YES	NO
-----	----

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?

YES	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

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

YES	NO
n/a	
YES	NO

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

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

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?

YES	NO
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If yes, provide the particulars of the facility:

Facility name:	n/a		
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

Will the activity release emissions into the atmosphere?

YES	NO
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If yes, is it controlled by any legislation of any sphere of government?

YES	NO
-----	----

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

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

- | |
|---|
| <ul style="list-style-type: none"> - Some dust during construction - Exhaust emissions from vehicles and machinery used in construction of the road - Exhaust emissions from vehicles using the road during the operational phase |
|---|

11(d) Generation of noise

Will the activity generate noise?

YES	NO
-----	----

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

YES	NO
-----	----

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

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

- | |
|--|
| <ul style="list-style-type: none"> - Construction vehicles and machinery - Engines of vehicles using the road during the operational phase |
|--|

12. WATER USE

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

municipal	water board	groundwater	river, stream, dam or lake	Other – to be obtained from Twickenham mine	the activity will not use water
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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:

±10 m³ / month during construction (6 months)	
YES	NO

Does the activity require a water use permit from the Department of Water Affairs?
WULA required for stream crossing, not for water abstraction.

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. **WULA is underway. No WULA required for water abstraction, only for the stream crossing.**

13. ENERGY EFFICIENCY

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

n/a

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

n/a

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

- 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):

- Paragraphs 1 - 6 below must be completed for each alternative.

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

YES	NO
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If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

Property description/physical address:

Remaining Extent of the Farm Waterkop 113- KT

(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	NO
YES	NO

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

Indicate the general gradient of the site.

Alternative S1:

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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Alternative S2 (if any):

Flat	1:50 – 1:20	1:20 – 1:15	1:15 – 1:10	1:10 – 1:7,5	1:7,5 – 1:5	Steeper than 1:5
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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

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		2.8 Dune	
2.4 Closed valley		2.9 Seafront	
2.5 Open valley	X		

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) – possibility of a seasonal shallow water table (refer to geotechnical report)	YES	NO	YES	NO	YES	NO
Dolomite, sinkhole or doline areas	YES	NO	YES	NO	YES	NO
Seasonally wet soils (often close to water bodies)	YES	NO	YES	NO	YES	NO
Unstable rocky slopes or steep slopes with loose soil	YES	NO	YES	NO	YES	NO
Dispersive soils (soils that dissolve in water)	YES	NO	YES	NO	YES	NO
Soils with high clay content (clay fraction more than 40%)	YES	NO	YES	NO	YES	NO
Any other unstable soil or geological feature	YES	NO	YES	NO	YES	NO
An area sensitive to erosion	YES	NO	YES	NO	YES	NO

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

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

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

Natural veld – good condition ^E	Natural veld with scattered aliens ^E	Natural veld with heavy alien infestation	Veld dominated by alien species ^E	Gardens
Sport field	Cultivated land	Paved surface	Building or other structure	Bare soil

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

5. LAND USE CHARACTER OF SURROUNDING AREA

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

5.1 Natural area	X	5.22 School	
5.2 Low density residential	X	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	X
5.17 Plantation		5.38 Nature conservation area	
5.18 Agriculture	X	5.39 Mountain, koppie or ridge	X
5.19 Archaeological site		5.40 Graveyard	
5.20 Quarry, sand or borrow pit		5.41 River, stream or wetland	X
5.21 Dam or Reservoir		5.42 Other land uses (describe)	

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

n/a

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

No boxes marked with an "AN" are ticked

If YES, specify and explain:

n/a

If NO, specify:	n/a
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If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

No boxes marked with an "H" are ticked

If YES, specify and explain:	n/a
If NO, specify:	n/a

6. CULTURAL/HISTORICAL FEATURES

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

If YES, explain: n/a

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: No sites of heritage importance were identified at the bridge site during the heritage scoping study conducted by Shasa Heritage Consultants.

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

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

SECTION C: PUBLIC PARTICIPATION

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 subregulation 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.

Please refer to Appendix F for proof of advertisement of the first comment period in English and SePedi by means of a newspaper advertisement, site notices and direct notification of identified I&APs by e-mail / fax / post.

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.

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)
Fetakgomo Tubatse Local Municipality	No, but they are the beneficiary who will take over the project from the applicant upon completion, and are very involved in the planning process
Sekhukhune District Municipality	Not yet
Department of Water and Sanitation	Not yet
Department of Rural Development & Land Reform	Not yet
Department of Agriculture, Forestry and Fisheries	Not yet
Roads Agency Limpopo	Not yet

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 subregulation 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

NO

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

n/a

SECTION D: IMPACT ASSESSMENT

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

No issues have been raised thus far.

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):

No issues have had to be addressed thus far.

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

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

Alternative A (preferred alternative): DEVELOPMENT / CONSTRUCTION PHASE

Direct impacts:

Bio-physical impacts:

- Risk of contamination of soil or watercourses by spillage of hazardous substances such as fuel during the road construction phase, especially during construction of the stream crossing;
- Possible increase in soil erosion and associated siltation of watercourse, especially during construction;
- Risk of labourers using the veld or watercourse for ablutions, and associated risk of contamination of water resources or posing a health risk to local residents or pedestrians;
- Localised, small-scale habitat degradation;
- Risk of veld fire due to cigarette butts, fires for cooking / heating, or "hot" work such as welding;
- Air-borne dust during construction;
- Generation of construction waste, as well as liquid and solid waste associated with workers.

Socio-economic impacts:

- Noise related to construction activities, offloading of materials and heavy machinery;
- Negative visual impact of construction activities during this phase;
- Littering by construction workers;
- Disruption of traffic during construction;
- Job creation during the construction phase – labour will be sourced from the local community where possible.

Cumulative and indirect impacts:

- Risk of disorderly or criminal activity associated with construction workers or persons posing as workers.
- Habitat degradation.

Alternative A (preferred alternative): OPERATIONAL PHASE

Bio-physical impacts:

- Decrease in soil erosion and sedimentation of the drainage line due to establishment of a proper stream crossing (low-level bridge) including erosion control;
- Decrease in faunal fatalities due to roadkill at the stream crossing, as the stream crossing structure will mean that vehicles will no longer pass directly through the drainage line where fauna (e.g. frogs) are likely to migrate, but will pass over it on the low-level bridge;
- Decreased risk of contamination of water in the watercourse due to the establishment of a proper culvert bridge structure, as vehicles will no longer pass directly through the drainage line but will pass over it on the low-level bridge, and will no longer come into direct contact with the water and vegetation in the drainage line.
- Possible increase in colonisation / infestation by alien invasive vegetation due to the local disturbance.

Socio-economic impacts:

- Improved accessibility for residents and small businesses in the affected villages;
- Increased traffic due to improved accessibility;
- Noise and exhaust fumes caused by increased number of vehicles on the road;
- Increased road safety risk due to increased traffic on the road.

Indirect and cumulative impacts:

- Encouragement of further development in the area, due to improved accessibility;
- Increased traffic on the access road.

Alternative A (preferred alternative): DECOMMISSIONING PHASE

Bio-physical impacts:

- Disturbance of fauna and flora;
- Increased risk of soil erosion;
- Risk of veld fire if workers act indiscriminately with cigarette butts or if cooking / heating fires and “hot” activities such as welding are not confined to designated “safe” areas;
- Physical impacts on, or contamination of, the drainage line, especially during demolition of the low-level bridge;
- Possible contamination of watercourses, ground water or soil;
- Generation of construction waste and debris as well as sewage and general domestic solid waste associated with the workers undertaking the demolition activities;
- Use by workers of the veld for ablutions.
- Airborne dust.

Socio-economic impacts:

- Noise associated with activities such as blasting;
- Negative visual impact;
- Risk of disorderly or criminal behaviour associated with workers or persons posing as workers;
- Littering;
- Safety risk in the event of potentially dangerous activities such as blasting taking place;
- Disruption of traffic by slow-moving vehicles involved in demolition or in removal of demolition rubble;
- Temporary job creation.

Indirect and cumulative impacts:

- Possible return of habitat for wildlife.

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.

No other site or project alternatives were investigated as part of the BA.

Alternative A (preferred alternative)

	TYPE	STATUS	DURATION	LIKELIHOOD	MAGNITUDE	SIGNIFICANCE
Bio-	Possible contamination of soil, streams and/ groundwater by spillage of waste or hazardous substances such as fuel during construction phase, or by workers using the veld for ablutions	Negative	Short term	Possible	Low	Low
	Short-term soil erosion and siltation of watercourse	Negative	Short term	Highly	Medium	Low-Medium

				probable		
	Long-term decrease in contamination risk in drainage line due to establishment of a proper low-level bridge	Positive	Long term	Highly probable	Medium	Low-Medium
	Long-term decrease in faunal fatalities / roadkill at the stream crossing due to establishment of a proper crossing	Positive	Long term	Highly probable	Low	Very low
	Long-term decrease in soil erosion, siltation and soil compaction at the stream crossing, as vehicles will now pass over the low-level bridge instead of directly through the watercourse	Positive	Long term	Highly probable	Medium	Medium
	Risk of veld fires during construction	Negative	Short term	Possible	Unknown	Very low
	Generation of construction waste	Negative	Short term	Definite	Very Low	Negligible
	Air-borne dust during construction	Negative	Short term	Highly probable	Low	Very Low
Socio-economic impacts	Noise associated with construction activities	Negative	Short term	Definite	Very Low	Very Low
	Visual impact of construction activities	Negative	Short term	Definite	Very Low	Very Low
	Littering during construction phase	Negative	Short term	Highly probable	Very low	Very low
	Supporting local businesses through local procurement of materials, equipment & services	Positive	Short term	Definite	Low	Low
	Risk of criminal behaviour, trespassing or rowdiness during construction phase	Negative	Short term	Possible	Unknown	Very Low
	Disruption of traffic during construction	Negative	Short term	Possible	Very Low	Negligible
	Job creation and sustaining of existing jobs – construction phase	Positive	Short term	Definite	Very Low	Very Low
	Improved accessibility along the route	Positive	Long term	Definite	Low	Medium
	Potential stimulation of more development along the route due to improved accessibility	Positive	Long term	Possible	Low	Low
	Increased traffic and associated noise and exhaust fumes due to improved accessibility	Negative	Long term	Highly probable	Low	Low
	Increased road safety risk due to improved accessibility and anticipated increase in traffic	Negative	Long term	Possible	Low	Low

No-go alternative (compulsory)

	TYPE	STATUS	DURATION	LIKELIHOOD	MAGNITUDE	SIGNIFICANCE
Bio-physical	Possible contamination of soil, streams and/ groundwater by spillage of waste or hazardous substances such as fuel during construction phase, or by workers using the veld for ablutions	Neutral	Short term	Definite	Low	Low
	No short-term construction-related soil erosion and siltation of watercourse	Neutral	Long term	Definite	Medium	Low-Medium

	No long-term change in contamination risk in drainage line	Neutral	Long term	Highly probable	Medium	Low-Medium
	No long-term change in faunal fatalities / roadkill	Neutral	Long term	Highly probable	Low	Very low
	No change in long-term trends in soil erosion, siltation and soil compaction at the stream crossing	Neutral	Long term	Highly probable	Medium	Medium
	No risk of veld fires related to construction	Neutral	Long term	Definite	Unknown	Very low
	No generation of construction waste	Neutral	Long term	Definite	Very Low	Negligible
	No air-borne dust during construction	Neutral	Long term	Definite	Low	Very Low
Socio-economic impacts	No noise associated with construction activities	Neutral	Short term	Definite	Very Low	Very Low
	No visual impact of construction and other related earthworks	Neutral	Long term	Definite	Very Low	Very Low
	No construction-phase littering	Neutral	Short term	Definite	Very low	Very low
	No supporting of local businesses through local procurement of materials, equipment & services	Neutral	Short term	Definite	Low	Low
	No risk of criminal behaviour, trespassing or rowdiness during construction phase	Neutral	Short term	Definite	Unknown	Very Low
	No disruption of traffic by construction activities	Neutral	Short term	Definite	Very Low	Negligible
	No job creation or sustaining of existing jobs – construction phase	Neutral	Short term	Definite	Very Low	Very Low
	No improvement of accessibility along the route	Neutral	Long term	Definite	Low	Medium
	No stimulation of more development along the route due to improved accessibility	Neutral	Long term	Highly probable	Low	Low
	No change in traffic levels and associated noise and exhaust fumes	Neutral	Long term	Highly probable	Low	Low
	No change in road safety risk	Neutral	Long term	Highly probable	Low	Low

Alternative C

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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	NO

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

n/a

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

It is recommended that the following be included in any authorisation that may be granted by LEDET in respect of the application:

- Appointment of an Environmental Control Officer (ECO) to monitor implementation of the EMPR during the construction phase;
- Submittal of environmental compliance monitoring reports to LEDET on a six-monthly basis and at the end of the construction phase;
- When employing workers during the construction phase, local labourers (within GTFM's boundaries or within 50km of the site) must be given preference as far as availability of appropriate skills permit;
- Local suppliers (within GTFM's boundaries or within 50km of the site) must be given preference in the sourcing of services and materials as far as availability and quality permits;
- The stream crossing must be registered with the Department of Water and Sanitation in terms of the General Authorisation;
- Should any protected trees need to be removed, a permit must be obtained from the Department of Agriculture, Forestry and Fisheries (DAFF);
- The impact mitigation measures in the EMPR as well as the conditions of the EA and any other authorisations must be adhered to.

Is an EMPr attached?

YES	NO
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The EMPr is attached as Appendix I.

SECTION F: APPENDICES

The following appendixes must be attached as appropriate:

Appendix A: Site plans and maps

Appendix B: Site photographs

Appendix C: Facility illustration(s)

Appendix D: Engineering design report

Appendix E: Specialist reports:

- Ecological / biodiversity assessment
- Desktop surface water report
- Heritage scoping study

Appendix F: Comments and responses:

- List of I&APs
- Comments and responses report / issues trail
- Copies of comments and responses

Appendix G: Proof of advertisement of first public comment period

Appendix H: Proof of advertisement of consultative BAR public comment period

Appendix I: Environmental Management Programme (EMPr)

Appendix J: LEDET pre-application meeting and communication

SECTION G: DECLARATION BY THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

I, Louise Agenbag. declare that 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, 2014;
- (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:

Polygon Environmental Planning CC

Name of company:

25/09/2020.

Date: