



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA

(For official use only)

**File Reference Number:**

**Application Number:**

**Date Received:**


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.

**Kindly note that:**

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

**SECTION A: ACTIVITY INFORMATION**

Has a specialist been consulted to assist with the completion of this section? NO

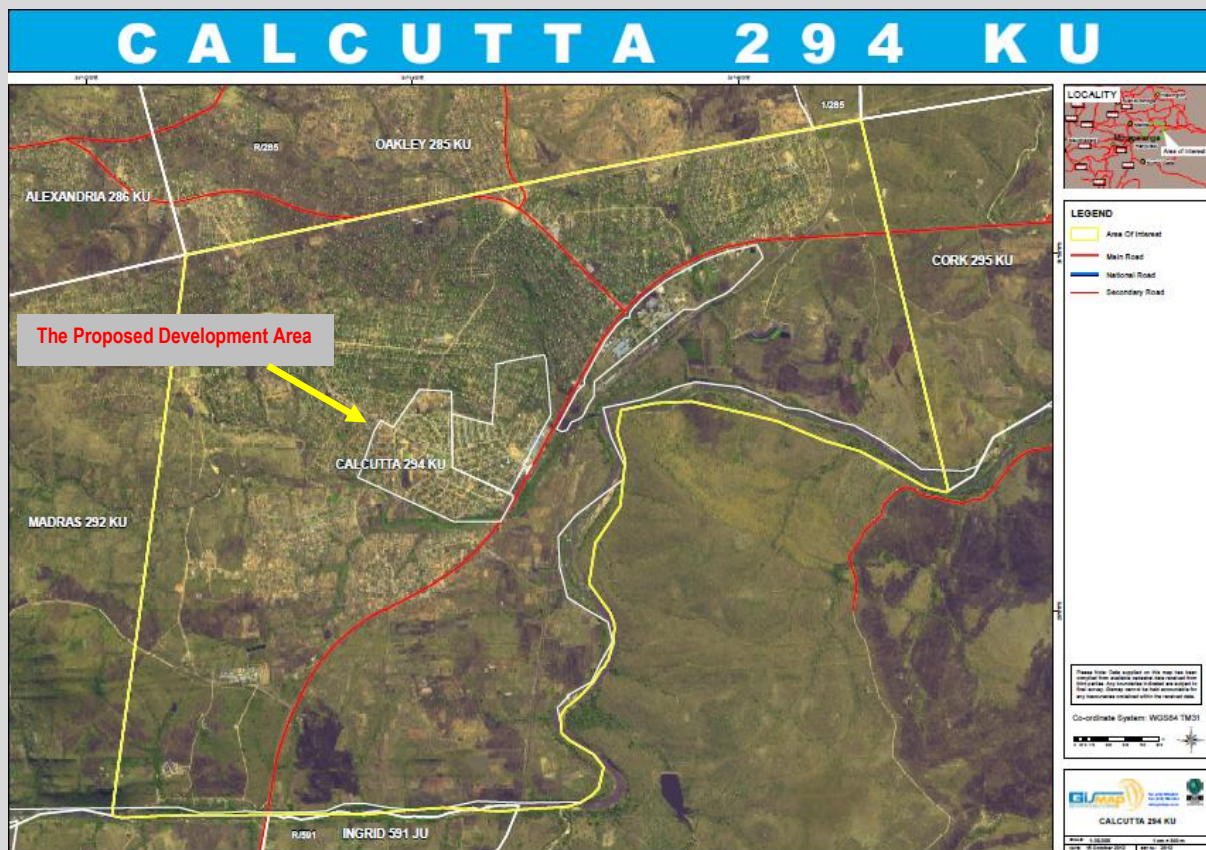
Any specialist reports must be contained in Appendix D.

**1. ACTIVITY DESCRIPTION**

Describe the activity, which is being applied for, in detail<sup>1</sup>:

**1.1 Background to the Proposed Project**

The Mpumalanga Provincial Government is faced with a challenge of training traffic officials in the province and the country at large and also the high standard facility where such officials will be trained, hence the proposed traffic training academy. The applicant, Department of Public Works, Roads and Transport (DPWRT) is the development agent on behalf of the Mpumalanga Department of Community Safety, Security and Liason (DCSSL). DPWRT is assisting DCSSL in planning, designing and implementation of the traffic training academy. The proposed development area is located on the remainder of Farm Calcutta No. 294-KU, Mkhuhlu, Bushbuckridge Local Municipality Mpumalanga Province, see Figure 1.1.



**Figure 1.1: Remainder of the Farm Calcutta 294-KU in Mkhuhlu**

The aim of the proposed traffic training academy is to heighten the training of traffic officials in the province and across the country. The proposed development is a public institution and it will bring about social benefit to the surrounding communities through job creation, community upliftment, skills development, improved education facilities and systems, improved infrastructure and will also attract other community services.

Currently the proposed development area is vacant and is used as a grazing area for cattles from nearby communities, see Figure 1.2. The proposed site was previously used for cultivation purposes by local residents and is now home to a variety of bushveld and grassland vegetation, see Figure 1.3.

<sup>1</sup> 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.



**Figure 1.2: Cattle Grazing on Site**



**Figure 1.3: Typical Bushveld Vegetation on site**

The project entails construction of the traffic training academy, sports fields, admin block, clinic and residence to accompany it. The academy itself will consist of classes and administrative offices as follows:

Classrooms	= 725m <sup>2</sup>
Admin Block	= 676m <sup>2</sup>
Computer Centre	= 218m <sup>2</sup>
Auditoriums	= 344m <sup>2</sup>
Library	= 586m <sup>2</sup>
Cafeteria	= 586m <sup>2</sup>
Testing Station	= 218m <sup>2</sup>
Shooting Range	= 378m <sup>2</sup>
Basketball Pitch	= 510m <sup>2</sup>
Tennis Court	= 708m <sup>2</sup>
Soccer Field	= 4896m <sup>2</sup>
Gym and Recreation	= 586m <sup>2</sup>
Clinic	= 512m <sup>2</sup>
Staff Housing 1	= 193m <sup>2</sup>
Staff Housing 2	= 193m <sup>2</sup>
Staff Housing 3	= 193m <sup>2</sup>
Staff Housing 4	= 193m <sup>2</sup>
Staff Housing 5	= 193m <sup>2</sup>
Hostels	= 3032m <sup>2</sup>
Walk ways	= --m <sup>2</sup>
Gate House	= 138m <sup>2</sup>

**Particulars of Property**

The proposed Mkhuhlu Traffic Training Academy is to be located on the remainder of Farm Calcutta No. 294-KU, Mkhuhlu in the Bushbuckridge Local Municipality of Mpumalanga Province. The site measures approximately 25 hectares in extent, however only 75% of the total area will be used for the development. It is bordered by Transnet freight rail railway line on the west and the Thulane settlement on the north-west. The farm is owned by the Hoxane Tribal Authority who handed over ownership of the land to the Department of Public Works, Roads and Transport (DPWRT), see Appendix G, for the purpose of constructing the traffic training academy. The site is currently vacant and zoned agricultural owing to the previous land use of the site for agricultural purposes by local residents. The proposed site is accessed off the Hazyview-Kruger National Park R536 Road.



This proposed development triggers a listed activity (Activity 15) according to the EIA Regulations published in Government Notice:

**R545 of June 18, 2010 – Activity No. 15**

*Physical alteration of undeveloped vacant or derelict land to residential, retail, commercial, recreational, industrial or institutional use where the total area to be transformed is 20 hectares or more.*

**Specialists Studies**

The following specialist studies, and summary of recommendations (see Appendix D), were conducted to assist in the basic Environmental Impact Assessment process for the proposed establishment of the Mkhuhlu Traffic Training Academy.

- **Heritage and Archaeological Studies** – The study by *Adansonia Heritage Consultants cc*, found no compelling reasons which may prevent the proposed traffic training academy in Mkhuhlu to continue, with the exclusion of an area believed to be a grave and is recommended to be demarcated a “no-go-zone”.
- **Biodiversity Study** – According to the Biodiversity Specialists, *Ligoga Consulting*, the proposed site can be considered for development, provided the recommendations and mitigation measures are followed accordingly.
- **Geotechnical Survey** - Based on the results of the investigations, the site is suitable for the traffic training academy provided that all recommendations are implemented.

**Environmental Management Programme (EMP)**

The Environmental Management Programme (EMP) is the basic tool used to reduce the magnitude of impacts that might arise from the activity through practical measures. It is also used to monitor and measure compliance during and after development. It is this tool that gives guidance during environmental compliance monitoring, auditing and advices on taking corrective actions during project implementation, thereby ensuring continuous monitoring of possible impacts. An EMP is developed during and after an environmental assessment, depending on the level of such assessment. It can also be drawn after an Environmental Authorisation as a directive by the Competent Authorities, to incorporate the conditions of the authorization. An EMP is implemented throughout the project life-cycle, i.e. during pre-construction, construction, operational and decommissioning in order to minimize negative impacts and enhance positive ones. An effective EMP will be a practical working document that sets out the requirements and the goals required in mitigation. The EMP is attached as Appendix F.

**2. FEASIBLE AND REASONABLE ALTERNATIVES**

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

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

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

**2.1 Project Alternatives**

**(i) Activity Alternative**

Other developments were considered for this farm portion, i.e. airport, hotel, e.t.c., however due to the severe challenge faced by the Mpumalanga Provincial Government and the urgency for training traffic officials in the province and the country at large and also the need for a high standard facility where such officials will be trained, the proposed traffic training academy on the proposed farm portion in Mkhuhlu has been viewed as the solution to curb the challenge as it will provide both an excellent public institution facility and also create job opportunities for the community, thus improving the lives of the locals.

**(ii) Site Alternatives**

No other site alternatives were considered for this project as the farm is suitable for the establishment of the Traffic Training Academy.

**(iii) No Go Alternative**

The no go alternative means that the area will not be developed into the proposed Traffic Training Academy and job opportunities for locals will be forfeited.

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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

List alternative sites, if applicable.

**Alternative:**

Alternative S1<sup>2</sup> (preferred or only site alternative)

Alternative S2 (if any)

Alternative S3 (if any)

Latitude (S):		Longitude (E):	
24°	57' 58" S	31°	16' 28" E
o	'	o	'
o	'	o	'

**In the case of linear activities:**

**Alternative:**

Alternative S1 (preferred or only route alternative)

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

Latitude (S):		Longitude (E):	
o	'	o	'
o	'	o	'
o	'	o	'

Alternative S2 (if any)

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

o	'	o	'
o	'	o	'
o	'	o	'

<sup>2</sup> "Alternative S.." refer to site alternatives.

Alternative S3 (if any)

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

o	‘	o	‘
o	‘	o	‘
o	‘	o	‘

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 A1<sup>3</sup> (preferred activity alternative)
  - Alternative A2 (if any)
  - Alternative A3 (if any)
- or, for linear activities:

**Size of the activity:**

25, 000 m <sup>2</sup>
m <sup>2</sup>
m <sup>2</sup>

**Length of the activity:**

25, 000 m<sup>2</sup>

**Alternative:**

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

25, 000 m <sup>2</sup>
m <sup>2</sup>
m <sup>2</sup>

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

**Alternative:**

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

**Size of the site/servitude:**

25, 000 m <sup>2</sup>
m <sup>2</sup>
m <sup>2</sup>

#### 5. SITE ACCESS

Does ready access to the site exist?

YES	
n/a	

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

Describe the type of access road planned:

The traffic training academy will be accessed off the Hazyview-Kruger National Park R536 road. Service roads for the traffic training academy are included in the site layout plan.

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.

<sup>3</sup> "Alternative A.." refer to activity, process, technology or other alternatives.

## 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 DWA);
  - 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

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.



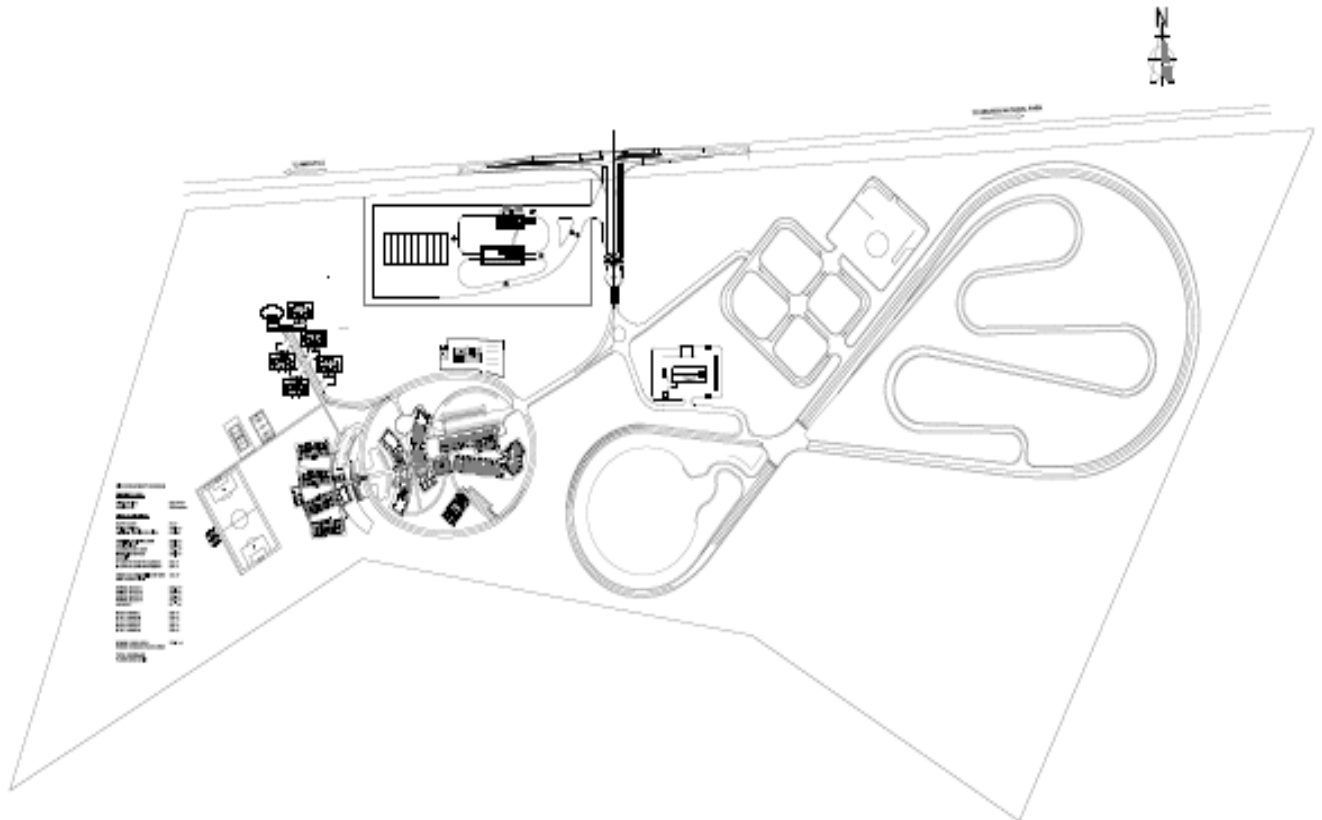


Figure 1.4: The Proposed Mkhuhlu Traffic Training Academy Site Layout Plan

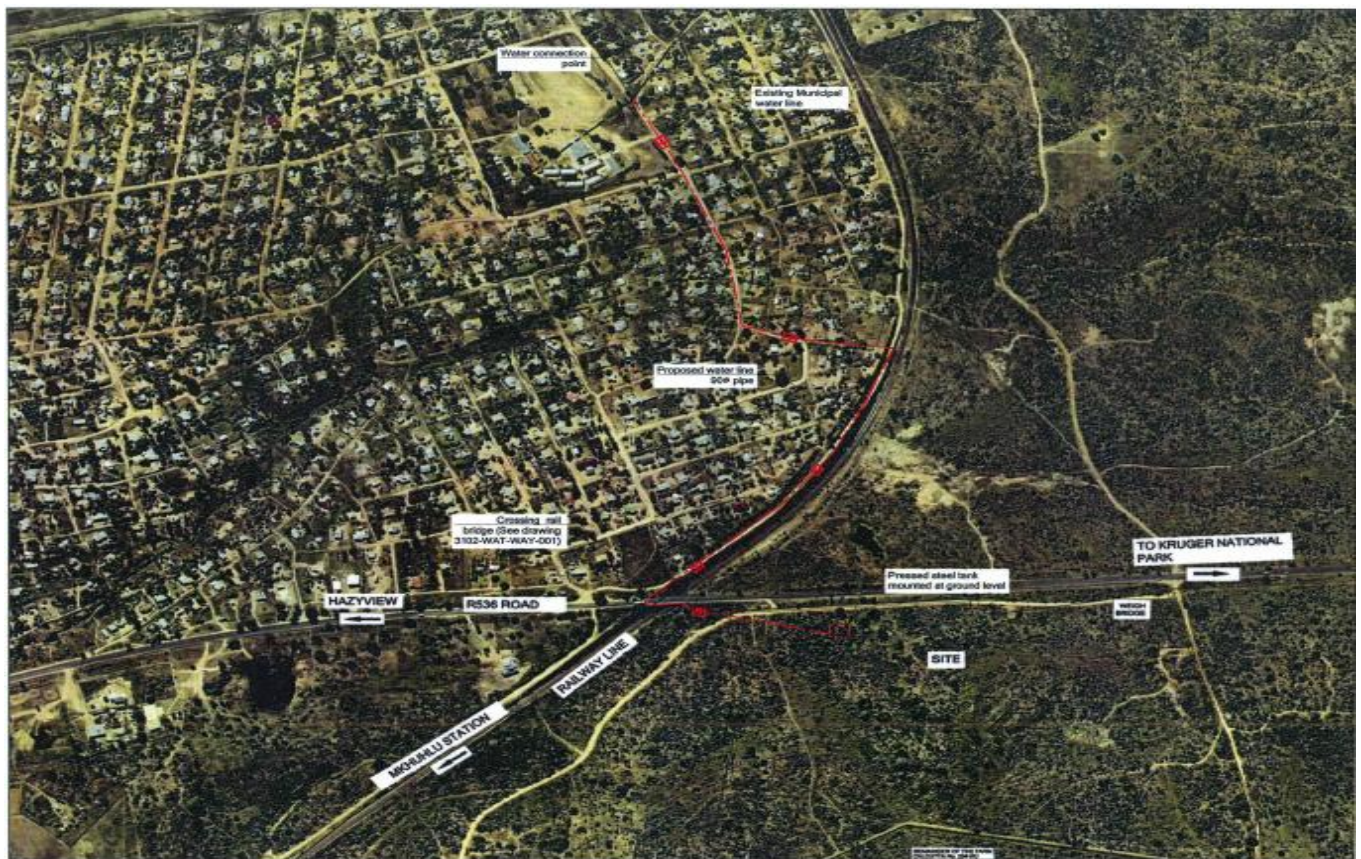
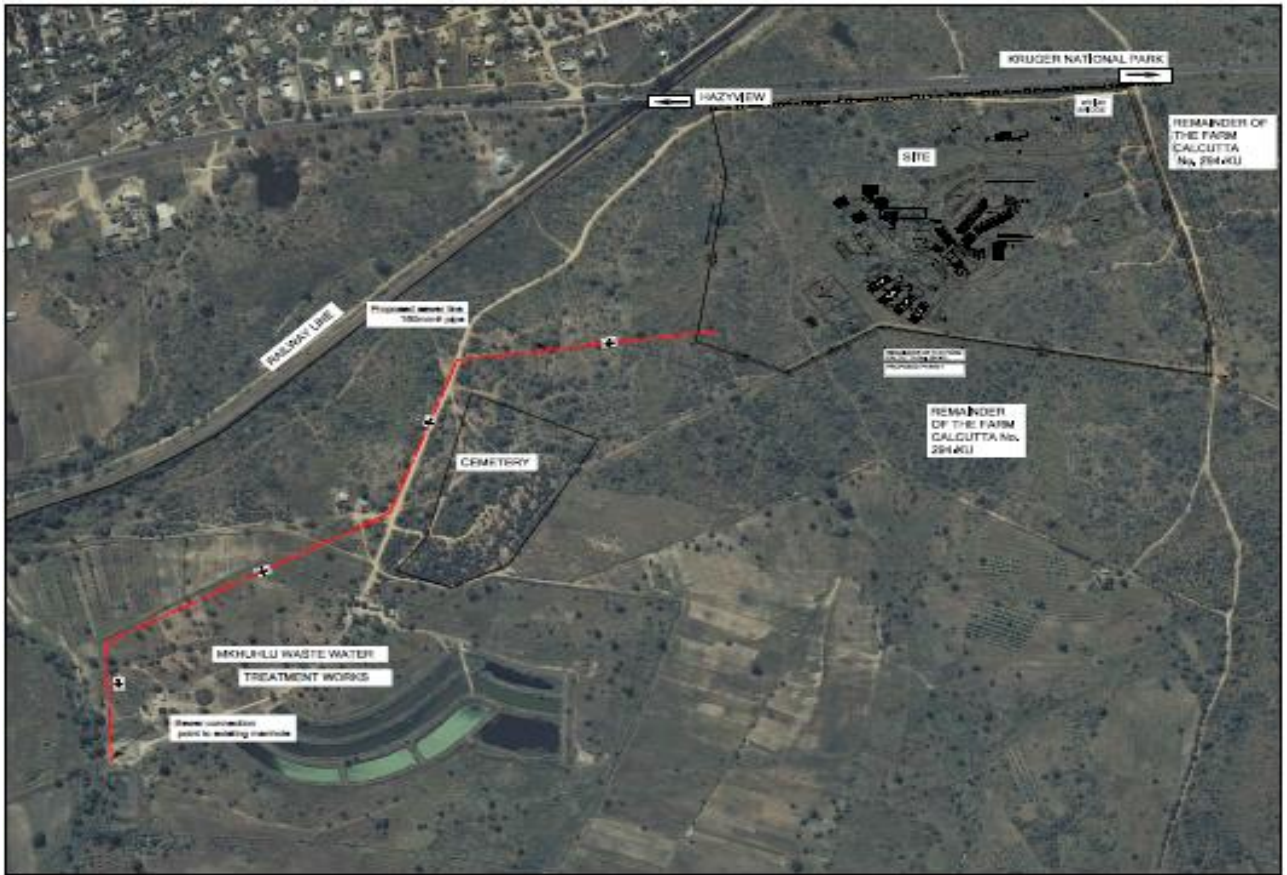


Figure 1.5: Water Layout Plan





**Figure 1.6: Sewer Layout Plan**

**9. ACTIVITY MOTIVATION**

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

What is the expected capital value of the activity on completion?	Uncertain
What is the expected yearly income that will be generated by or as a result of the activity?	Uncertain
Will the activity contribute to service infrastructure?	YES
Is the activity a public amenity?	YES
How many new employment opportunities will be created in the development phase of the activity?	Uncertain
What is the expected value of the employment opportunities during the development phase?	Uncertain
What percentage of this will accrue to previously disadvantaged individuals?	Uncertain
How many permanent new employment opportunities will be created during the operational phase of the activity?	Uncertain
What is the expected current value of the employment opportunities during the first 10 years?	Uncertain
What percentage of this will accrue to previously disadvantaged individuals?	Uncertain

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

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

<b>NEED:</b>			
1.	Was the relevant provincial planning department involved in the application?	YES	
2.	Does the proposed land use fall within the relevant provincial planning framework?	YES	
3.	If the answer to questions 1 and / or 2 was NO, please provide further motivation / explanation:		
	N/A		

<b>DESIRABILITY:</b>			
1.	Does the proposed land use / development fit the surrounding area?	YES	
2.	Does the proposed land use / development conform to the relevant structure plans, SDF and planning visions for the area?	YES	
3.	Will the benefits of the proposed land use / development outweigh the negative impacts of it?	YES	
4.	If the answer to any of the questions 1-3 was NO, please provide further motivation / explanation:		
	N/A		
5.	Will the proposed land use / development impact on the sense of place?		NO
6.	Will the proposed land use / development set a precedent?		NO
7.	Will any person's rights be affected by the proposed land use / development?		NO
8.	Will the proposed land use / development compromise the "urban edge"?		NO
9.	If the answer to any of the question 5-8 was YES, please provide further motivation / explanation.		
	N/A		

<b>BENEFITS:</b>			
1.	Will the land use / development have any benefits for society in general?	YES	
2.	Explain: The proposed Mkhuhlu Traffic Training Academy will help curb the challenge, faced by the Mpumalanga Provincial Government, of providing a high standard facility for training traffic officials in the province and country at large.		
	The proposed traffic training academy will also bring about social benefits to the surrounding communities through community upliftment, improved infrastructure and other community services.		
	Local contractors will benefit during the construction phase of the project as they will be sub-contracted to erect and/or supply building materials for the training academy.		
3.	Will the land use / development have any benefits for the local communities where it will be located?	YES	
4.	Explain: The proposed traffic training academy is a public institution hence it will be easily accessible for all members of the community. Local communities will benefit from this development through job creation during construction and operation, skills development, improved infrastructure, community upliftment and will attract other community services in the future.		

## 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:**

Constitution of the Republic of South Africa (No. 108, 1996)	Parliament	1996
National Environmental Management Act, 107	Department of Environmental Affairs	1998
National Environmental Management: Biodiversity Act (No 10 of 1998)	Department of Environment	2004
National Environmental Management: Protected Areas Act (No. 57, 2003) as amended by the National Environmental Management: Protected Areas Amendment Act (No 31 of 2004)	Department of Environment	2004
National Environment Management: Waste Act, 2008 (No 59 of 2008)	Department of Environment	2008
National Water Act (No. 36, 1998)	Department of Water Affairs and Forestry	1998
National Heritage Resources Act (No 25, 1999)	Department of Arts and Culture	1999
Mpumalanga Nature Conservation Act (No 10 of 1998)	MTPA	1998
Occupational Health and Safety Act (No. 85, 1993)	Department of Labour	1993
Conservation of Agricultural Resources Act, 43	Department of Agriculture	1983
National Environment Conservation Act (No 73, 1989)	Department of Environmental Affairs	1989
National Roads Act, 7	Department of Public works	1998
Advertising on Roads and Ribbon Development Act, 21	Department of Public works	1940
Promotion of Access to Information Act (No. 2, 2000)	All Departments	2000
Electricity Regulation Act (No. 4, 2006)	Department of Environmental Affairs	2006
EIA regulations as listed in Government Notices R543 and R544 (20 June 2010)	Department of Environment	2010

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

**11(a) Solid waste management**

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

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

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

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

Construction waste will be used as backfilling material
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Where will the construction solid waste be disposed of (describe)?  

It will be disposed off at a permitted landfill site.
---

Will the activity produce solid waste during its operational phase? 

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

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

Uncertain
-----------

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

Solid waste that will be generated on site will be included in the municipal's weekly refuse removal service that is currently servicing Mkhuhlu.
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Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

The anticipated waste is categorised as domestic and will feed into the municipal waste stream.
---

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

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

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

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

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

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

**11(b) Liquid effluent**

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

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

N/A
-----

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

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

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

<input type="checkbox"/>	NO
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If yes, provide the particulars of the facility:

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

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

N/A – No waste water will be generated except for normal sewerage which will feed into the Mkhuhlu waste water treatment works located on the southwest of the proposed site.

**11(c) Emissions into the atmosphere**

Will the activity release emissions into the atmosphere?

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

During the construction phase, dust and vehicular emissions will be released into the atmosphere as a result of earth moving machinery and trucks transporting construction material. The emissions will however have short term impacts on the immediate surrounding areas and thus the authorisation of such emissions will not be required.

**11(d) Generation of noise**

Will the activity generate noise?

YES	<input type="checkbox"/>
NO	<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 noise in terms of type and level:

Noise will be generated by construction vehicles moving in and out of the proposed site and will only affect the surrounding residential within close proximity of the site. The noise level is anticipated to be less than 50dBA as required by SANS 10103 and will only last for the duration of the construction phase thus authorisation will not be required for the noise.

**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	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:

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

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

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**

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:

It is anticipated that during power cuts alternative energy sources will be acquired through the use of in-house generators.

**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. 1  
(e.g. A):

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

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: The proposed site is to be located on the remainder of Farm Calcutta No. 294-KU, Mkhuhlu, Bushbuckridge Local Municipality Mpumalanga Province. The site is currently vacant and was previously used for agricultural purposes by the local communities.

(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: Agricultural.

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	
Must a building plan be submitted to the local authority?		NO

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 and decimal minutes. The minutes should have at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection)

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



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

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

**4. GROUNDCOVER**

Indicate the types of groundcover present on the site:

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

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

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

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

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

The railway line and the access road used when servicing the railway line, located on the west of the site, will not be impacted upon by the proposed development.

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

If YES, specify and explain: N/A

If YES, specify:

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

If YES, specify and explain: N/A

If YES, specify:

## 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?

	NO
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If YES, explain:

N/A
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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:

Briefly explain the findings of the specialist:	The survey did not identify any graves on site, however, one of the local residents mentioned the presence of a grave on site, as the site was previously home to seven (7) families who were moved from the site in 1967 to a safer area. The archaeologist has recommended that the mentioned area be fenced off and regarded as a no-go zone for the development. Other cultural and/or historical features identified on site were a lower grinder and rough clay potsherds located outside the proposed site on the south-east. See Appendix D, Heritage and Archaeological Studies.
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Will any building or structure older than 60 years be affected in any way?

	NO
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Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?

	NO
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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 competent authority) at a place conspicuous to the public at the boundary or on the fence of—
  - (i) the site where the activity to which the application relates is or is to be undertaken; and
  - (ii) any alternative site mentioned in the application;
- (b) giving written notice to—
  - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
  - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
  - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
  - (v) the municipality which has jurisdiction in the area;
  - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
  - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in—
  - (i) one local newspaper; or
  - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
  - (i) illiteracy;
  - (ii) disability; or
  - (iii) any other disadvantage.

**2. CONTENT OF ADVERTISEMENTS AND NOTICES**

A notice board, advertisement or notices must:

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



### 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 competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

### 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 competent authority 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 the EIA 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.

List of authorities informed:

1. Department of Water Affairs
2. Mpumalanga Tourism and Parks Agency
3. South African Heritage Resources Agency
4. Department of Health
5. Department of Public Works Roads and Transport
6. Transnet Freight Rail
7. Bushbuckridge Local Municipality

List of authorities from whom comments have been received:

At the time of compiling this report, no comments had been received from commenting authorities.

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

Has any comment been received from stakeholders?

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

At the time of compiling this report, no comments had been received from I&APs and commenting authorities.

The comments were received at the public meeting.

All comments and questions were responded to at the meeting. No objections towards the development were recorded.

Please refer to the public participation report attached as Appendix E.

**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.

Criteria	Description	
<b>Nature of the impact</b>	An assessment of the type of effect the activity would have on the affected environment including the description of what is being affected and how.	
<b>Extent</b>	Describes whether the impacts are either limited in extent or affect a wide range of group of people.	
	National / International	Reaches national or international scale
	Regional	Widespread, far beyond site
	Local	Beyond site boundary. Local area.
	Site	Within site boundary.
<b>Duration</b>	Describe the life time of the impact	
	Permanent	Beyond decommissioning.
	Long Term	More than ≥16-30 years
	Medium Term	Medium (6-15 years). Lifespan of the project. Reversible over time
	Short term/once off	Short term (0-5 years). Less than the project lifespan. Quickly reversible
	No impact	
<b>Intensity/ Severity</b>	Describe the potential for causing negative impacts	
	High	The impact will have a serious impact unless mitigation measures are implemented
	Medium	The impact will have moderate impacts unless mitigation is implemented
	Low	The impact will have small negative impacts
	Negligible	The impact is insignificant
	Unknown	The severity of the impact is unknown
<b>Probability /Certainty</b>	Describes the degree of certainty of the impact actually occurring	
	Definite	More than 90% sure of a particular fact.
	Probable	Over 70% sure of a particular fact
	Unsure	Less than 40% sure of a particular fact
<b>Significance</b>	Synthesis of the above	
	High	It will influence the decision regardless of any possible mitigation. (widespread)
	Medium	It should have an influence on the decision unless it is mitigated. (limited)
	Low	It will not have an influence on the decision. (insignificant)

## 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

Issues and concerns raised during the consultations included impacts on

- Are there any affected landowners by the project?
- Traffic controlling lights to prevent accidents; and
- Community to be informed at all times with the development.

For full correspondence from I&APs, refer to Appendix E (Comment and Response Report).

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):

Responses from the EAP regarding issues and concerns raised

- No landowners will be affected as the farm wholly belongs to the Tribal Council;
- Noted; and
- Noted.

More detailed information on the response is attached in Appendix E (Comment and Response Report).

**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.

**2.3.1. CONSTRUCTION IMPACTS.**

**Table 1.**

<b>Potential impact on geographical and physical aspects:</b>	
<b>Nature of the impact:</b> Soil erosion	The proposed project will have a potential to encourage avenues for erosion in the footprint during the construction and post construction phases. Intensive utilisation of service and access roads by construction vehicles may cause loss of stability of road surfaces which will result in soil erosion through wind and surface water run-off. Occasional deviation from the access and service roads by heavy construction machinery might result in most of the road-side vegetation being trampled thereby disabling the roots in their binding effect on the soil. This will enable surface run-off to cut the edges of the roads into undesired and uneven slopes.  Newly created access roads might encourage erosion if not properly designed especially if located on steep slopes.
Extent	Site ( limited to the site boundaries)
Duration	Medium term (limited to the lifespan of the project and reversible over time if mitigated)
Intensity / Severity	Low (will have small negative impacts)
Probability / Certainty	Probable
Significance	Medium
<b>Proposed mitigation:</b>	
It is imperative that movement of equipment and machinery be restricted to designated roads to access the site. Newly established access roads during the construction phase should be designed in such a way that steep slopes are avoided. If unavoidable, surface run-off humps should be made to direct the flow into vegetated surfaces in mitigation against soil erosion.	
Unused/abandoned roads or disturbed terrains should be tilled and reseeded with local vegetation during rehabilitation. Excavated areas should be backfilled to avoid unnecessary accumulation of surface water and high velocity overflow. Disturbed steep slopes should be supported with surface rock gladding or vegetation. Stipulations of the Environmental Management Programme (EMP) should be adhered to during the construction phase of the project till decommissioning.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low



**Table 2.**

<b>Potential impacts on biodiversity</b>	
<b>Nature of impact</b>	The main conservation concern is the loss of flora and fauna, especially protected species, during construction of temporary campsite, site offices and storage facilities. Vegetation removal will be required for the purpose of construction of the traffic training academy and its associated housing facilities. Impacts on both fauna and flora will be inevitable and this will result in habitat fragmentation and ultimate loss of a fair amount of vegetation and displacement of faunal species surviving in that particular habitat. A variety of bird species, reptiles and mammals are nomadic in the area and during construction displacement of terrestrial animals, insects and reptiles might occur. Also, the construction crew will be tempted to kill animals (snakes and reptiles) when they come across them, to hunt down birds and mammals, as well as felling trees to make firewood. Construction of the traffic training academy might have an impact on the grassland vegetation. Deviation of heavy machinery from designated access roads might account for most of the grassland vegetation being trampled thereby destroying the habitat of smaller faunal species.
Disturbance of fauna and flora	
Extent	Site
Duration	Short term
Intensity / Severity	Medium
Probability / Certainty	Definite
Significance	Low
<p><b>Proposed mitigation:</b>                      The contractor should stick to the engineer's designs and recommendations by the consultant. Although the grassland structure is low and disturbed, there is a variety of reptiles, amphibians, insects, mammals and birds that occur in this type of habitat. Care should be taken during the planning and construction phases to restrict the development to areas of lower biodiversity sensitivity. Vegetation removal should be restricted to areas where the development is to take place and undesired tree felling or vegetation removal should be avoided at all costs. Construction workers should be discouraged from killing of animals and birds for relish as this might interfere with the livelihood of the ecosystem and will encourage poaching. Activities associated with the construction should have an element of conservation through avoiding undesired destruction of wildlife within the site.</p>	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 3.**

<b>Potential impacts on the atmosphere</b>	
<b>Nature of impact</b>	Increased vehicular traffic and numbers of construction crew during site clearance are likely to increase dust emission and ambient noise levels. Construction activities on site will lead to noise and dust from construction vehicles when they move in and out of the construction site for, excavation, loading, hauling and dumping of construction materials. Because of the temporary nature of site clearance, the impact is low, however, construction will be on-going for a few months, hence the duration of the impact.
Generation of dust and noise	
Extent	Site
Duration	Short term/ once off
Intensity / Severity	Low
Probability / Certainty	Probable
Significance	Low
<p><b>Proposed mitigation:</b></p> <p>Dust emission on access roads should be limited by using dust suppression methods such as water spraying through the use of water tanker lorry, equipped with a mounted water pump engine that will be used to sprinkle water on the road surface and suppress dust. All dumps and stockpiles must be arranged on site so as not to be exposed to the wind. Loading of equipment should be done in such a manner that items are placed tightly against each other so that they do not collide against each other as the truck rocks through unstable surfaces of the access roads. High speeding should be discouraged at all times as dust is generated the most with high speed. Construction vehicles should be serviced regularly and be kept in good working condition at all times. Vehicles in good condition are not likely to generate high pitched roars especially if operated properly. It is the responsibility of the contractor to ensure that dust and noise generated during site clearance and construction does not encroach on the aesthetic freedom of the surrounding areas. Loading bins of vehicles should be rubberised as that reduces rattling sounds.</p> <p>Construction workers should be alerted not to scream at the public especially as they pass by residential areas. The same applies to unnecessary hooting of construction vehicles.</p>	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 4.**

<b>Potential impact on road infrastructure</b>	
<b>Nature of impact</b>	The proposed project site is situated along the R536 provincial road. Regular road users (tourists, public and heavy haulage vehicles) of the R536 will be disturbed by construction vehicles accessing the site during construction of the proposed traffic training academy.
Traffic disruption	
Extent	Local
Duration	Short term/ once off
Intensity / Severity	Low
Probability / Certainty	Probable
Significance	Low
<b>Proposed mitigation:</b>	
During construction signage and notifications through media should be considered so that road users and commuters are alerted of the intended use of the road by construction vehicles.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 5.**

<b>Potential impact on skyline and immediate environs</b>	
<b>Nature of impact</b>	During construction the site may be untidy, as unused items, spoil material as well as stockpile areas on site may not be visually attractive. However, this will be of a temporary nature to attain the operational phase. In order to lessen this impact, stockpiles have to be centralized and excavations and spoil materials must not be left unattended. The final product will be a well designed training academy and no negative visual impacts are foreseen.
Visual impacts	
Extent	Local
Duration	Permanent
Intensity / Severity	Low
Probability / Certainty	Unsure
Significance	Low
<b>Proposed mitigation:</b>	
The construction site must be enclosed by a dark green or black shade cloth of no less than 2m high, to prevent any visual intrusion. The site must be kept tidy at all times, sufficient refuse bins must be provided for the construction crew, and they must be emptied regularly. Refuse or building rubble generated on the premises must not be deposited on adjacent properties, road verges or open spaces. It must be contained on site, then removed and disposed of at an approved dumping site at least every two weeks.	
Disturbed and open areas must be rehabilitated and re-vegetated as soon as possible after construction.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 6.**

<b>Potential impacts on soil and water quality</b>	
<b>Nature of impact</b>	The use of heavy construction machinery is associated with possible leaks, spillages of hydraulic oils, diesel fuels and grease. Such spillages can contaminate the soil, surface and underground water if in larger quantities. Such spillages are detrimental to biodiversity and are obviously poisonous. Signs of the impact can be seen as grass starts drying and dying. With this, all life forms depending on the grass material for food and shelter will be affected. In this case, the soil is regarded as dead. Smaller insects that survive on the water surface will be affected as diesel and oil create a layer on the water surface thereby disturbing them as they swim and suffocating as they get covered with in a layer of oil.
Pollution and spillages of hazardous waste	Disinfectants used in mobile toilets can also be detrimental to surface water and soil if not handled with care. Careless handling of full toilets during loading and transportation to sewerage treatment plant can result in spillages which might contaminate the ground and obviously surface water. Obnoxious smell of such spillage can attract flies which are capable of spreading diseases.
Extent	Site
Duration	Short term
Intensity / Severity	Low
Probability / Certainty	Unsure
Significance	Low
<p><b>Proposed mitigation:</b></p> <p>Machinery with hydraulic equipments like hydraulic jacks and lifts should be inspected and maintained on daily basis to guard against possible leakages and malfunctioning. Refuelling of machinery and trucks should be done at a designated site and such site should be paved with a concrete slab to avoid soaking of oils into the ground in the event of accidental spillages. Storage facilities, fuels and related liquids should be located away from the vicinity of any water course. A concrete slab will be easy to clean prior to overflow and further contamination. Fuel containers should be inspected for possible leaks at all times. Used and empty drums that contained grease, diesel, hydraulic oil and petrol should be disposed of at a registered and licensed facility to avoid pollution and contamination of soil and water.</p> <p>Mobile toilets on site should be handled by experienced people during loading and transportation. Toilets should be inspected for leaks routinely. Antiseptic liquids should be handled and stored in a safe place in sealed containers.</p>	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

Table 7.

<b>Potential impact on neighbourhood (social) and site</b>	
<b>Nature of impact</b>	Experience has proven that undisciplined contract workers pose a serious problem with the surroundings where they travel, work and live. Littering is one of the major challenges experienced in and around construction sites. Food packaging material is normally discarded wherever construction workers might be having their lunch and left lying all over. Possible consumption of plastic material by livestock can lead to death of the animal. As they travel along access roads, smokers will discard life cigarette buds which normally ignites veld fires, hence the grassland environment along the site.
Undisciplined contract workers	Screaming and insulting of community members by undisciplined contract workers is very common as they pass by residential areas to and from site. Interference with families located along construction sites where construction workers start relationships with married women is very common. Disputes between construction workers and families erupt in this instances resulting in social instability in individual families. Prostitution comes along with such relationships where construction workers spend their monies for such services and deprive their own families of the benefits from their work which impacts on families at remote distances. The result of this state of affairs has serious impacts on work performance on the part of the workers themselves.
Extent	Local
Duration	Short term
Intensity / Severity	Low
Probability / Certainty	Unsure
Significance	Low
<p><b>Proposed mitigation:</b></p> <p>The contractor should have a code of conduct documented to address the required standards in terms of team member's behaviour. Workers should be allocated a site where they can have their lunch. It should be strictly noted that smokers should not discard life cigarette buds anywhere else other than a designated smoking area where the risk of veld fire is not eminent or such be placed in ashtrays.</p> <p>Workers should be warned not to insult the public and respect whoever they come across. Befriending locals especially women should be prohibited at all costs. In the event where a camp site is allocated, resident security guard should be deployed for the purpose of access control and monitoring. This will help in protecting property and equipment from theft and possible damage. Through the employee wellness programme, workers should be advised to take care of their benefits in order to see growth in their socio-economic conditions of their respective families. This will encourage them to perform better in their workplace.</p>	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low



**Table 8.**

<b>Potential impacts on regional environment and downstream</b>	
<b>Nature of impact</b>	Spillages of diesel, hydraulic oil, grease and other volatile fuels can be carried away with surface water run-off. This can result in the water bodies being contaminated and aquatic life threatened. Spillages can soak into ground water and render it unusable for boreholes therefore not suitable for consumption.
Pollution and littering	Litter can be carried away through wind and surface run-off to neighbouring properties away from the site. This might end up in storm water drainage lines and causing blockages. Litter deposited on drainage sites and scattered all over is unsightly and have a serious visual impact. Livestock, the likes of cattle, has a tendency of swallowing plastic bags and related material which normally result into digestion complications and sudden loss of weight and sudden death.
Extent	Local
Duration	Medium term
Intensity / Severity	Medium
Probability / Certainty	Unsure
Significance	Low
<b>Proposed mitigation:</b>	
Storage facilities of fuels and related liquids should be locked and containers tightly closed to avoid accidental spillages in the event the container falling over. All surfaces where these liquids are stored should be paved with reinforced concrete slab to avoid cracks through which spillages can leak into the ground. Inspections should be conducted at all times to guard against hidden impacts occurring due to leaks.	
Routine litter picking should be conducted and litter bins be supplied on site.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**2.3.2. OPERATIONAL IMPACTS.**

**Table 1.**

<b>Potential impact on geographical and physical aspects:</b>	
<b>Nature of the impact:</b>	Erosion is a long-term problem if allowed to occur as it leads to land degradation, where the soil types and slopes contribute to a high erosion hazard index. Construction developments often leave cleared areas unrehabilitated and the soil bare and prone to erosion. Unless mitigation measures are undertaken, soil erosion at exposed areas left by construction activities will continue on a permanent basis.
Soil erosion	
Extent	Site (limited to the site boundaries)
Duration	Long term (reversible over time if mitigated)
Intensity / Severity	High (will have a serious impact unless mitigation measures are implemented)
Probability / Certainty	Definite
Significance	Medium
<b>Proposed mitigation:</b>	
It is imperative that disturbed areas during construction are rehabilitated. Topsoil stockpiled during construction will be re-spread to all excavated areas after construction has been completed.	
Soil erosion prevention measures i.e., grass planting, must be implemented in all sections of the site. Indigenous vegetation needs to be re-introduced, and this, will enhance the aesthetic value of the site when the project is completed.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 2.**

<b>Potential impacts on immediate environment</b>	
<b>Nature of impact</b>	Unrehabilitated construction sites are a major environmental problem as they are an eyesore on the immediate landscape. When construction of the traffic training academy and associated residence facilities has been completed, all temporary structures must be decommissioned. The main problem that will likely arise at the construction site will be that of disposal of used items e.g., material stockpiles, spill containment, scrap metals, etc.
Visual impacts	
Extent	Local
Duration	Permanent (if not mitigated)
Intensity / Severity	Low
Probability / Certainty	Definite
Significance	Medium
<b>Proposed mitigation:</b>	
All temporary structures and their foundations used for construction purposes will be decommissioned prior at decommissioning phase. No waste material shall be left on site; usable panels will be packed for use by the contractor at future sites. Concrete slabs will be ripped and disposed off at an approved builder's rubble site or municipal landfill. Toilet dugouts will be left to dry before filling to compaction with locally sourced soil. The site must be fully rehabilitated.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 3.**

<b>Potential impact on road infrastructure</b>	
<b>Nature of impact</b>	The proposed project site is situated along the R536 provincial road. Regular road users (tourists, public and heavy haulage vehicles) of the R536 will be disturbed by vehicles entering and exiting the traffic academy.
Traffic disruption	
Extent	Local
Duration	Permanent
Intensity / Severity	Low
Probability / Certainty	Probable
Significance	Low
<b>Proposed mitigation:</b>	
To avoid accidents during operation, proper signage must be put in place to alert users of the busy R536 road about vehicles accessing the site.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

**Table 4.**

<b>Potential impacts on regional environment and downstream</b>	
<b>Nature of impact</b>	Litter can be carried away through wind and surface run-off to neighbouring properties away from the site. This might end up in storm water drainage lines and causing blockages. Litter deposited on drainage sites and scattered all over is unsightly and have a serious visual impact. Livestock, the likes of cattle, has a tendency of swallowing plastic bags and related material which normally result into digestion complications and sudden loss of weight and sudden death.
Pollution and littering	
Extent	Local
Duration	Medium term
Intensity / Severity	Medium
Probability / Certainty	Unsure
Significance	Low
<b>Proposed mitigation:</b>	
The training academy must be fenced off with a no less than 2m high steel/wall fence, to prevent encroachment and illegal dumping of refuse on nearby farms. Waste bins must be provided in strategic places and must be regularly maintained. Sign to encourage no littering must be placed at strategic points. A central point for waste collection must be established.	
All traffic officials attending the training academy must be educated on how to minimize littering.	
Cumulative impacts post mitigation:	Low
Significance rating of impact after mitigation:	Low

### 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.

<b>ALTERNATIVE S1 (PREFERRED ALTERNATIVE)</b>							
Phase	Nature of Impact	Extent	Duration	Intensity/ Severity	Probability/ Certainty	Significance	
						Before	After mitigation
Planning	Topography	Site	Long term	Low	Definite	Medium	Low
	Land use	Site	Long term	Low	Definite	Low	Low
	Geology	Site	Long term	Low	Probable	Low	Low
	Locality	Site	Long term	Low	Definite	Low	Low
Construction	Geology - Topography	Local	Short term	Medium	Probable	Medium	Low
	Surface & groundwater	Site	Short term	High	Definite	High	Medium
	Generation of spoil material and general waste	Site	Short term	Low	Definite	Medium	Low
	Loss of Fauna & Flora	Site	Long term	High	Definite	High	Medium
	Workforce management	Local	Short term	Low	Definite	Medium	Low
	Erosion	Local	Short term	Low	Probable	Medium	Low
	Visual impacts	Local	Short term	High	Definite	Medium	Low
	Traffic and Neighbourhood disruptions	Local	Short term	Medium	Probable	Medium	Low
	Surface & groundwater	Local/ downstream	Long term	Low	Unlikely	Low	Low
Operational	Erosion	Site	Long term	Low	Probable	Medium	Low
	Visual impacts	Site	Long term	High	Definite	High	Medium
	Availability of services and waste management	Local	Long term	Medium	Probable	Medium	Low
	Positive Social Impacts	Local	Long term	High	Definite	High	
	Negative Social Impacts (unavailability of employment)	Local	Long term	Medium	Definite	High	

#### No-go alternative (compulsory)

THIS ALTERNATIVE MEANS THAT THE AREA WILL NOT BE DEVELOPED INTO THE PROPOSED TRAFFIC TRAINING ACADEMY AND JOB OPPORTUNITIES FOR LOCALS WILL BE FORFEITED.

**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	
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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):

N/A

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

In the event of an Environmental Authorisation for the development being issued, it is recommended by the EAP that the following conditions should accompany it:

- ❑ The local community must be informed when the activity is about to commence.
- ❑ The recruitment of local labour must be encouraged.
- ❑ No construction camp must be established within the site to reduce social impacts.
- ❑ Contractor(s) that will be responsible for the construction of the traffic training academy must familiarize themselves with the mitigation measures enshrined within this document.
- ❑ The contractor(s) must implement and adhere to the requirements of the Occupational Health and Safety Act, 1993 (Act 85 of 1993) and all other acts cited within the report.
- ❑ The contractor(s) must have a Safety and Health specialist at all times on site to attend to injuries and offer first aid.
- ❑ The implementation of the Environmental Management Programme (EMP) must be strictly enforced during all construction and operational activities.
- ❑ During the construction period, construction activities must be stopped if heritage resources are discovered and the South African Heritage Resources Agency (SAHRA) consulted for inspection.

Is an EMPr attached?

YES	
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The EMPr must be attached as Appendix F.



## **SECTION F: APPENDIXES**

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information