

	(For official use only)
ile Reference Number:	
Application Number:	
Pate Received:	

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

Kindly note that:

- 1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 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. This report format is current as of **08 December 2014**. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
- 3. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
- 4. Where applicable **tick** the boxes that are applicable in the report.
- 5. An incomplete report may be returned to the applicant for revision.
- 6. The use of "not applicable" in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
- 7. This report must be handed in at offices of the relevant competent authority as determined by each authority.
- 8. No faxed or e-mailed reports will be accepted.
- 9. The signature of the EAP on the report must be an original signature.
- 10. The report must be compiled by an independent environmental assessment practitioner.

- 11. Unless protected by law, all information in the report will become public information on receipt by the competent authority.

 Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
- 12. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.
- 13. Should a specialist report or report on a specialised process be submitted at any stage for any part of this application, the terms of reference for such report must also be submitted.
- 14. Two (2) colour hard copies and one (1) electronic copy of the report must be submitted to the competent authority.
- 15. Shape files (.shp) for maps must be included in the electronic copy of the report submitted to the competent authority.

SECTION A: ACTIVITY INFORMATION

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

YES	NO
	x

1. PROJECT DESCRIPTION

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

INTRODUCTION

The KZN Department of Transport (DOT) proposes to upgrade the existing local road, to a type 7A gravel road, 1.478 km in length and 6 m in width that conforms to DOT standards. The existing road will be upgraded in one of the Greytown villages on local road L2771 off D215. There is an urgent need to ensure safe and reliable means of access for the local community. The existing local road is not suitable, and erosion is evident as a direct result of poor drainage. The upgrading of the existing track to a gravel road will address such issues and improve access for the local community to basic amenities.



Photo 1: showing existing track of L2771



Photo 2: showing gully erosion as a result of poor drainage of the existing road



Photo 3: showing eroded banks along the existing track

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

Listed activity as described in GNR 983 (Listing Description of project activity Notice 1)

Listing Notice 1 of 2014, Listed The proposed construction of a local road **Activity 24.** from a mud track to a gravel road 6 m in

The development of -

- (i) a road for which an environmental reserve of 20 m. authorization was obtained for the route determination in terms of activity 5 in Government Notice 387 of 2006 or activity 18 in Government Notice 545 of 2010; or
- (ii) a road with a reserve wider than 13,5 meters, or where no reserve exists where the road is wider than 8 metres;

but excluding-

- (a) roads which are identified and included in activity 27 in Listing Notice 2 of 2014; or
- (b) roads where the entire road falls within an urban area.

The proposed construction of a local road from a mud track to a gravel road 6 m in width, and a length of 1.478 km with a road reserve of 20 m.

Listing Notice 1 of 2014, Listed According to DOT upgrade the proposed Activity 56.

The widening of a road by more than 6 length. meters, or the lengthening of a road more than 1 kilometre-

- (i) where the existing reserve is wider than 13.5 m;
- (ii) where no reserve exists, where the existing road is wider than 8 m; excluding where widening or lengthening occur inside urban areas.

road length is approximately 1.478 km in

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;
- the design or layout of the activity; (c)
- (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.

a) Site Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The preferred route was chosen based on the fact that	28° 50′ 59.20″ S	30° 47′ 12.98″ E
a local road currently exists and no new road will be		
constructed minimizing the impact to the receiving		
environment. This alternative has shown to be the best		
practical option. The road design has taken numerous		
engineering methodologies into consideration which		
has a minimal impact on the environment, by improving		
drainage and reducing erosion along the road. The		
road has been designed according to DOT standards,		
type 7A gravel road.		
Alternative 2		
Description	Lat (DDMMSS)	Long (DDMMSS)
No alternate activities or routes have been investigated	I. N/A	N/A
It is not feasible to construct a new road which will have	е	
a negative impact on the environment.		
Alternative 3		
Description	Lat (DDMMSS)	Long (DDMMSS)
N/A	N/A	N/A

In the case of linear activities:

Alternative: Latitude (S): Longitude (E):

Alternative S1 (preferred)

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

28° 50′ 59.20″ S	30° 47′ 12.98″ E
28° 51′ 03.14″ S	30° 47′ 38.15″ E
28° 50′ 51.97″ S	30° 47′ 53.40″ E

Alternative S2 (if any)

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

N/A	N/A
N/A	N/A
N/A	N/A

Alternative S3 (if any)

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

N/A	N/A
N/A	N/A
N/A	N/A

b) Lay-out alternatives

Alternative 1 (preferred alternative)		
Description	Lat (DDMMSS)	Long (DDMMSS)
The proposed construction of the local road from a mud	28° 50′ 59.20″ S	30° 47′ 12.98″ E
track to a gravel road 6 m in width, and a length of 1.478		
km. The road will be upgraded on an existing track,		
which has become prone to erosion and inundated		
during periods of high rainfall.		
Alternative 2	L	
Description	Lat (DDMMSS)	Long (DDMMSS)
No alternate road designs/routes have been investigated	N/A	N/A
as the proposed/preferred designs/routes meet DOT		
standards for gravel roads, and the proposed		
construction is an upgrade of an existing track.		
Furthermore, the local road:		
1. Is within the budget available from Department of		
Transport to establish a gravel road.		
2. Have limited impact on the ecological environment as		
no new road will be constructed.		
Alternative 3		
Description	Lat (DDMMSS)	ong (DDMMSS)
N/A	N/A	N/A

c) Technology alternatives

Alternative 1 (preferred alternative)

Figure 1 below: shows the drawing of the type 7A road (Drawing number SD0211). Refer to the plan of the road in **Appendix C** - Facility Illustration for a more detailed design.

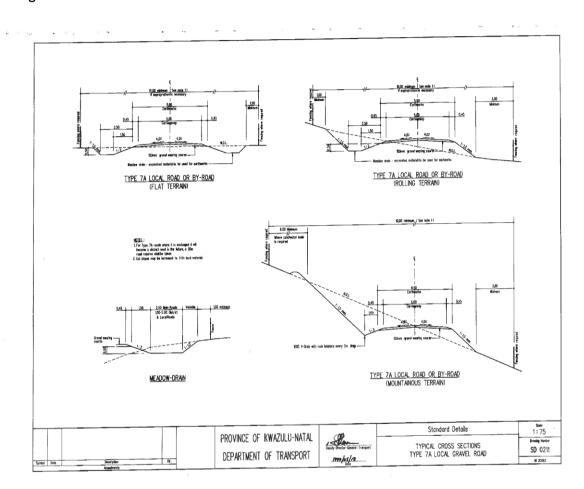


Figure 1: showing the type 7A local gravel road (Drawing no. SD0211)

N/A
Alternative 2
N/A
Alternative 3
N/A

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

No alternate technologies have been investigated as the proposed/preferred design:

- 1. The current design is in accordance with DOT standards for gravel roads.
- 2. Is within the budget available from Department of Transport to establish a Gravel road.
- 3. Have limited impact on the ecological environment as no new road will be constructed.
- 4. The best practical means approach has been adopted and the design favorably suits the ambience of the surrounding environment.

e) No-go alternative

No gravel road will be constructed, therefore there will be no negative impacts associated with construction activity. However, there will also be no positive impacts associated with the road construction such as the improved connectivity and access for local residents. Residents that make use of the road will continue to experience disruptions, as access is frequently overtopped by flood water, making access difficult at times of high flow. Erosion along the road is evident in areas as a direct result of poor drainage of the existing road. According to the **tribal court**, community members are left stranded and cannot access basic amenities during periods of high rainfall as the existing road becomes impossible to use. The proposed route is transformed by existing footpaths and highly degraded, most natural vegetation have been invaded by alien vegetation along the track.

3. PHYSICAL SIZE OF THE ACTIVITY

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

Alternative:	Size of the activity:
Alternative A1 ¹ (preferred activity alternative)	N/A
Alternative A2 (if any)	N/A m ²
Alternative A3 (if any)	N/A m ²

or, for linear activities:

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	1.478 km
Alternative A2 (if any)	N/A m
Alternative A3 (if any)	N/A m

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

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	N/Am ²
Alternative A2 (if any)	N/Am ²
Alternative A3 (if any)	N/Am ²

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

4. SITE ACCESS

Does ready access to the site exist?

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

YES	NO
X	
	N/A m

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.

5. ACTIVITY MOTIVATION

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

1. Is the activity permitted in terms of the property's existing land use rights?

| YES | NO | Please explain

The existing road is located off the D215 main road providing access to the local communities, and school children. The gravel road will be constructed to ensure safe access to pedestrians and motorists. This activity is in line with the property's existing land use rights.

- 2. Will the activity be in line with the following?
 - (a) Provincial Spatial Development Framework (PSDF)

 YES

 NO Please explain

The Greytown region is predominately rural and access to basic developmental areas is limited. Therefore the activity is in line with the PSDF which outlines road construction as a priority area within the rural municipality such as the uMzinyathi municipality.

(b) Urban edge / Edge of Built environment for the area	YES X	NO	Please explain
The road is not in a built urban environment thus urban e	edge po	olicies	are not
affected.			
(c) Integrated Development Plan (IDP) and Spatial			
Development Framework (SDF) of the Local Municipality			
(e.g. would the approval of this application compromise	YES	NO	Please explain
the integrity of the existing approved and credible		X	
municipal IDP and SDF?).			
,			
Provincial roads within Umvoti are in a fair to poor condit			•
not adequate and clearance of open drains and roa	ad ver	ges n	eed to be
undertaken. Rural roads require more attention, as they are	e mostl	y unsi	urfaced and
hence susceptible to erosion. The municipality currently do	es not	have	storm water
control measures for rural areas. Most of the drains for ru	ıral roa	ds dis	charge into
watercourses and the veld, and this contribute to soil erosic	on. Stra	ategic	intervention
need to focus on storm water management and the n	nonitori	ing of	settlement
establishment on areas adjacent to rivers and streams		_	
p117).	(,,,
P117).	V/E0		
(d) Approved Structure Plan of the Municipality	YES	NO	Please explain
The tribal authority has expressed the communities' conce	erns w.	r.t the	need for an
access route that is not inundated during high rainfall perio	ods. He	e expr	essed these
concerns to the local municipality which were documented	. There	fore th	ne activity is
in line with the approved structure plan of the municipality.			
(e) An Environmental Management Framework (EMF) adopted			
by the Department (e.g. Would the approval of this			
application compromise the integrity of the existing	\/=0	NO	D
environmental management priorities for the area and if	YES	X	Please explain
so, can it be justified in terms of sustainability			
considerations?)			
	I		

The EMF is currently in compilation stage.

(f) Any other Plans (e.g. Guide Plan)	YES	NO X	Please explain
N/A			
3. Is the land use (associated with the activity being applied for)			
considered within the timeframe intended by the existing			
approved SDF agreed to by the relevant environmental	YES	NO	Please explain
authority (i.e. is the proposed development in line with the		NO	riease expiairi
projects and programmes identified as priorities within the	X		
credible IDP)?			
The SDF aligns itself with the new national priorities as it	underl	ying p	rinciples are
based on sustainable development planning strategies; acc	ess rou	utes a	s investment
lines; a service centre strategy; integration; meeting	land	use	needs and
identification of areas of economic development potentials;	restru	cturing	of the local
municipality (Umvoti SDF, 2013).			
4. Does the community/area need the activity and the associated			
land use concerned (is it a societal priority)? (This refers to	YES		
the strategic as well as local level (e.g. development is a	X	NO	Please explain
national priority, but within a specific local context it could be	^		
inappropriate.)			
Community members are often left stranded during p	eriods	of h	igh rainfall,
therefore, the upgrading of the existing track to a gravel ro	ad will	impa	ct positively
to members of the community. Training opportunities	will als	so be	offered to
members of the community during the construction pro	cess.	Empl	oyment will
increase and skills will be transferred to the local of	commu	ınity.	During the
construction process local labour will be sourced (re	equired	d/roote	ed) by the
contractor.			
5. Are the necessary services with adequate capacity currently	VEO		
available (at the time of application), or must additional	YES X	NO	Please explain
capacity be created to cater for the development?	^		
All necessary services are available for the activity to commo	ence.		1

6. Is this development provided for in the infrastructure planning of the municipality, and if not what will the implication be on the infrastructure planning of the municipality (priority and placement of services and opportunity costs)?	YES	NO X	Please explain
No infrastructure planning is envisaged by the municipali project costs are borne by the Department of Transport.	ty w.r.t	this	project. The
7. Is this project part of a national programme to address an issue of national concern or importance?	YES	NO X	Please explain
The proposed activity is site specific and is at a localized lev	el.		l
8. Do location factors favour this land use (associated with the activity applied for) at this place? (This relates to the contextualisation of the proposed land use on this site within its broader context.)	YES X	NO	Please explain
The site location is highly degraded and natural vegetation presence of alien vegetation. Therefore the location factor the site will be rehabilitated once construction is completed.			
9. Is the development the best practicable environmental option for this land/site?	YES X	NO	Please explain
The proposed site has been assessed and a favorable construction has been identified with all stakeholders decrease the overall costs of proposing to construct an example to the existing track will minimize the negative in the surrounding area.	. This entirely	will new (significantly gravel road.
10. Will the benefits of the proposed land use/development outweigh the negative impacts of it?	YES X	NO	Please explain
The proposed construction of the road will positively impact providing access to basic amenities, and minimizing the ne and soil erosion.			•

11. Will the proposed land use/development set a precedent for NO Please explain YES similar activities in the area (local municipality)? Χ No precedent will be set in the area, however the upgrade of the road from a track to a gravel road will improve accessibility for community members. 12. Will any person's rights be negatively affected by the NO YES Please explain proposed activity/ies? Χ During the Public Participation Process no person expressed the view that the proposed activity will directly affect them negatively, all stakeholders fully supported the project proposal. No dwellings will be relocated as the existing track does not transverse any properties or infringe on the rights of the residents. 13. Will the proposed activity/ies compromise the "urban edge" as NO YES Please explain defined by the local municipality? Χ The project is located in a rural area, and therefore the urban edge is not affected. 14. Will the proposed activity/ies contribute to any of the 17 NO YES Please explain Strategic Integrated Projects (SIPS)? Χ This is a localized site specific activity, and will benefit the local community

members, but contributes to SIPS.

15. What will the benefits be to society in general and to the local communities?

Please explain

There is an urgent need to ensure safe and reliable means of transversing the road for both vehicles and pedestrians, which will promote economic growth in the area as well as make travelling for basic amenities, education and work feasible for the local communities. The existing road is prone to flooding and more importantly access to basic amenities is limited during high rainfall periods. The establishment of local roads lays the foundation for further and knock-on development, thereby leading to the upliftment of the society. While the local road may not have benefits as far reaching as to society in general, it is paving the way for upliftment of disadvantaged societies. The majority of the population has no formal education and is illiterate. Most people earn a living from governmental social grants, pensions and others from informal trading. Development of this area is therefore paramount and the establishment of this road can be considered the first step in this direction toward upliftment of the community. The road will also allow for public transport modes to cater to the local community. The construction of the road would contribute to the community in the following ways:

- Vehicles would not have to endure rugged terrain.
- Communities will have easier access to public and governmental transportation.
- Travelling route distances would be decreased.
- Will increase the safety of the people within the community.
- Response and delivery time would be increased for public and emergency services.
- Easier travelling routes for basic needs, schools and medical centers.

16. Any other need and desirability considerations related to the proposed activity?

Please explain

According to the Umvoti IDP (2014/2015) there is a critical need to improve local roads within the local municipality. The area is predominately rural and developmental initiatives are limited w.r.t funding. The Department of Transport has funded the project and similar projects within the District. Communities expressed their excitement for the project, as they are of the view that the Government is taking their concerns of development seriously.

17. How does the project fit into the National Development Plan for 2030?

Please explain

The National Development Plan (NDP) aims to eliminate poverty and reduce inequality by 2030. The NDP has identified various aspects as priorities including economic infrastructure; transitioning to a low carbon economy; inclusive rural economy; positioning South Africa in the world; human settlements; improving education, innovation and training; promoting health; social protection; building safer communities; building a capable state; promoting accountability and fighting corruption; transforming society and uniting the country (Umvoti IDP, 2014/2015, p.26).

18. Please describe how the general objectives of Integrated Environmental Management as set out in section 23 of NEMA have been taken into account.

According to section 23 of NEMA the appropriate environmental management tools were applied effectively. The EAP is an independent person, appointed by Nankhoo Engineers to determine all negative as well as positive impacts of the proposed activities might have on the environment. Mitigation measures were also proposed in this report. All the information compiled by the EAP was rated in a scoring matrix, taking environmental, cultural heritage and ecological issues into account. The BAR will be circulated into the public domain for a Public Participation Process as described in NEMA. All comments received during the entire BAR process will be recorded as part of the Issues and Responses Report. Particulars regarding this Process have been included in **Appendix D.** The impacts that have been identified must be managed and mitigated. These measures have been included in the Environmental Management Plan attached as **Appendix E**.

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

All of these principles have been taken into account as the construction of this road will be socially sustainable due to continuous access that will be provided to local communities. Communities will therefore be able to access basic amenities at all times. Economically, the proposed activity will ensure that communities gain access to the schools, transportation services, etc. All factors mentioned in Section 2 (4) of NEMA were taken into consideration, assessed and discussed in **Section D.** Through Section 2 of NEMA it is understood that the principles as set out in this section have been taken into account through the proper application of a Basic Assessment Process as described by NEMA, and by assessing the predicted and actual impacts of the proposed activity in order to assist the Competent Authority in adequately making an informed decision.

6. 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:

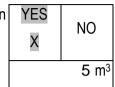
Title of legislation, policy	Applicability to the project	Administering authority	Date
or guideline			
National	Environmental Authorisation is	Department of	1998
Environmental	required in terms of Regulation R	Environmental Affairs	
Management Act,	983 of Dec 2014 (included within		
1998 (Act No 107 of	NEMA 107 of 1998)		
1998)			
Environmental Impact	Guidelines with regards to the	Department of	1998
Assessment	Environmental Impact	Environmental Affairs	
Regulations (Notice	Assessment Process to be		
No. R983 of 2014)	undertaken		
Constitution of	The project falls within the	Department of	1998
Republic of South	boundaries of South Africa	Environmental Affairs	
Africa (Act No 108 of			
1996)			
National Heritage	Any possible artefacts which	SAHRA	1999
Resources Act (Act	could be of cultural or historical		
No 25 of 1999)	significance must be identified		
National	Damaging of, disturbance to or	Department of	2004
Environmental	destroying of plant or animal	Environmental Affairs	
Biodiversity Act 10 of	species during the clearing of the		
2004	site		
Integrated	Public Participation Process	Department of	2010
Environmental		Environmental Affairs	
Management			
Guideline, Public			
Participation			

7. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

a) Solid waste management

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

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



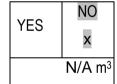
How will the construction solid waste be disposed of (describe)?

All solid waste will be disposed at the registered local landfill site. This will be addressed in the EMPr. The ECO will audit the EMPr and submission will be made to the CA for review.

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

The construction solid waste will be disposed of at the registered landfill site by the contractor. This will be addressed in the EMPr. The ECO will audit the EMPr and submission will be made to the CA.

Will the activity produce solid waste during its operational phase?



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

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

N/A

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

N/A

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

N/A

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

Can any part of the solid waste be classified as hazardous in terms of the NEM:WA?	YES	NO X
If YES, inform the competent authority and request a change to an application for sco application for a waste permit in terms of the NEM:WA must also be submitted with this		
Is the activity that is being applied for a solid waste handling or treatment facility?	YES	NO X
If YES, then the applicant should consult with the competent authority to determ necessary to change to an application for scoping and EIA. An application for a waste the NEM:WA must also be submitted with this application. b) Liquid effluent		
Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?	YES	NO X
If YES, what estimated quantity will be produced per month?		N/A m ³
Will the activity produce any effluent that will be treated and/or disposed of on site?	YES	NO X
If YES, the applicant should consult with the competent authority to determine wheth to change to an application for scoping and EIA.	er it is n	ecessary
Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO X
If YES, provide the particulars of the facility:		
Facility name:		
Contact person:		
Postal address:		

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Postal code:			
Telephone:	С	Cell:	
E-mail:	F	ax:	

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

N/A

c) Emissions into the atmosphere

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

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

YES	NO
	X
YES	NO

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

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

N/A

d) Waste permit

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

VEC	NO
YES	X

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

e) Generation of noise

Will the activity generate noise?

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

YES	NO
X	
YES	NO
	X

Describe the noise in terms of type and level:

Noise will only be generated during the construction phase (machinery, generator etc.) The level of the noise is however low as there are no residents nearby. No noise will be generated during the operational phase; therefore the impact is temporary in nature.

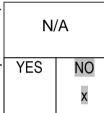
8. WATER USE

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,	Other	The activity will
Municipal	vvalei boaiu	Groundwater	dam or lake	Other	not use water

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:

Does the activity require a water use authorisation (general authorisation or water



No WULA application needs to be submitted.

use license) from the Department of Water Affairs?

9. ENERGY EFFICIENCY

Describe the design measures, if any, which 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 B and indicate the area, which is covered by each copy No. on the Site Plan.

Section B Copy No. (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	NO
X	

Name of Specialist	Neelesh Ramasis
Qualification	Bsc. Environmental Science

If YES, please complete the form entitled "Details of specialist and declaration of interest" for each specialist thus appointed and attach it in Appendix I. All specialist reports must be contained in Appendix D.

Property description/physica I address:

Province	Kwazulu Natal
District Municipality	uMzinyathi Municipality
Local Municipality	Msinga Municipality
Ward Number(s)	Ward 8
Farm name and	N/A
number	
Portion number	N/A
SG Code	N/A

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

YES



1. 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
		x				1:5	

Alternative S2 (if any):

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

Alternative S3 (if any):

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

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that	2.4 Closed valley	2.7 Undulating plain / low hills	X
best describes the site:2.1			
Ridgeline			
2.2 Plateau	2.5 Open valley	2.8 Dune	
2.3 Side slope of hill/mountain	2.6 Plain	2.9 Seafront	
2.10 At sea			

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

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

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

As per the site investigation on the 12/05/15 the following features have been identified:

The Umvoti municipality is one of the local municipalities which fall under the UMzinyathi District Municipality. It is situated approximately 75km from Pietermaritzburg and 55km from Stanger, and includes the urban centers of Greytown and Kranskop (SDF, 2013). The site for the proposed development is located in one of the villages in the Greytown area on local road L2771.

The general topography of the region as per the site investigation was classified as undulating plains/low hills. The general gradient of the site is 1:15-1:20, which indicates generally a flat terrain.

The geology for most of the Greytown region, including the site Edumbe Road consists of the Ecca group which is 250 million years old, overlain with patches of the Drakensberg formation. The Ecca group mainly consists of Shale and Sandstone.

There are no steep slopes in the area, therefore there is no need for a slope stability assessment. The road has presence of erosion, which can be classed as gully erosion.

Soils around this region exhibit a yellow/red colour, which is an indication of the presence of iron which is dominated by hematite and aluminum. The area has estimated clay content of between 20-40% near the watercourse, during high periods of rainfall the estimated clay content could rise. Some of the soils in this region are severely degraded due to geological influence, overgrazing and improper land use. There are no steep slopes or cliffs near the site of development which means that construction will not be hampered.

Rock Type	Description of rock	Engineering qualities
Sandstone	Sandstone (sometimes	Inherent material
	known as arenite) is a	deterioration problems
	clastic sedimentary rock	generally occur gradually
	composed mainly of sand-	over long periods of time,
	sized minerals or rock	at predictable rates and
	grains. Most sandstone is	require appropriate routine
	composed of quartz and/or	or preventive maintenance
	feldspar because these	to control.
	are the most common	
	minerals in the Earth's	
	crust. Like sand,	
	sandstone may be any	

color, but the most common colors are tan, brown, yellow, red, grey, pink, white and black



Photo 1: showing gully erosion as a result of poor drainage of the existing road.



Photo 2: showing eroded banks along the existing track.

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	heavy alien	Veld dominated by	Gardens
Sport field	Cultivated land X	Paved surface	Building or other structure	Bare soil X

5. SURFACE WATER

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

6. LAND USE CHARACTER OF SURROUNDING AREA

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

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

N	//	Δ
1	,,,	•

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

N/A

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

N/A

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

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

7. CULTURAL/HISTORICAL FEATURES

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

YES	NO X	
Uncertain		

No heritage permit is required. However, should elements of significance be identified during the construction phase, all construction activities will stop immediately and an independent heritage specialist will be appointed to investigate. This is covered in more detail in the EMPr. A draft BAR document was sent to AMAFA for comments and uploaded onto the SAHRIS website. Awaiting comments from AMAFA.

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

YES NO X
es YES NO X

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

8. SOCIO-ECONOMIC CHARACTER

a) Local Municipality

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

Level of unemployment:

The employment statistics indicate that the unemployment rate in Umvoti has decreased significantly from 40.7% to 30.4% between 2001 and 2011. The youth unemployment rate has also experienced a decrease from 48% in 2001 to 38% in 2011 (Umvoti IDP, 2014/2015, p.91).

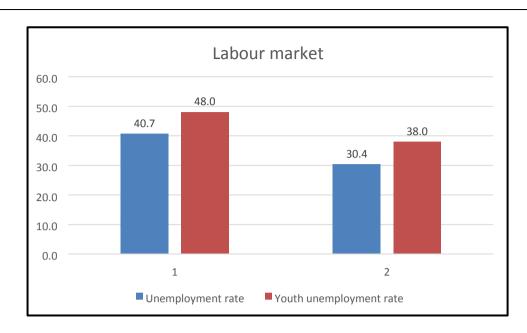


Figure 1: Unemployment and youth unemployment rate (Umvoti IDP, 2014/2015, p.91)

Economic profile of local municipality:

According to the SDF (2013), for the Umvoti Local Municipality, community, social and personal services is the main source of employment. It employs approximately 23% of the municipal's population. Government is the second source of employment absorbing approximately 19% of the municipal's population, followed by wholesale 15.3%, agriculture 14.8% and manufacturing 11.4%.

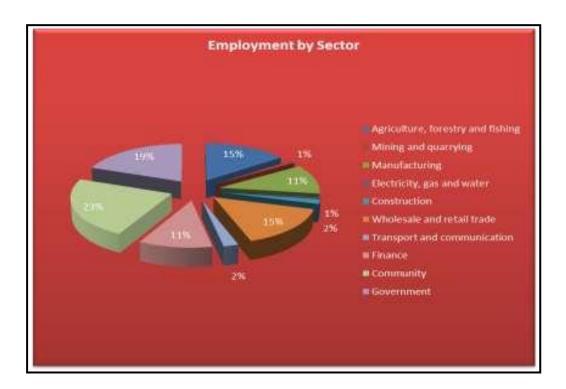


Figure 2: Employment by sector (SDF, Umvoti local municipality, 2013).

Level of education:

The majority of the population that appears to have some form of education increased, over the past ten years (2001 – 2011), while those with no schooling decreased. In 2001, 37.3% of the population had primary education, 23.5% of the population attended secondary school (of which 6.2% was Grade 12), and only 2.8% had some form of higher education. This changed over the past ten years. According to the latest stats, census 2011, 35% of the population have secondary education (of which 12.8% is Grade 12), 32.4% have attended primary school, and only 2.6% have some form of higher education. The table below is a graphic representation of the level of education (Umvoti IDP, 2014/2015, p89).

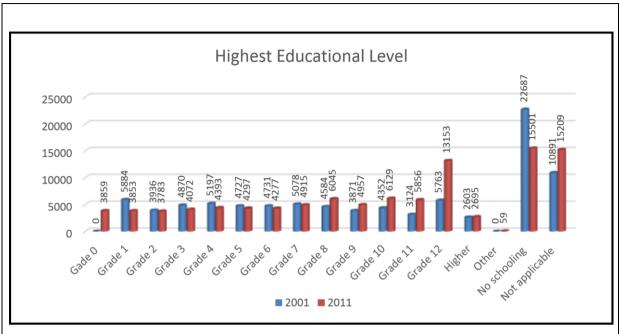


Figure 3: Umvoti educational level (Umvoti IDP, 2014/2015, p.90).

b) Socio-economic value of the activity

What is the expected capital value of the activity on completion? To be determined What is the expected yearly income that will be generated by or as a result of the R N/A activity? YES Will the activity contribute to service infrastructure? NO X Is the activity a public amenity? YES NO X How many new employment opportunities will be created in the development and To be construction phase of the activity/ies? determined What is the expected value of the employment opportunities during the To be determined development and construction phase? 100 % What percentage of this will accrue to previously disadvantaged individuals? How many permanent new employment opportunities will be created during the To be operational phase of the activity? determined

What is the expected current value of the employment opportunities during the first	R N/A
10 years?	
What percentage of this will accrue to previously disadvantaged individuals?	100 %

9. BIODIVERSITY

Various GIS maps have been consulted during the desk studies, and no biodiversity issues were identified. The site is degraded and the presence of alien vegetation and existing footpaths have transformed the site, therefore the proposed activity will contribute to the rehabilitation of the site which has been outlined in the EMPr. A draft BAR has been submitted to KZN Wildlife for comments and forms part of the Public Participation Process. Awaiting comments from KZN wildlife.

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

Systemati	ic Biodiversi	ty Planning	Category	If CBA or ESA, indicate the reason(s) for its selection in biodiversity plan
Critical Biodiversity Area (CBA)	Ecological Support Area (ESA)	Other Natural Area (ONA)	No Natural Area Remaining (NNR)	N/A

b) Indicate and describe the habitat condition on site

Habitat Condition	Percentage of habitat condition class (adding up to 100%)	Description and additional Comments and Observations (including additional insight into condition, e.g. poor land management practises, presence of quarries, grazing, harvesting regimes etc).
Natural	%	
Near Natural (includes areas with low to moderate level of alien invasive plants)	%	
Degraded (includes areas heavily invaded by alien plants)	%	
Transformed (includes cultivation, dams, urban, plantation, roads, etc)	100 %	The existing road has been utilized over a number of years, therefore the site has become degraded by footpaths and invaded by alien vegetation.

c) Complete the table to indicate:

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

Terrestrial Ecos	Aquatic Ecosystems										
Ecosystem threat	Critical	Wetlan	d (includ	ding rivers,							
status as per the	Endangered	depressions, channelled and			Endangered depressions, channelled and						
National Environmental	Vulnerable	unchanneled wetlands, flats, Estuary seeps pans, and artificial					stuary Coast				
Management:	Locat										
Biodiversity Act (Act	Least Threatened	wetlands)									
No. 10 of 2004)	THEALENEU	YES	NO	UNSURE	YES	NO	YES	NO			

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

Natural vegetation is minimal being invaded by alien vegetation and footpaths. The area has become completely transformed and offers no significant biodiversity or natural pristine ecosystems.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT AND NOTICE

Publication name	ILanga Newspaper	
Date published	11/06/2015	
Site notice position	Latitude	Longitude
	28° 50′ 59.20″ S	30° 47′ 12.98″ E

Include proof of the placement of the relevant advertisements and notices.

2. DETERMINATION OF APPROPRIATE MEASURES

Provide details of the measures taken to include all potential I&APs as required by Regulation 41(2)(e) and 41(6) of GN 983.

Two Newspaper articles (English and Zulu) were published in the Ilanga Newspaper on the 11/06/2015. The relevant tribal authorities/ward councillors were made aware of the proposed development. All organs of state that were identified during the process were informed and requested to comment on the BAR **Appendix D**.

Key stakeholders (other than organs of state) identified in terms of Regulation 41(2)(b) of GN 983

Title, Name and Surname	Affiliation/ key stakeholder status	Contact details (tel number or
		e-mail address)

3. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

Summary of main issues raised by I&APs	s Summary of response from EAP						
No concerns have been raised by the	Responses	have	been	inclu	ded	in	the
local community, other than the lack of	Appendix	D	entitle	ed	'Cor	nme	ents
formal access to all amenities and safe	Received'						
access to the schools. The tribal authority							
expressed the need for the upgrade of							
the proposed road, and the employment							
opportunities that will be created during							
the construction phase.							

4. COMMENTS AND RESPONSE REPORT

SEE APPENDIX C.1 FOR COMMENTS AND REPONSES REPORT.

5. AUTHORITY PARTICIPATION

Authorities and organs of state identified as key stakeholders:

Authority/Org	Contact	Tel No	e-mail	Postal address
an of State	person (Title,			
	Name and			
	Surname)			
Department	Mrs. S.	034	Sibongile.mhlungu@kzntra	Private Bag X2002
of Transport	Ndlela	299 860 0	nsport.gov.za	Dundee
				3000
Amafa	Ms Bernadet	033	bernadetp@amafapmb.co.z	P.O.Box 2685
		3946543	<u>a</u>	РМВ
				3201
KZN Wildlife	Mr D	033	dominic.wieners@	P.O.Box 13053
	Wieners	8451999	kznwildlife.com	3202
Department	Mr S. Naidoo	031	naidooso@dwa.gov.za	P.O. Box 1018
of Water &		3362798		Durban
Sanitation				4000
Department	Mr. S.	031 336	GovenderS2@dwa.gov.za	88 Field Street
of Water &	Govender	2759		Durban
Sanitation				4001

SECTION D: IMPACT ASSESSMENT

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

N.B All mitigation measures have been outlined in specific detail in the EMPr (Appendix E), therefore this section must be read in conjunction with the EMPr. The proposed upgrade will follow the existing track which will have minimal impact to the environment as no further disturbance is envisaged. For reporting purposes the existing route will be investigated and forms the preferred alternative (Route 1).

1.1. Selection of Route - Local Road

The selection of a local road will have the greatest environmental impact. The proposed gravel road will be constructed along an existing track. The area is degraded with the presence of alien vegetation and highly eroded banks. Therefore the existing road has been selected as the preferred alternative as not to cause further disturbance to the environment. Engineering Designs prepared by DOT has taken the most efficient techniques with minimal impact to the environment into consideration. Generally, roads are constructed along the path of least disturbance, often following existing tracks.

Impact Ratings

The following presents the assessment criteria used to evaluate the impacts resulting from the proposed development.

Impact Assessment Methodology

The impacts that may result from the construction phase and operation phase of the project was assessed according to a number of criteria to arrive at an overall significance rating. The criteria used were as follows:

Spatial Scale

Site (S) Immediate area of impact

Local **(L)** Area within 20km of the development

Regional (R) Entire Municipality

Duration

Short Term (ST) Less than the duration of the activity

Medium Term (MT) Impact persists until activity ceases

Long Term (LT) Impact persists well beyond the cessation of the activity

Permanent (P) Impact is permanent

Probability

Low (L) Unlikely

Medium (M) Possible

High (H) Likely

<u>Intensity</u>

Intensity describes whether an impact is destructive or benign.

SCORE	ELABORATION
LOW	These are impacts which individually or combined pose a deleterious
(L)	or adverse impact and low negative risk to the quality of the receiving
	environment, and may lead to potential health, safety and
	environmental concerns. Aesthetically and/or physical non-compliance
	can be expected for short periods. In this case the impact is short term,
	local in extent, not intense in its effect and may not be likely to occur. A
	low impact has no permanent impact of significance. Mitigation
	measures are feasible and are readily instituted as part of a standing
	design, construction or operating procedure.
MEDIUM	These are impacts which individually or combined pose a moderate
(M)	negative risk to the quality of health of the receiving environment.
	These systems would not generally require immediate action but the
	deficiencies should be rectified to avoid future problems and
	associated cost to rectify once in HIGH risk. Aesthetically and/or
	physically non-compliance can be expected over a medium term. In
	this case the impact is medium term, moderate in extent, mildly intense
	in its effect and probable. Mitigation is possible with additional design
	and construction inputs.
HIGH	These are impacts which individually or combined pose a significantly
(H)	high negative risk to the environment. These impacts pose a high risk
	to the quality of the receiving environment. The design of the site may
	be affected. Mitigation and possible remediation are needed during the
	construction and/or operational phases. The effects of the impact may
	affect the broader environment.

Significance

Impacts can be Low, Medium or High and can be positive (+ve) or negative (-ve).

Impacts/Significance associated with the Construction phase

Impact	Impact type	Activity	Prefer	red a	altei	rnat	ive	
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	DURATION	PROBABILITY	INTENSITY	SIGNIFICANCE	POST MITIGATED
		DIRECT IMPACTS						
Dust Pollution	(-)	During construction high levels of dust is emitted into the atmosphere by construction vehicles and sediment is produced as a result of dust that enters the environment in rainfall runoff. These impacts are short-term and will only result over a 2 month period. No surrounding dwellings will directly be affected. These impacts have been addressed in detail within the EMPr.	S	мт	М	L		L

Impact	Impact type	Activity	Prefer	red a	lterr	ativ	re	
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	DURATION	PROBABILITY	INTENSITY	MITIGATED SIGNIFICANCE	POST
Spillages	(-)	Construction vehicles pose major threats w.r.t spillages on-site, this may result in the contamination of soil and water. The presence of fuels on-site may have a negative impact on the groundwater. Cement mixing/spillages on open ground pose a threat to the receiving environment.	S	МТ	M	M	L	
Water Quality	(-)	During construction, water quality is compromised. This is mainly due to human activity and by implementing inappropriate techniques such as diverting the flow of the water course. Pollution of the water course is also a major concern during construction, such as washing of equipment and discharging waste into the river.	L	МТ	M	M	L	

Impact	Impact type	Activity	Pref	erred	alte	rna	ativ	е	
	Positive (+ve) Or Negative (-ve)		SCALE	DURATION	PROBABILITY	-	INTENSITY	SIGNIFICANCE	POST
Soil erosion	(-)	All topsoil that will be removed during construction will be prone to erosion; therefore all topsoil must be stockpiled using the appropriate erosion control techniques. Soil erosion was evident at various points along the existing route as a result of poor drainage. The proposed gravel road will address these concerns by implementing correct standard designs by DOT. A vegetation rehabilitation plan will be included in the EMPr to address the mitigation measures that must be implemented to reduce soil erosion on site. Extensive gully erosion is evident around the entire area. The road itself may have negative soil erosion impacts during construction but positive impacts thereafter as it may stabilize erosion.	L	M	- M		M	ı	

Impact	Impact type	Activity	Preferr	ed alternative
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	POST MITIGATED SIGNIFICANCE INTENSITY PROBABILITY DURATION
Habitat Fragmentation	(-)	Roads can act as barriers or filters to animal movement and lead to habitat fragmentation. Many species will not cross the open space created by a road due to the threat of predation, and roads also cause increased animal mortality from traffic. This barrier effect can prevent species from migrating and re-colonizing areas where the species has gone locally extinct as well as restricting access to seasonally available or widely scattered resources. This will be a low negative impact as a track already exists, and the new proposed gravel road is an upgrade, therefore the route has been disturbed by the existing track and footpaths.	L	LT L M L

Impact	Impact type	Activity	Prefer	red a	lterr	nativ	ve	
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	DURATION	PROBABILITY	INTENSITY	SIGNIFICANCE	POST
Unplanned routes/footpaths.	(-)	Construction workers may disturb or create footpaths that are not planned or existing, which may lead to areas becoming prone to erosion and spread of alien vegetation. Strict control measures must be implemented by the Contractor and ECO. All areas must be clearly demarcated and incidents must be reported immediately to the site agent.	L	ST	L	L	L	
Water Resource	(-)	Water will be required during the construction phase that may lead to extra demands on the local water resources of the municipality. However, water will be transported to the site via tanks which will minimize the impact. No water will be extracted from any watercourse in the construction phase.	L	МТ	M	L	L	-

Impact	Impact type	Activity	Prefer	red a	lterr	nativ	/e
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	DURATION	PROBABILITY	INTENSITY	POST MITIGATED SIGNIFICANCE
Impact on surface and ground water	(-)	Pollution of soil/ groundwater (fuel, oil, cement, other chemicals etc.)	L	МТ	М	M	L
Impact of Storm water	(-)	Storm water could lead to erosion without the proper mitigation measures in place, and side drains not properly constructed.	L	мт	M	М	L
Sanitation	(-)	Inadequate sanitation could lead to pollution of the water table.	S	МТ	М	М	L
Heritage impacts	(+)	No negative impact. As artefacts of historical or cultural value was not found on the route.	S	ST	L	L	L
Noise disturbance	(-)	Construction machinery and personnel could disturb the peace in the surrounding area.	S	МТ	М	L	L
Waste Disposal	(-)	Waste is generated through construction activities and therefore the possibility of the area being polluted is increased.	L	МТ	М	М	L

Impact	Impact type	Activity	Pre	eferr	ed al	terr	ativ	/e	
	Positive (+ve) Or Negative (-ve)		SCALE	SPATIAL	DURATION	PROBABILITY	INTENSITY	SIGNIFICANCE	POST
Socio-Economic Impact	(+)	Construction creates temporary employment for community members.	L	-	ъ	н	П	н	
No-go option	(-)	Safety - During most rainy seasons, the road is flooded. The local community's safety will therefore be compromised.	-		-	1	1	-	

Impact	Impact type	Activity	Pre	eferr	ed al	terr	nativ	ve	
	Positive (+ve) Or Negative (-ve)		SCALE	SPATIAL	DURATION	PROBABILITY	INTENSITY	MITIGATED SIGNIFICANCE	POST
		INDIRECT IMPACTS							
Spread of Alien Vegetation	(-)	The removal of topsoil and natural vegetation with an increase in human activity may result in the increase of alien vegetation. The vegetation rehabilitation will address this issue in more detail.		6	ST	M	М	L	
Waste Disposal	(-)	Waste such as plastic and paper will impact surrounding animals if ingested.		-	МТ	н	н	L	
Socio-Economic Impact	(+)	Improved living standards.	ı	-	Р	Н	L	Н	
No-go option	(-)	Safety - During most rainy seasons, the road is flooded. The local community's safety will therefore be compromised.		-	-	ı	1	-	

Impact	Impact type	Activity	Prefe	rred	alteri	nati	/e
	Positive (+ve) Or Negative (-ve)		SCALE	DURATION	PROBABILITY	INTENSITY	POST MITIGATED SIGNIFICANCE
		CUMULATIVE IMPACTS					
Waste Generation	(-)	Extra waste generated during the construction phase could result in added pressure placed on the local landfill site.	L	МТ	L	L	L
No-go option	(-)	Safety - During most rainy seasons, the road is flooded. The local community's safety will therefore be compromised.	-	-	-	-	-

Alternative 2

No alternative site or route has been identified. Alternative alignments would require additional disturbance to the environment with very little potential of improvement in terms of environmental performance. This is a linear activity and the proposed gravel road will be upgraded on the existing track to minimise negative impacts to the environment, furthermore DOT has assessed other options and none were cost effective. As a new road will require relocation of dwellings and disturbance to the natural state of the surroundings. Therefore upgrading the existing track is the most feasible option.

Impacts/Significance associated with the Operational Phase

Impact	Impact type	Activity	Preferi	ed a	ltern	ativ	re e
	Positive (+ve) Or Negative (-ve)		SPATIAL SCALE	DURATION	PROBABILITY	INTENSITY	POST MITIGATED SIGNIFICANCE
		DIRECT IMPACTS					
Increased traffic in the area	(-)	The proposed road is an access route off a local road, therefore increased traffic.	п	LT	M	Γ.	L
Increased vehicular fumes contributing to Air Pollution	(-)	It is not envisaged that the increased vehicular fumes will contribute significantly to increased localized air pollution but may have a cumulative effect.	L	MT	L	L	L
Direct alteration of faunal habitat	(-)	The area is highly transformed by the existing track and river crossing.	п.	LT	ш	п.	L
Increased socio-economic benefits	(+)	The positive impact is that of increased socio- economic development to the local community.	L	LT	н	L	Н

Impact	Impact type	Activity	Pref	erre	ed al	tern	ativ	'e		
	Positive (+ve) Or Negative (-ve)		SCALE	CD ATIAI	DURATION	PROBABILITY	INTENSITY	SIGNIFICANCE	MITIGATED	POST
		INDIRECT IMPACTS								
Safety Issues for the community	(+)	The proposed road is merely an upgrade of the existing track; therefore safety issues do not pose a major threat.	S	•	MT	L	L		L	
Increased noise	(-)	The road services the local community therefore noise levels should not be affected greatly by the upgrade.	s	ı	MT	M	L		L	

6. ENVIRONMENTAL IMPACT STATEMENT

Alternative A (preferred alternative)

It is the opinion of the EAP that all potential impacts that could potentially occur during the construction and operational phase of the road construction have been identified and key impacts and their mitigation measures are provided in this report.

The following factors were taken into consideration:

A) Site and route

- The route and site location has been selected based on the fact that an
 existing track is currently used as a local road, however this is not suitable.
 DOT therefore proposes to upgrade the existing track to a gravel road which
 conforms to DOT standards.
- The existing route is disturbed and footpaths have been created along the track.
- Should a new access road be constructed this will impact negatively on the receiving environment.

B) Land

- No land needs to be expropriated and the community has expressed the need for the track to be upgraded to a gravel road.
- No land will be lost that is currently utilized by the community.

C) Design of the gravel road

- The proposed design of the gravel road has taken DOT standards into consideration. This will improve the overall drainage of the road and minimize surface run-off and erosion along the road verges.
- The route is relatively gentle in gradient and no major modifications are envisaged along the route.

D) Funding

 DOT has made funding available for this financial year 2015/16, the upgrade falls within the ambient of road infrastructure projects for the local municipality.

It is the opinion of the EAP that the proposed local road should be constructed.

The construction would result in minor environmental impact whilst promoting development in the area. The construction of this road from an environmental perspective will result in an improved situation with minimal erosion and damage caused by storm water run-off.

Alternative B

N/A

Alternative C

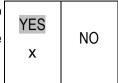
N/A

No-go alternative (compulsory)

Should the proposed construction of the road not go ahead, the site would be exposed to on-going erosion as well as major safety concerns for crossing the existing track during high rainfall periods The road provides the local community access to a number of amenities, therefore the "No-Go" alternative was used as a baseline for impact studies. The proposed construction has positive impacts with minimal environmental impacts.

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)?



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.

- The EMPR must be strictly adhered to and implemented during the construction and operational phases.
- An ECO should be appointed by the applicant to undertake Environmental Audits and submit reports to the Competent Authority when requested.
- All mitigation measures and factors outlined in the BAR must be considered.
- Should cultural artefacts or heritage sites occur in close proximity to the site, construction must cease immediately and the applicant must appoint a heritage specialist to submit a report to AMAFA.

Is an EMPr attached?		ES X	NO
SHELDON SINGH	DATE		
SIGNATURE OF FAP			



APPENDIX A.1 LOCALITY MAP



APPENDIX A.2 AERIAL PHOTO



APPENDIX A.3 TOPOGRAPHICAL MAP



APPENDIX B SITE PHOTOS

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APPENDIX C PLAN OF THE ROAD

APPENDIX D PUBLIC PARTICIPATION

- D.1 COMMENTS/RESPONSES FROM I&APS
- D.2 PROOF OF RECIEPTS
- D.3 COPY OF NEWSPAPER AD
- D.4 COMMENTS FROM AMAFA
- D.5 COMMENTS FROM KZN WILDLIFE
- D.6 COMMENTS FROM WATER & SANITATION

BASIC ASSESSMENT REPORT	

D.1 - COMMENTS/RESPONSES FROM I&APS

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D.2 – PROOF OF RECIEPTS

BASIC	ASSESSI	MENT	REPORT
	AUGE GOI	VI	

D.3 – COPY OF NEWSPAPER AD

BASIC ASSESSMENT REPORT
D.4 - COMMENTS FROM AMAFA

	BASIC ASSESSMENT REPORT			
D.5 - COMMENTS FROM KZN WILDLIFE				

BASIC ASSESSMENT REPORT
D.6 - COMMENTS FROM WATER & SANITATION

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APPENDIX E ENVIRONMENTAL MANAGEMENT PROGRAMME (EMPR)