

## SECTION D: IMPACT ASSESSMENT

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

### 1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

None

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):

None

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

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

#### Alternative S1 (Only alternative):

PLANNING AND DESIGN PHASE
POLICY COMPLIANCE
<b>Impact:</b> The proposed development may not be consistent with relevant environmental policy and/or spatial guideline documents.
SOCIAL
<b>Impact:</b> Temporary job creation and skills development.
STORMWATER
<b>Impact:</b> Traffic problems and safety risks may arise as a result of inadequate storm water drainage planning due to inappropriate road design.
<b>Impact:</b> Inappropriate routing of storm water will lead to stream sedimentation and erosion of the surrounding area.
ROAD DESIGN
<b>Impact:</b> Inappropriate road design and alignment of the new Flonkers bridge road section may lead to stream sedimentation and erosion of the Wolwekop Stream.
BRIDGE DESIGN
<b>Impact:</b> Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.
<b>Impact:</b> Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.
HERITAGE
<b>Impact:</b> Re-routing of road section at Flonkers rail-over-road bridge will affect a Late Stone Age site identified in the Heritage Assessment.
<b>Impact:</b> Re-use of the borrow pit along the N9 (coordinates: 31° 23.729'S; 25° 1.846'E) will result in damage to a Late Stone Age site identified in the Heritage Assessment.

**Impact:** Modification/upgrade/destruction of both the Ludlow Spruit and the Seligman Spruit bridge will result in damage to heritage sites older than 60 years.

#### PALAEONTOLOGY

**Impact:** Road upgrade may affect possible fossils found in some of the surrounding sedimentary layers.

#### TRAFFIC

**Impact:** Inadequate planning for high volume construction vehicles on the surrounding roads will impact traffic flow.

#### WASTE MANAGEMENT

**Impact:** Failure to plan for waste management storage can lead to unsanitary conditions & poor waste management practices.

#### QUARRY SITE

REFER TO THE MINING EMPr IN APPENDIX G

### CONSTRUCTION PHASE

#### AIR POLLUTION

**Impact:** Dust (air) pollution caused by grading and levelling exposed land can cause a nuisance to neighbouring residential areas and businesses close to Middelburg.

#### NOISE POLLUTION

**Impact:** Noise pollution caused during construction could potentially be a nuisance to neighbouring residential areas and businesses close to Middelburg.

#### VISUAL

**Impact:** Impact on existing views of sensitive visual receptors caused by the presence of construction activities.

#### HAZARDOUS SUBSTANCE STORAGE & USAGE

**Impact:** Concrete, tar and bitumen mixing techniques and diesel/oil spillage occurring as a result of poorly maintained machinery can lead to soil pollution.

**Impact:** Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.

**Impact:** Inappropriate responses to petrochemical or hazardous spill

**Impact:** Inappropriate hazardous material storage can lead to spillages and contamination of ground water.

#### WORKER HEALTH AND SAFETY

**Impact:** Inadequate attention to fire safety awareness and fire safety equipment could result in unsafe working environment and loss of property.

**Impact:** Failure to provide adequate onsite sanitation and clean drinking water may result in runoff transferring contaminants into the surrounding environment.

#### WASTE MANAGEMENT

**Impact:** Construction rubble left onsite may attract vermin and encourage the growth of opportunistic alien vegetation.

**Impact:** Littering on site may attract vermin, detract from the visual appeal of the area, and pollute the surrounding areas.

**Impact:** Hazardous waste e.g. used oils, offcuts, etc., could pollute surface and groundwater resources if not properly contained.

#### TRAFFIC

**Impact:** High amount of construction vehicles will impact traffic flow.

#### SOCIAL

**Impact:** Temporary job creation during the construction phase.

<b>RIVERS &amp; STREAMS</b>
<b>Impact:</b> Potential negative impacts (eg. Bulldozers, rubble etc.) on the various rivers and streams crossing the N9.
<b>ROAD RE-ROUTING</b>
<b>Impact:</b> Dumping construction rubble into or close to the Wolwefontein Stream may cause stream blockage, erosion, stream diversion etc.
<b>STORM WATER MANAGEMENT</b>
<b>Impact:</b> Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.
<b>QUARRY SITE</b>
REFER TO THE MINING EMPr IN APPENDIX G
<b>OPERATIONAL PHASE</b>
<b>MAINTENANCE</b>
<b>Impact:</b> Toxicants (such as heavy metals, hydrocarbons, surfactants and oils) spilled from vehicles may negatively impact the surrounding environment and biodiversity.
Quarry site
REFER TO THE MINING EMPr IN APPENDIX G
<b>NO-GO OPTION</b>
If the development does not proceed, none of the impacts identified will take place.

### 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.

Alternative S1 (only alternative)

**Table 3.1: Issues and Impacts during the Planning and Design Phase: Pre- and post-mitigation assessment**

PLANNING AND DESIGN PHASE								
		Pre mitigation					Post mitigation	
Nature of impact	Impact Description	Temporal	Spatial	Likelihood	Severity	Significance	Mitigation	Significance
<b>POLICY COMPLIANCE</b>								
Legal & policy compliance	The proposed development may not be consistent with relevant environmental policy and/or spatial guideline documents.	<u>Permanent</u>	Localised	Possible	Severe	MODERATE NEGATIVE	Development should coincide with relevant legislation and/or policy, e.g. ECBCP, Municipal By-laws, SDFs, etc.	LOW NEGATIVE
<b>SOCIAL</b>								
Job creation during the proposed development's lifespan.	Temporary job creation and skills development.	<u>Long Term</u>	Project Level	Probable	Very Beneficial	HIGH POSITIVE	N/A	HIGH POSITIVE
<b>STORMWATER</b>								
Inadequate planning of drainage	Traffic problems and safety risks may arise as a result of inadequate storm water drainage planning due to inappropriate road design.	<u>Long term</u>	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.	LOW NEGATIVE
Inappropriate routing	Inappropriate routing of storm water will lead to stream sedimentation and erosion of the surrounding area.	<u>Long term</u>	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.	LOW NEGATIVE
<b>ROAD DESIGN</b>								
Environmental damage to the surrounding area	Inappropriate road design and alignment of the new Flonkers bridge road section may lead to stream sedimentation and erosion of the Wolwekop Stream.	<u>Long term</u>	Project Level	Possible	Moderate Severe	MODERATE NEGATIVE	Ensure that there is proper drainage of surface water away from the new road and that it does not cause any erosion. Ensure that the new road is more than 32m from the Wolwekop stream.	LOW NEGATIVE
<b>BRIDGE DESIGN</b>								
Impacting various Streams & Rivers along the road upgrade.	Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.	<u>Long term</u>	Project Level	Definite	Moderately severe	HIGH NEGATIVE	Ensure that the bridge design does not impede the flow of water or cause erosion in these rivers/streams.	MODERATE NEGATIVE

							Ensure there is proper drainage of stormwater away from these bridges.	
Deviating stream flow	Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.	<u>Long term</u>	Localised	Definite	Moderately severe	HIGH NEGATIVE	Ensure that the new course layout does not cause major erosion or structural damage to the bridge or road infrastructure	MODERATE NEGATIVE
<b>HERITAGE</b>								
Late Stone Age site close to Flonkers bridge.	Re-routing of road section at Flonkers rail-over-road bridge will affect a Late Stone Age site identified in the Heritage Assessment.	<u>Permanent</u>	Localised	Definite	Moderately severe	LOW NEGATIVE	The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.	LOW NEGATIVE
Late Stone Age site close to identified existing borrow pit.	Re-use of the borrow pit along the N9 (coordinates: 31o 23.729'S; 25o 1.846'E) will result in damage to a Late Stone Age site identified in the Heritage Assessment.	<u>Permanent</u>	Localised	Definite	Moderately severe	LOW NEGATIVE	The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.	LOW NEGATIVE
Bridges older than 60 years are protected by NHRA.	Modification/upgrade/destruction of both the Ludlow Spruit and the Seligman Spruit bridge will result in damage to heritage sites older than 60 years.	<u>Permanent</u>	Localised	Definite	Moderately severe	LOW NEGATIVE	Modifying, or destroying and rebuilding these bridges in any manner requires a SAHRA Built Environment permit.	LOW NEGATIVE
<b>PALAEONTOLOGY</b>								
Possible fossils present is some of the affected sedimentary layers	Road upgrade may affect possible fossils found in some of the surrounding sedimentary layers.	<u>Permanent</u>	Project level	Possible	needs to be assessed by a palaeontologist	NEEDS TO BE ASSESSED BY A PALAEONTOLOGIST	A Phase 1 paleontological survey should be undertaken to identify possible fossil sites, and mitigated accordingly.	NEEDS TO BE ASSESSED BY A PALAEONTOLOGIST
<b>TRAFFIC</b>								
Construction vehicles impacting traffic flow,	Inadequate planning for high volume construction vehicles on the surrounding roads will impact traffic flow.	<u>Short Term</u>	Localised	Definite	Moderately severe	MODERATE NEGATIVE	A Traffic Impact Assessment is required.	LOW NEGATIVE
<b>WASTE MANAGEMENT</b>								
Storage	Failure to plan for waste management storage can lead to unsanitary conditions & poor waste management practices.	<u>Permanent</u>	Localised	Definite	Moderately severe	MODERATE NEGATIVE	Ensure that a proper Waste Management Plan is designed and implemented.	LOW NEGATIVE
<b>QUARRY SITE</b>								

REFER TO THE MINING EMPr IN APPENDIX G

**Table 3.2: Issues and Impacts during the Construction Phase: Pre- and post-mitigation assessment**

CONSTRUCTION PHASE								
Pre mitigation							Post mitigation	
Nature of Impact	Impact Description	Temporal	Spatial	Likelihood	Severity	Significance	Mitigation	Significance
<b>AIR POLLUTION</b>								
Dust nuisance	Dust (air) pollution caused by grading and levelling exposed land can cause a nuisance to neighbouring residential areas and businesses close to Middelburg.	<u>Short Term</u>	Localised	Probable	Moderately severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Cleared surfaces must be dampened whenever possible and especially in dry and windy conditions to avoid excessive dust generation.</li> <li>Any soil excavated, and not utilised for rehabilitation, must be removed from site or covered and no large mounds of soil should be left behind after construction.</li> </ul>	LOW NEGATIVE
<b>NOISE POLLUTION</b>								
Nuisance	Noise pollution caused during construction could potentially be a nuisance to neighbouring residential areas and businesses close to Middelburg.	<u>Short Term</u>	Localised	Possible	Slight	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Construction activity close to Middelburg, which includes the movement of construction vehicles, must be restricted to normal working hours (7:00am – 17:00pm).</li> </ul>	LOW NEGATIVE
<b>VISUAL</b>								
Construction activities impacting on visual receptors.	Impact on existing views of sensitive visual receptors caused by the presence of construction activities.	<u>Short Term</u>	Localised	Definite	Moderately Severe	LOW NEGATIVE	<ul style="list-style-type: none"> <li>Limited mitigation to contain the impact of auxiliary activities such as clearance of vegetation, road construction and control of waste and littering on camp sites.</li> </ul>	LOW NEGATIVE
<b>HAZARDOUS SUBSTANCE STORAGE &amp; USAGE</b>								
Site contamination due to hazardous substance usage	Cement, tar and bitumen mixing techniques and diesel/oil spillage occurring as a result of poorly maintained machinery can lead to soil pollution.	<u>Short Term</u>	Localised	Possible	Moderately severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Concrete should not be mixed directly on the ground, or during rainfall events when the potential for transport to the stormwater system is the greatest (as per the EMPr).</li> <li>Concrete must be mixed only in the area demarcated for this purpose and on an impermeable substratum.</li> <li>Oil trays must be placed under the machinery to avoid soil contamination. All areas affected during the Construction Phase should be rehabilitated</li> </ul>	LOW NEGATIVE
Site contamination due to spillage of hazardous substances	Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.	<u>Short Term</u>	Localised	Possible	Severe	HIGH NEGATIVE	<ul style="list-style-type: none"> <li>Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction process.</li> <li>Depending on the nature and extent of the spill, contaminated soil must be either excavated or treated on-site.</li> </ul>	LOW NEGATIVE

							<ul style="list-style-type: none"> <li>The ECO must determine the precise method of treatment of polluted soil.</li> <li>This could involve the application of soil absorbent materials or oil-digestive powders to the contaminated soil.</li> <li>If a spill occurs on an impermeable surface such as cement or concrete, the surface spill must be contained using oil absorbent materials.</li> <li>Contaminated remediation materials must be carefully removed from the area of the spill so as to prevent further release of petrochemicals to the environment, and stored in adequate containers until appropriate disposal.</li> </ul>	
	Inappropriate responses to petrochemical or hazardous spill	<u>Long Term</u>	Localised	Possible	Severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>The individual responsible for or who discovers the petrochemical spill must report the incident to the Project Coordinator, ECO and or Contractor as soon as reasonably possible.</li> <li>The problem must be assessed and the necessary actions required will be undertaken.</li> <li>The immediate response must be to contain the spill.</li> </ul>	LOW NEGATIVE
Site contamination due to inappropriate storage of hazardous substances	Inappropriate hazardous material storage can lead to spillages and contamination of ground water.	<u>Long Term</u>	Localised	Possible	Severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Staff that will be handling hazardous materials must be trained to do so.</li> <li>Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction time.</li> <li>All hazardous chemicals must be properly stored in a secure, banded and contained area.</li> </ul>	LOW NEGATIVE
<b>WORKER HEALTH AND SAFETY</b>								
Health risk associated with fires	Inadequate attention to fire safety awareness and fire safety equipment could result in unsafe working environment and loss of property.	<u>Long Term</u>	Project Level	Possible	Very Severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Fire fighting equipment should be present on site at all times as per Occupational Health and Safety Act.</li> <li>All construction foremen must be trained in fire hazard control and fire fighting techniques.</li> <li>All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.</li> <li>No open fires will be allowed on site unless in a demarcated area identified by the ECO.</li> <li>No smoking near flammable substance.</li> <li>All cooking shall be done in demarcated areas that are safe in terms of runaway or uncontrolled fires.</li> <li>The Contractor shall have operational fire-fighting equipment available on site at all times. The level of fire fighting equipment must be assessed and evaluated thorough a typical risk assessment process.</li> </ul>	LOW NEGATIVE

Sanitation and water	Failure to provide adequate onsite sanitation and clean drinking water may result in runoff transferring contaminants into the surrounding environment.	<u>Short Term</u>	Localised	Possible	Moderately Severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Adequate sanitary and ablutions facilities must be provided for construction workers</li> <li>The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.</li> <li>Contaminated wastewater must be managed by the Contractor to ensure existing water resources on the site are not contaminated. All wastewater from general activities in the camp shall be collected and removed from the site for appropriate disposal at a licensed commercial facility.</li> </ul>	LOW NEGATIVE
<b>WASTE MANAGEMENT</b>								
Building construction rubble	Construction rubble left onsite may attract vermin and encourage the growth of opportunistic alien vegetation.	<u>Short Term</u>	Localised	Possible	Slight	LOW NEGATIVE	<ul style="list-style-type: none"> <li>Construction rubble shall be disposed of in pre – agreed, demarcated spoil dumps that have been approved by Inxuba Yethemba Municipality.</li> </ul>	LOW NEGATIVE
Littering	Littering on site may attract vermin, detract from the visual appeal of the area, and pollute the surrounding areas.	<u>Short Term</u>	Localised	Possible	Slight	LOW NEGATIVE	<ul style="list-style-type: none"> <li>Littering by the employees of the Contractor shall not be allowed under any circumstances. The ECO shall monitor the neatness of the work sites as well as the Contractor campsite.</li> <li>All waste must be removed from the site and transported to the licenced landfill site in Queenstown.</li> </ul>	LOW NEGATIVE
Hazardous waste	Hazardous waste e.g. used oils, offcuts, etc., could pollute surface and groundwater resources if not properly contained.	<u>Short Term</u>	Localised	Possible	Moderately Severe	LOW NEGATIVE	<ul style="list-style-type: none"> <li>All waste hazardous materials must be carefully stored as advised by the ECO, and then disposed of offsite at the licensed hazardous landfill site in Port Elizabeth.</li> <li>Contaminants to be stored safely to avoid spillage</li> <li>Machinery must be properly maintained to keep oil leaks in check.</li> </ul>	LOW NEGATIVE
<b>TRAFFIC</b>								
Construction vehicles impacting on the traffic flow	High amount of construction vehicles will impact traffic flow.	<u>Short Term</u>	Localised	Definite	Moderately severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>A Traffic Management Plan must be implemented.</li> </ul>	LOW NEGATIVE
<b>SOCIAL</b>								
Job creation	Temporary job creation during the construction phase.	<u>Short Term</u>	Localised	Definite	Beneficial	BENEFICIAL	N/A	BENEFICIAL
<b>RIVERS &amp; STREAMS</b>								
Rivers/Streams impacted by proposed development	Potential negative impacts (eg. Bulldozers, rubble etc.) on the various rivers and streams crossing the N9.	<u>Short term</u>	Project level	definite	Moderately severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>Ensure that no construction rubble is left in these rivers and streams after completion of work..</li> <li>The river/stream must be returned to its natural state after construction.</li> <li>Assessment from a specialist is required after completion of the bridge upgrades and must be included in the final</li> </ul>	LOW NEGATIVE



							ECO report.	
<b>ROAD RE-ROUTING</b>								
Environmental damage to Wolwefontein Stream	Dumping construction rubble into or close to the Wolwefontein Stream may cause stream blockage, erosion, stream diversion etc.	<u>Short term</u>	Localised	Possible	Moderate Severe	MODERATE NEGATIVE	<ul style="list-style-type: none"> <li>No building rubble may be dumped into the Wolwefontein Stream.</li> </ul>	LOW NEGATIVE
<b>STORM WATER MANAGEMENT</b>								
Offsite contamination due to runoff	Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.	<u>Long Term</u>	Localised	Probable	Severe	HIGH NEGATIVE	<ul style="list-style-type: none"> <li>The site must be managed in a manner that prevents pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants.</li> <li>Temporary cut-off drains and berms may be required to capture storm water and promote infiltration.</li> <li>The area must be monitored by an ECO on a regular basis as described in the EMPr.</li> </ul>	LOW NEGATIVE
<b>QUARRY SITE</b>								
REFER TO THE MINING EMPr IN APPENDIX G								

**Table 3.3: Issues and Impacts during the Operation Phase: Pre- and post-mitigation assessment**

<b>OPERATIONAL PHASE</b>								
Nature of Impact	Impact Description	Pre mitigation					Post mitigation	Significance
		Temporal	Spatial	Likelihood	Severity	Significance	Mitigation	
<b>MAINTENANCE</b>								
Toxicants spilling from vehicles	Toxicants (such as heavy metals, hydrocarbons, surfactants and oils) spilled from vehicles may negatively impact the surrounding environment and biodiversity.	<u>Medium term</u>	Project level	Possible	Moderately severe	MODERATE NEGATIVE	No mitigation proposed.	MODERATE NEGATIVE
<b>QUARRY SITE</b>								
REFER TO THE MINING EMPr IN APPENDIX G								

**No-go alternative (compulsory)**

**NO-GO OPTION**

If the development does not proceed, none of the negative impacts identified will take place.

## SECTION E. RECOMMENDATIONS OF PRACTITIONER

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

YES	NO
YES	NO

Is an EMPr attached?

The EMPr must be attached as Appendix F.

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:

### **SUMMARY OF THE PROPOSED DEVELOPMENT**

The South African National Roads Agency (SANRAL) is proposing to upgrade the 27km section of National Road (N9) between Middelburg and Carlton Heights in the Eastern Cape Province. Arcus Gibb has been appointed by the SANRAL as the project managers who subcontracted Coastal & Environmental Services (CES) as Environmental Assessment Practitioner (EAP).

The proposed activity includes widening the existing road and reconstructing the road to provide the requisite level of service both in terms of geometrics and pavement structure, and reinforcing the existing pavement. The Flonkers "rail over road bridge" will be demolished and reconstructed and the road deviated to accommodate the new "rail over road bridge". A number of other "river crossing bridges" will be reconstructed, widened and rehabilitated. The road will not result in the widening of road reserve boundaries and should not intrude into private-owned land at any point.

In addition to the EIA process, a water use license application will be undertaken in accordance to the requirements of the National Water Act of 1998 (Act No. 36 of 1998) regulated by the Department of Water Affairs (DWA) for the upgrade and widening of 11 bridges within the road section.

A mining license application will also be submitted for an existing quarry site (called Wolwekop) in accordance with the regulations pertaining to the Minerals and Petroleum Resources Development Act (Act No.28 of 2002) regulated by the Department of Mineral Resources.

As this development entails the upgrade of existing infrastructure (road and bridges), the only alternative considered will be the "no development option".

It is mandatory to consider the no development (no-go) alternative in the EIA process. In context of this project it implies the consideration that the road upgrade will not take place.

The bridge over Ludlow Stream needs to be upgraded and widened to suit the new road alignment; however it is impossible to widen the bridge at the current angle which the stream runs below. SANRAL engineers have therefore suggested a realignment of the Ludlow Spruit as shown in Figure 1 below. There are two alternatives proposed. In the preferred alternative, the current spruit will be diverted to run parallel to the road to where it will cross at Tweefontein

Culvert 3 and re-join with the original Ludlow Spruit. A new bridge at Tweefontein culvert 3 will be build and the existing stream bed will be rehabilitated. The existing bridge will be demolished. The existing bridge will act as a river crossing for traffic until completion of the new bridge.



**Figure 1: Ludlow Spruit shown in blue with preferred alternative diversion of the spruit (L1) shown in black and alternative L2 shown in red.**

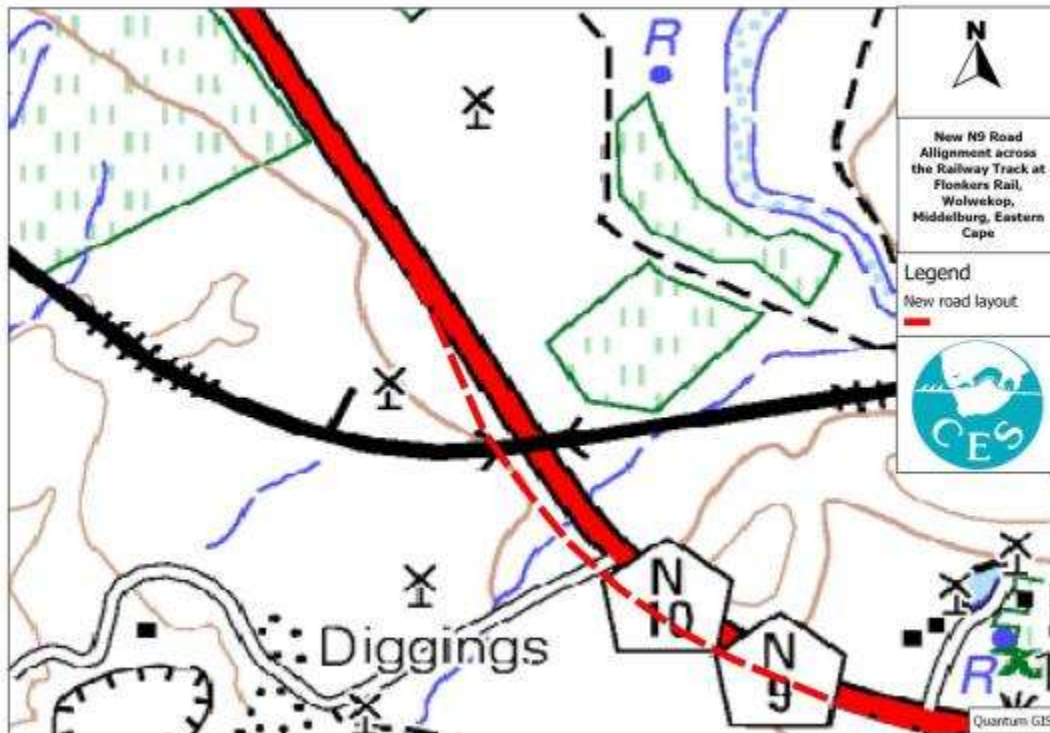
Alternative L2 will be diverting the Ludlow Stream to a new Bridge under the N9 (see Figure 1). The existing stream bed will be rehabilitated, and the existing bridge demolished. The existing bridge will act as a river crossing for traffic until completion of the new bridge.

The road will be re-aligned at two places namely Wolwekop pass and the Flonkers rail over road.

### Flonkers rail over bridge

The railway line runs parallel to the N9 at some places, but is still outside the road reserve and will not be impacted. The railway line crosses the N9 through a bridge over the road at Wolweko.

This bridge will be upgraded and possibly re-aligned to the new road layout.



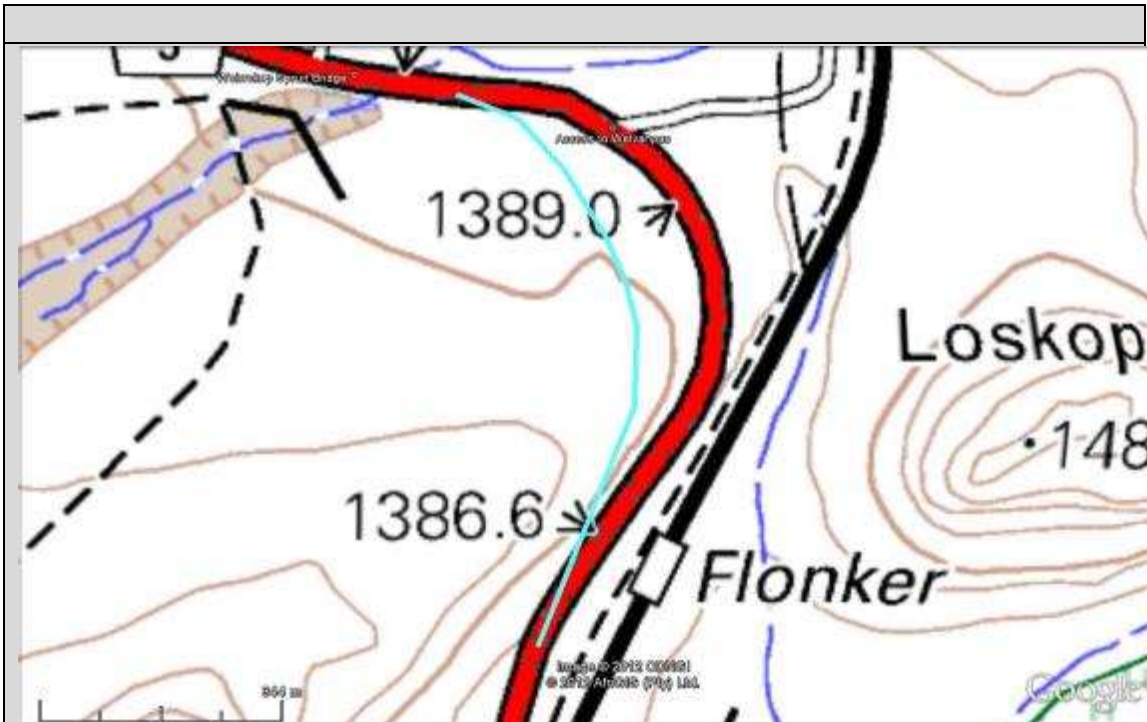
### New road alignment at the Flonkers Rail over Road bridge.

SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge.

The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

### Wolwekop pass

The curve of the road around Wolwekop will be re-aligned to allow for a less sharp and safer curve of the road. All extra rock and sediment from this road cutting will be used as road fill for the rest of the project area.



The light-blue line represents the new road alignment around the Wolwekop pass.

#### Biophysical environment

Vegetation types found in the area includes Eastern Upper Karoo vegetation and Tarkastad Montane Scrubland). Over 95% of the affected and surrounding area makes up Eastern Upper Karoo vegetation that consists of gently sloping plains dominated by dwarf microphyllous scrubs and 'white' grasses of the genera *Aristata* and *Eragrostis*. Tarkastad Montane Scrubland is found on ridges and hills characterised by high surface rock cover. The vegetation is low, semi-open mixed scrubland with grasses and dwarf scrubs. Both vegetation types are considered Least Threatened by SANBI.

#### Conservation status

According to ECBCP, two different CBA's were identified in the study site. The largest section of the study area, including the proposed Wolwekop quarry site falls under CBA 3, classifying it as functional landscape. Recommended land use management involves managing this area for sustainable development. This involves keeping all natural habitats intact in wetlands (including wetland buffers) and riparian zones.

The area around the town of Middelburg classifies as transformed landscape, classifying it as 'towns & settlements' (CBA 4). Recommended land use management involves managing the environment for sustainable development.

#### SUMMARY OF SIGNIFICANT IMPACTS (all impacts that are High pre-mitigation)

The proposed development will result in a number of impacts, both positive and negative, during the Planning and Design, Construction and Operation Phases (see table below). The phase with the highest number of impacts is the construction phase; however these impacts are not rated as significant. The following table provides a summary of the pre-mitigation impacts that were ranked as **HIGH**.

<b>PLANNING &amp; DESIGN PHASE</b>						
<b>Impacts</b>			<b>Significance pre-mitigation</b>	<b>Significance post-mitigation</b>		
<b>BRIDGE DESIGN</b>						
<b>Impacting various Streams &amp; Rivers along the road upgrade</b> – Upgrading and widening of bridges over rivers may result in water flow problems such as hampering flow or bank erosion.			HIGH NEGATIVE	MODERATE NEGATIVE		
<b>Deviating stream flow</b> – Widening of the bridge over Ludlow stream will result in permanently deviating stream flow.			HIGH NEGATIVE	MODERATE NEGATIVE		
<b>SOCIAL</b>						
<b>Job creation during the proposed development's lifespan.</b> – Temporary job creation and skills development.			HIGH POSITIVE	HIGH POSITIVE		
<b>CONSTRUCTION PHASE</b>						
<b>Impacts</b>			<b>Significance pre-mitigation</b>	<b>Significance post-mitigation</b>		
<b>HAZARDOUS SUBSTANCE STORAGE &amp; USAGE</b>						
<b>Site contamination due to spillage of hazardous substances</b> – Spillage of any hazardous substances such as fuel, chemicals, paint, etc. that can contaminate ground and groundwater.			HIGH NEGATIVE	LOW NEGATIVE		
<b>STORM WATER MANAGEMENT</b>						
<b>Offsite contamination due to runoff.</b> – Runoff of stormwater containing contaminants, silt, sand and litter may contaminate the surrounding environment.			HIGH NEGATIVE	LOW NEGATIVE		
<b>Summary of impact assessment significance, pre- and post-mitigation</b>						
	<b>PRE-MITIGATION</b>			<b>POST-MITIGATION</b>		
	<b>LOW</b>	<b>MODERATE</b>	<b>HIGH</b>	<b>LOW</b>	<b>MODERATE</b>	<b>HIGH</b>
<b>Planning and Design</b>	3	7	1	11	0	0
<b>Construction</b>	4	10	2	16	0	0
<b>Operation</b>	0	1	1	0	1	0
<b>TOTAL</b>	7	18	4	27	1	0

## **CONSIDERATION OF ALTERNATIVES**

The following alternatives were assessed as part of the Basic Assessment:

- No-Go or no development option.
- Alternative L1 (preferred alternative) for the re-alignment of the Ludlow stream
- Alternative L2 for the re-alignment of the Ludlow stream

## **OPINION OF THE EAP**

Coastal and Environmental Services (the EAP) hereby provides the following opinion concerning the proposed rehabilitation of the N9 between Middelburg and Carlton Heights.

**It is the opinion of Coastal and Environmental Service that NO FATAL FLAWS are associated with the proposed rehabilitation of the N9 and that all impacts can be adequately mitigated to reduce the risk or significance of impacts to an acceptable level.**

Most of the road upgrade takes place within the existing road reserve. The only section falling outside the road reserve is the road deviation and alteration of the Flonkers “rail over road” bridge. Here SANRAL is proposing the decommissioning and subsequent removal of the existing Flonkers Bridge, and the construction of a new upgraded bridge allowing for the proposed road widening, at a new site next to the existing bridge.

The main reason for this alteration is current height clearance problems coinciding with a major storm water drainage problem. Deepening the existing Flonkers Bridge to solve the current height problem, will only enhance the current drainage problem as this section is already lying in a low lying area that does not allow storm water to flow away from the road. The only viable solution is to build a new bridge underneath the railway line in a higher lying area slightly to the west.

Upgrading and widening all the bridges crossing various rivers and streams are a high impact activity as all these structures are situated within these rivers and streams. CES believes that effective planning; mitigation and monitoring (during the construction and operation phases) will result in significantly smaller impacts on these rivers and streams.

Both the Rossmead “road bridge” and the Rossmead “rail crossing bridge” will also be improved with a service/replacement of all joint seals and new wearing course. These 2 bridges does not cross any rivers/streams, thus the impact will be very low.

The bridge over Ludlow Stream will to be upgraded and widened to suit the new road alignment; however it is impossible to widen the bridge at the current angle which the stream runs below. Two alternatives are proposed namely L1 and L2. CES does not object to any of the two alternatives as we (CES) believes that effective planning; mitigation and monitoring (during the construction and operation phases) will result in significantly smaller impacts on these rivers and streams. CES do recommend that a Water Use Authorisation be obtained for this re-alignment of the Ludlow stream before any construction commences.

The proposed Wolwekop quarry is an existing quarry site that is currently not in use. The quarry is filled with storm water, and will need to be pumped out before quarrying commences. Mitigation of this process is discussed in the mining EMPr attached in Appendix G.

All the existing rest areas found in the study site will be improved to SANRAL standards. These sites are all within the existing road reserve and should not impact the natural environment.

All intersections along the study site (namely the R56 loop, Municipal road in Middelburg, access to the Agricultural College, gravel road intersections, Welvanpas Guest House Access road and the Sherborne farm Access road) will be improved to appropriate standards.

Additionally, the Municipal road access, the R56 loop, and the Agricultural College access will be improved with tapers, acceleration/deceleration lanes, and exclusive turns. The access road to Sherborne farm will also be moved to a safer access as this is currently a "blind" turn access.

It is the opinion of CES that this Basic Assessment Report contains sufficient information to allow DEA to make an informed decision. CES therefore recommends that the application for Authorisation should be approved on condition **that the recommended mitigation measures stated herein are effectively implemented.**

## **MITIGATION MEASURES**

### **Design And Planning Phase**

#### **POLICY COMPLIANCE**

- Development should coincide with relevant legislation and/or policy, e.g. ECBCP, Municipal By-laws, SDFs, etc.

#### **STORMWATER**

- Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.
- Flood attenuation and storm water management plans must be drawn up by a qualified engineer and approved by DEA and DWA.

#### **ROAD DESIGN**

- Ensure that there is proper drainage of surface water away from the new road and that it does not cause any erosion.
- Ensure that the new road is more than 32m from the Wolwekop stream.

#### **BRIDGE DESIGN**

- Ensure that the bridge design does not impede the flow of water or cause erosion in these rivers/streams.
- Ensure there is proper drainage of stormwater away from these bridges.
- Ensure that the new course layout does not cause major erosion or structural damage to the bridge or road infrastructure

#### **HERITAGE**

- The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.
- The site will need to be sampled if affected, and SANRAL will need to apply for a permit to destroy or damage these sites.



- Modifying, or destroying and rebuilding these bridges in any manner requires a SAHRA Built Environment permit.

#### PALAEONTOLOGY

- A Phase 1 paleontological survey should be undertaken to identify possible fossil sites, and mitigated accordingly.

#### TRAFFIC

- A Traffic Impact Assessment is required.

#### WASTE MANAGEMENT

- Ensure that a proper Waste Management Plan is designed and implemented.

#### **Construction Phase**

#### AIR POLLUTION

- Cleared surfaces must be dampened whenever possible and especially in dry and windy conditions to avoid excessive dust generation.
- Any soil excavated, and not utilised for rehabilitation, must be removed from site or covered and no large mounds of soil should be left behind after construction.

#### NOISE POLLUTION

- Construction activity close to Middelburg, which includes the movement of construction vehicles, must be restricted to normal working hours (7:00am – 17:00pm).

#### VISUAL

- Limited mitigation to contain the impact of auxiliary activities such as clearance of vegetation, road construction and control of waste and littering on camp sites.

#### HAZARDOUS SUBSTANCE STORAGE & USAGE

- Concrete should not be mixed directly on the ground, or during rainfall events when the potential for transport to the stormwater system is the greatest (as per the EMPPr).
- Concrete must be mixed only in the area demarcated for this purpose and on an impermeable substratum.
- Oil trays must be placed under the machinery to avoid soil contamination. All areas affected during the Construction Phase should be rehabilitated
- Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practise must be adhered to. This applies to solvents and other chemicals possibly used in the construction process.
- Depending on the nature and extent of the spill, contaminated soil must be either excavated or treated on-site.
- The ECO must determine the precise method of treatment of polluted soil.
- This could involve the application of soil absorbent materials or oil-digestive powders to the contaminated soil.
- If a spill occurs on an impermeable surface such as cement or concrete, the surface spill must be contained using oil absorbent materials.
- Contaminated remediation materials must be carefully removed from the area of the spill so as to prevent further release of petrochemicals to the environment, and stored in adequate containers until appropriate disposal.

- The individual responsible for or who discovers the petrochemical spill must report the incident to the Project Coordinator, ECO and or Contractor as soon as reasonably possible.
- The problem must be assessed and the necessary actions required will be undertaken.
- The immediate response must be to contain the spill.
- Staff that will be handling hazardous materials must be trained to do so.
- Hazardous Chemical Substances Regulations promulgated in terms of the Occupational Health and Safety Act 85 of 1993 and the SABS Code of Practice must be adhered to. This applies to solvents and other chemicals possibly used in the construction time.
- All hazardous chemicals must be properly stored in a secure, banded and contained area.

#### WORKER HEALTH AND SAFETY

- Fire fighting equipment should be present on site at all times as per Occupational Health and Safety Act.
- All construction foremen must be trained in fire hazard control and fire fighting techniques.
- All flammable substances must be stored in dry areas which do not pose an ignition risk to the said substances.
- No open fires will be allowed on site unless in a demarcated area identified by the ECO.
- No smoking near flammable substance.
- All cooking shall be done in demarcated areas that are safe in terms of runaway or uncontrolled fires.
- The Contractor shall have operational fire-fighting equipment available on site at all times. The level of fire fighting equipment must be assessed and evaluated through a typical risk assessment process.
- Adequate sanitary and ablutions facilities must be provided for construction workers.
- The facilities must be regularly serviced to reduce the risk of surface or groundwater pollution.
- Contaminated wastewater must be managed by the Contractor to ensure existing water resources on the site are not contaminated. All wastewater from general activities in the camp shall be collected and removed from the site for appropriate disposal at a licensed commercial facility.

#### WASTE MANAGEMENT

- Construction rubble shall be disposed of in pre – agreed, demarcated spoil dumps that have been approved by Inxuba Yethemba Municipality.
- Littering by the employees of the Contractor shall not be allowed under any circumstances.
- The ECO shall monitor the neatness of the work sites as well as the Contractor campsite.
- All waste must be removed from the site and transported to the licenced landfill site in Queenstown.
- All waste hazardous materials must be carefully stored as advised by the ECO, and then disposed of offsite at the licensed hazardous landfill site in Port Elizabeth.
- Contaminants to be stored safely to avoid spillage.
- Machinery must be properly maintained to keep oil leaks in check.

#### TRAFFIC

- A Traffic Management Plan must be implemented.

#### RIVERS & STREAMS

- Ensure that no construction rubble is left in these rivers and streams after completion of work.
- The river/stream must be returned to its natural state after construction.

- Assessment from a specialist is required after completion of the bridge upgrades and must be included in the final ECO report.

#### ROAD RE-ROUTING

- No building rubble may be dumped into the Wolwefontein Stream.

#### STORM WATER MANAGEMENT

- The site must be managed in a manner that prevents pollution of drains, downstream watercourses or groundwater, due to suspended solids, silt or chemical pollutants.
- Temporary cut-off drains and berms may be required to capture storm water and promote infiltration.
- The area must be monitored by an ECO on a regular basis as described in the EMPr.

#### **Operational Phase**

#### MAINTENANCE

- No mitigation proposed.

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## **SECTION F: APPENDICES**

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

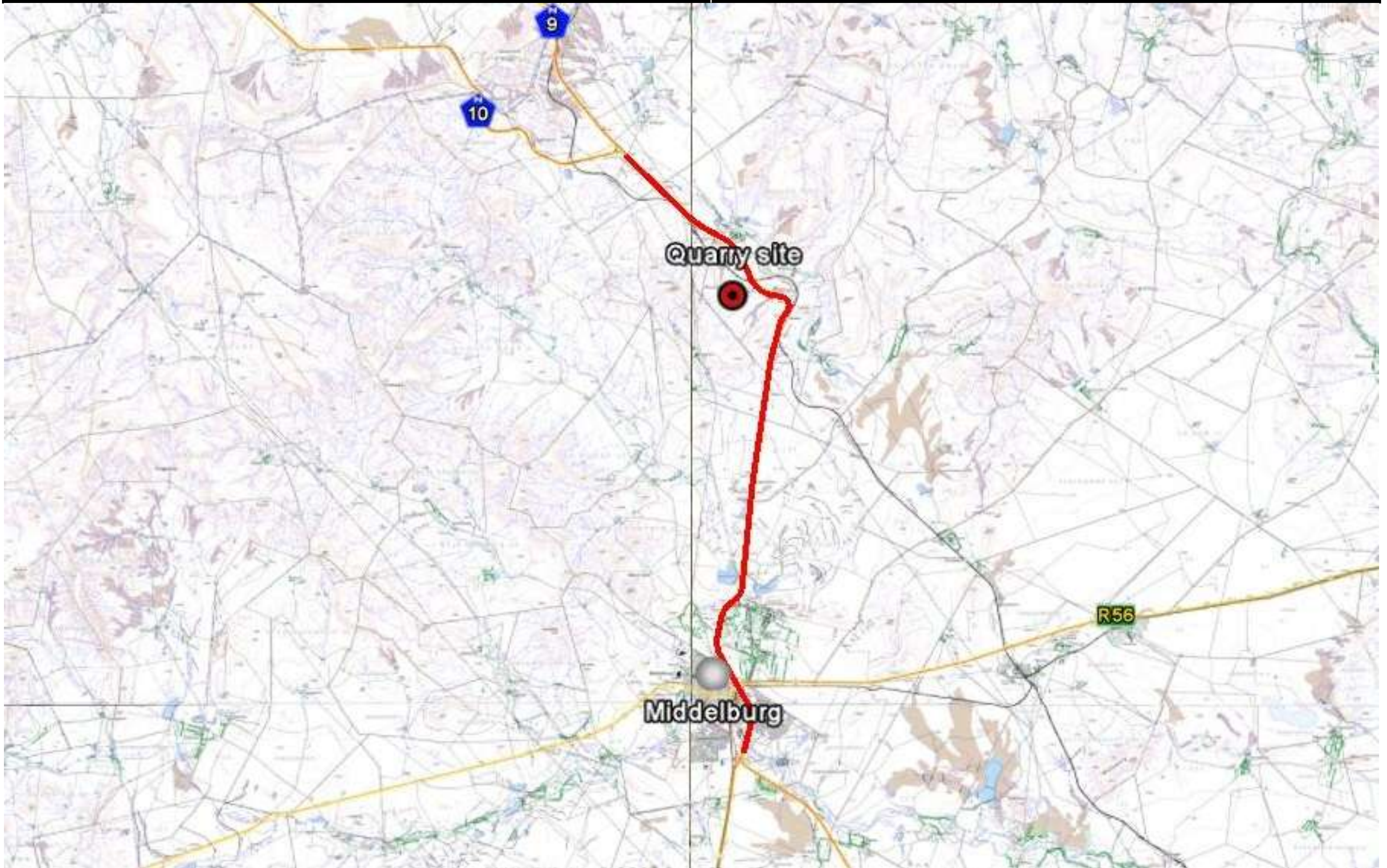
Appendix E: Comments and responses report

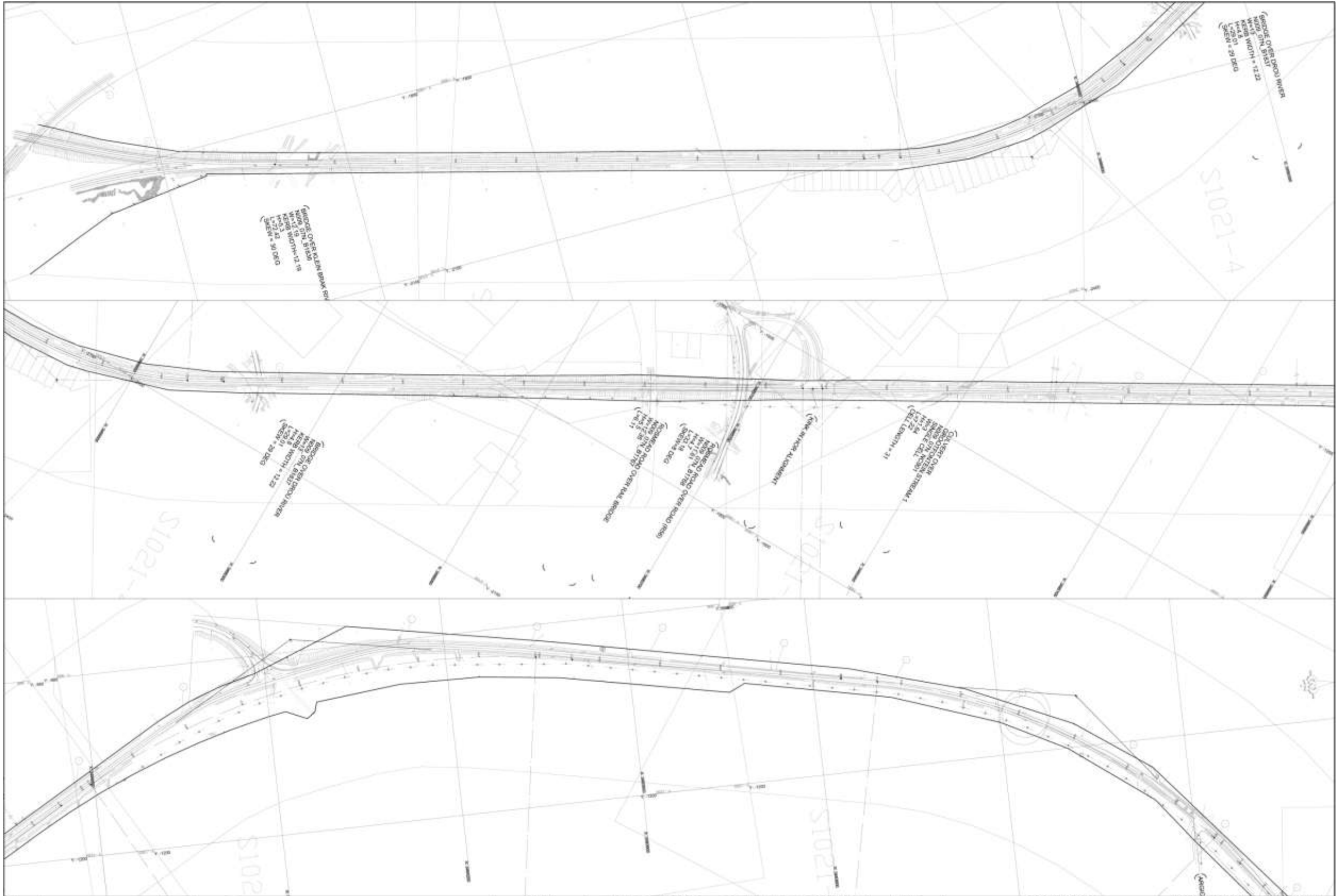
Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information

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Appendix A  
Site map





NO.	DATE	REVISION	BY	CHKD	APPD



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 8 Pearce Street  
 Birch  
 East London  
 5241  
 PO Box 1904  
 Tloene 5214  
 South Africa  
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DESIGNED BY	DATE	SCALE

**GENERAL APPROVAL**  
 NAME:    
 NO:    
 DATE:  

**HEAD OFFICE**  
 1254 Park Street  
 Midrand Pretoria  
 2003  
 PO Box 410  
 Pretoria 2000  
 South Africa  
 Tel: (011) 424 8080



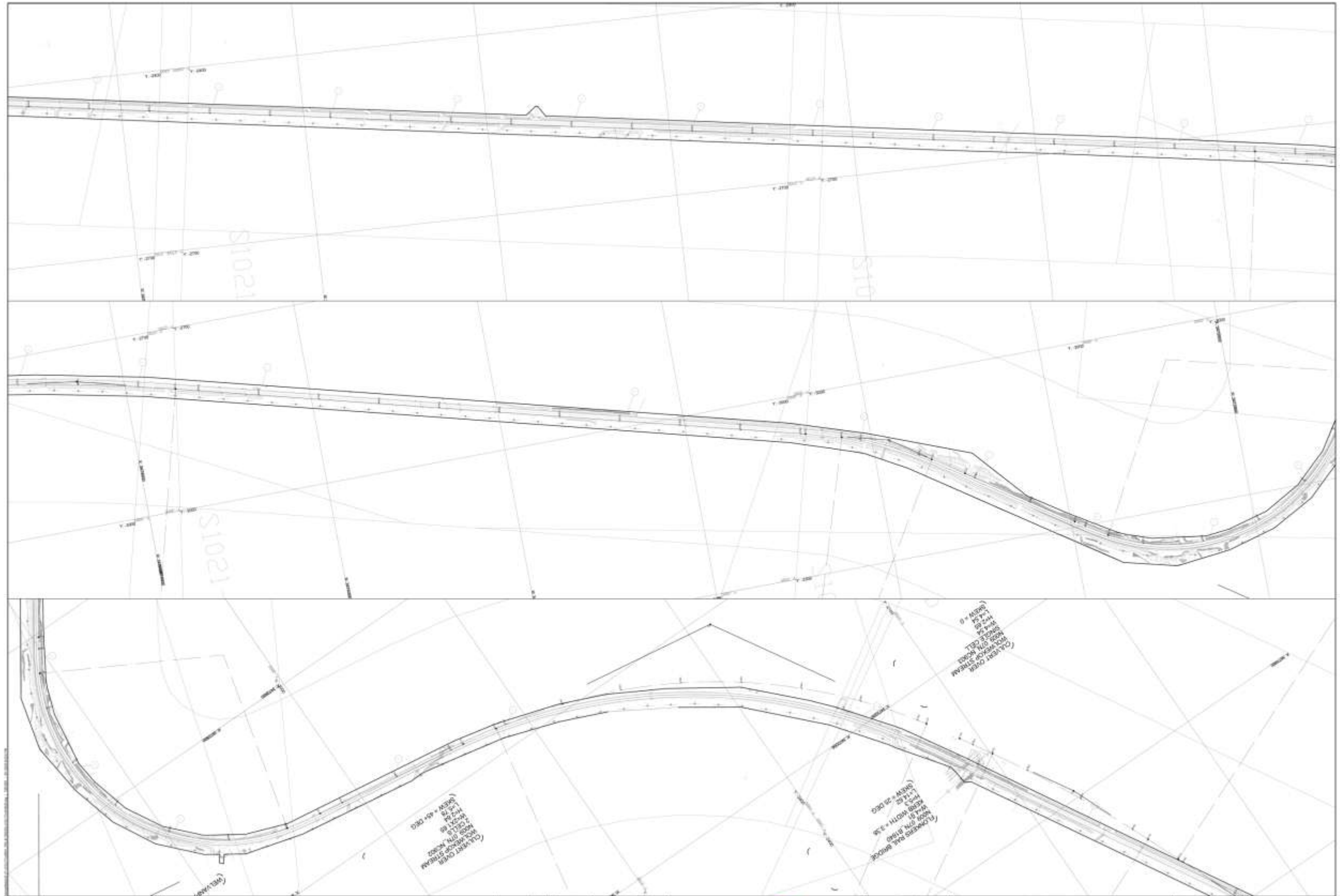
**SOUTHERN REGION**  
 19A Heuer  
 Southern Life Gardens  
 72 2nd Avenue  
 Hendon Park  
 Pretoria 0001  
 PO Box 2728  
 Greenfield  
 0051  
 Tel: (041) 280 2208

**NOTES**  
 THIS ACCEPTANCE IS FOR INFORMATIONAL AND ADMINISTRATIVE PURPOSES ONLY AND DOES NOT ATTRACT LEGAL LIABILITY OR LIABILITY OF ANY KIND FROM THE ROAD AGENCY OR THE ROAD USER.

PROJECT DESCRIPTION
THE REHABILITATION OF NATIONAL ROUTE 8, SECTIONS BETWEEN MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 28.8)
DESCRIPTION
PROPOSED HORIZONTAL ALIGNMENT

PROJECT NUMBER	START	END
NRA 0008-070-20001		
DRAWING LOCATION DATA		
ROUTE	7	7
SECTION		
DRAWING km DISTANCE		
DRAWING TYPE	ROADS - LAYOUT PLANS	
BRIDGE/STRUCTURE NO.		
CONSULTANT DRAWING NO.	PD 230177/LP 001	
SARVAL DOC #		





NO.	DATE	REVISION	BY



**EAST LONDON OFFICE**  
 5 Pearce Street  
 Bayside  
 East London  
 6041  
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 Terence 5214  
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 Tel: (041) 708 3888

NAME	IS FOUR

**HEAD OFFICE**  
 1204 Park Street  
 Halfway Pretoria  
 0081  
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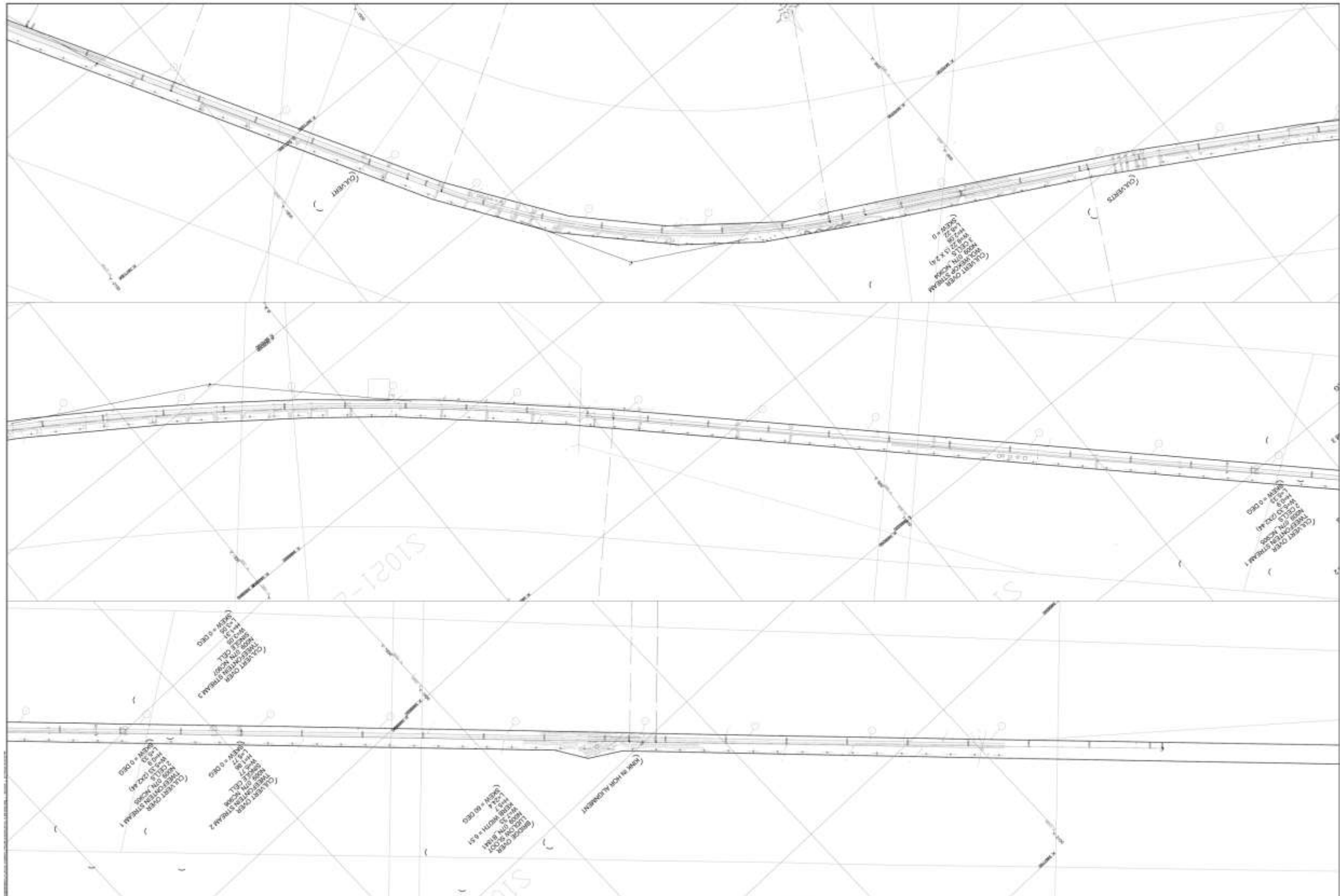
**SOUTHERN REGION**  
 MRA House  
 Southern Life Gardens  
 15 2nd Avenue  
 Sandton Park  
 Port Elizabeth  
 6045  
 PO Box 27208  
 Greenacres  
 6057  
 Tel: (041) 386 3200

**NOTES**  
 1. THIS ACCEPTANCE IS FOR PROCEDURAL AND COMPLIANCE PURPOSES ONLY AND DOES NOT REPRESENT AN ENDORSEMENT OF THE PROJECT OR THE CONSULTANT'S WORK.

**PROJECT DESCRIPTION**  
 THE REHABILITATION OF NATIONAL ROUTE 8, SECTIONS BETWEEN MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 28.0)  
**DESCRIPTION**  
 PROPOSED HORIZONTAL ALIGNMENT

PROJECT NUMBER	NRA N009-070-2005/1	
DRAWING LOCATION DATA	START	END
ROUTE	N009	N009
SECTION	7	7
DRAWING km DISTANCE	NA	NA
DRAWING TYPE	ROADS - LAYOUT PLANS	
BRIDGE/STRUCTURE NO.	NA	
CONSULTANT DRAWING NO.	PD	J01171 LP 001
SARRAL DOC #		





NO.	DATE	REVISION	BY



**EAST LONDON OFFICE**  
 3 Plover Street  
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**DESIGNED BY**  
 NAME: S. TOLP  
 Prof. Reg. No.  

**CHECKED BY**  
 NAME: S. TOLP  
 Prof. Reg. No.  

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 Durban  
 4001  
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 Newton Park  
 Port Elizabeth  
 6008  
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 Grahamstown  
 6067  
 Tel: (041) 306 3268

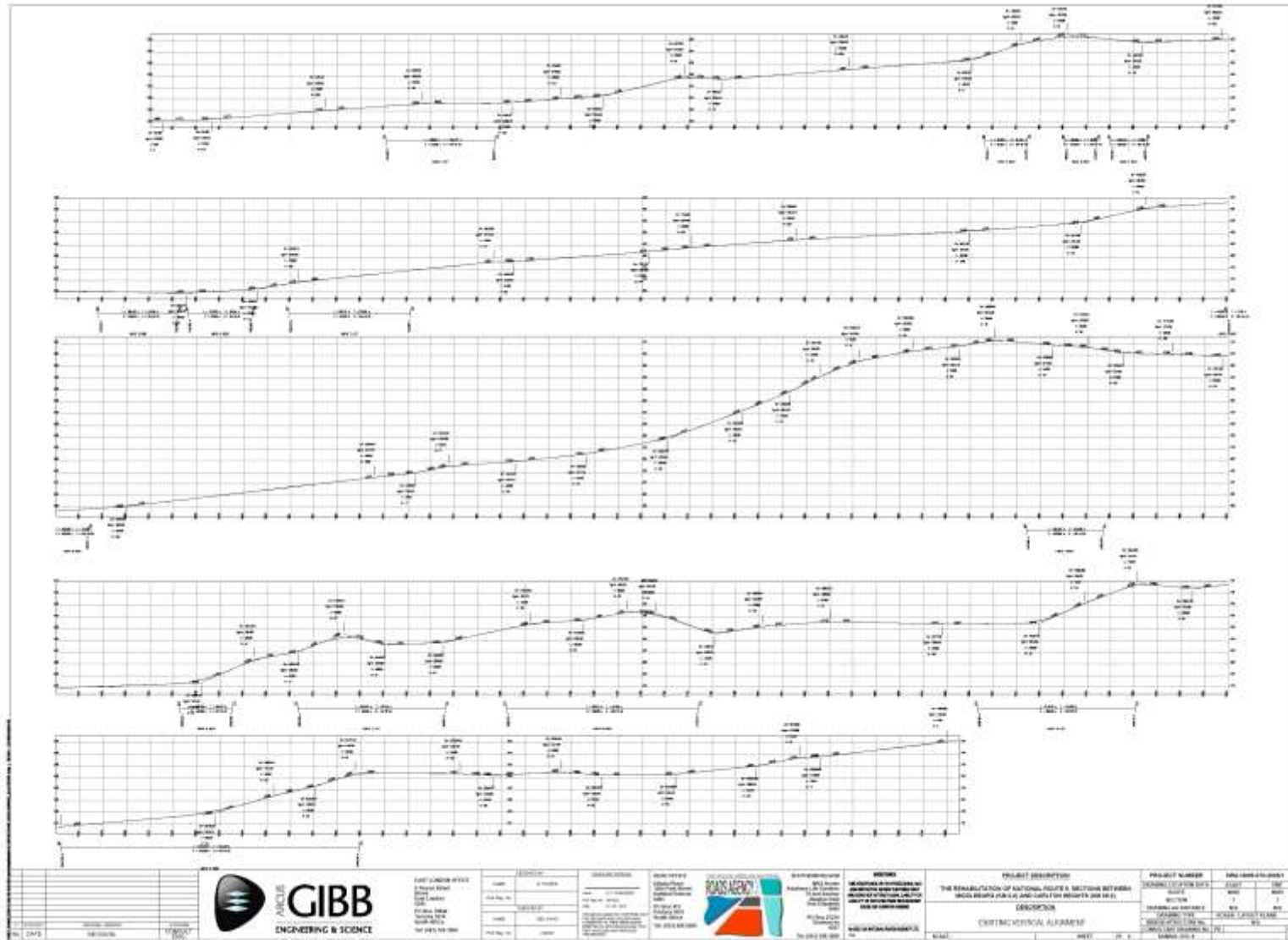
**NOTES**  
 THE ACCEPTANCE OF THIS PROVISION AND  
 ADMINISTRATION BY SANRAL IS SUBJECT TO THE  
 TERMS AND CONDITIONS OF THE CONTRACT AND  
 IS NOT TO BE CONSIDERED AN ENDORSEMENT  
 OR GUARANTEE BY SANRAL.

**PROJECT DESCRIPTION**  
 THE REHABILITATION OF NATIONAL ROUTE 8, SECTIONS BETWEEN  
 MIDDLEBURG (KM 0.0) AND CARLTON HEIGHTS (KM 29.0)

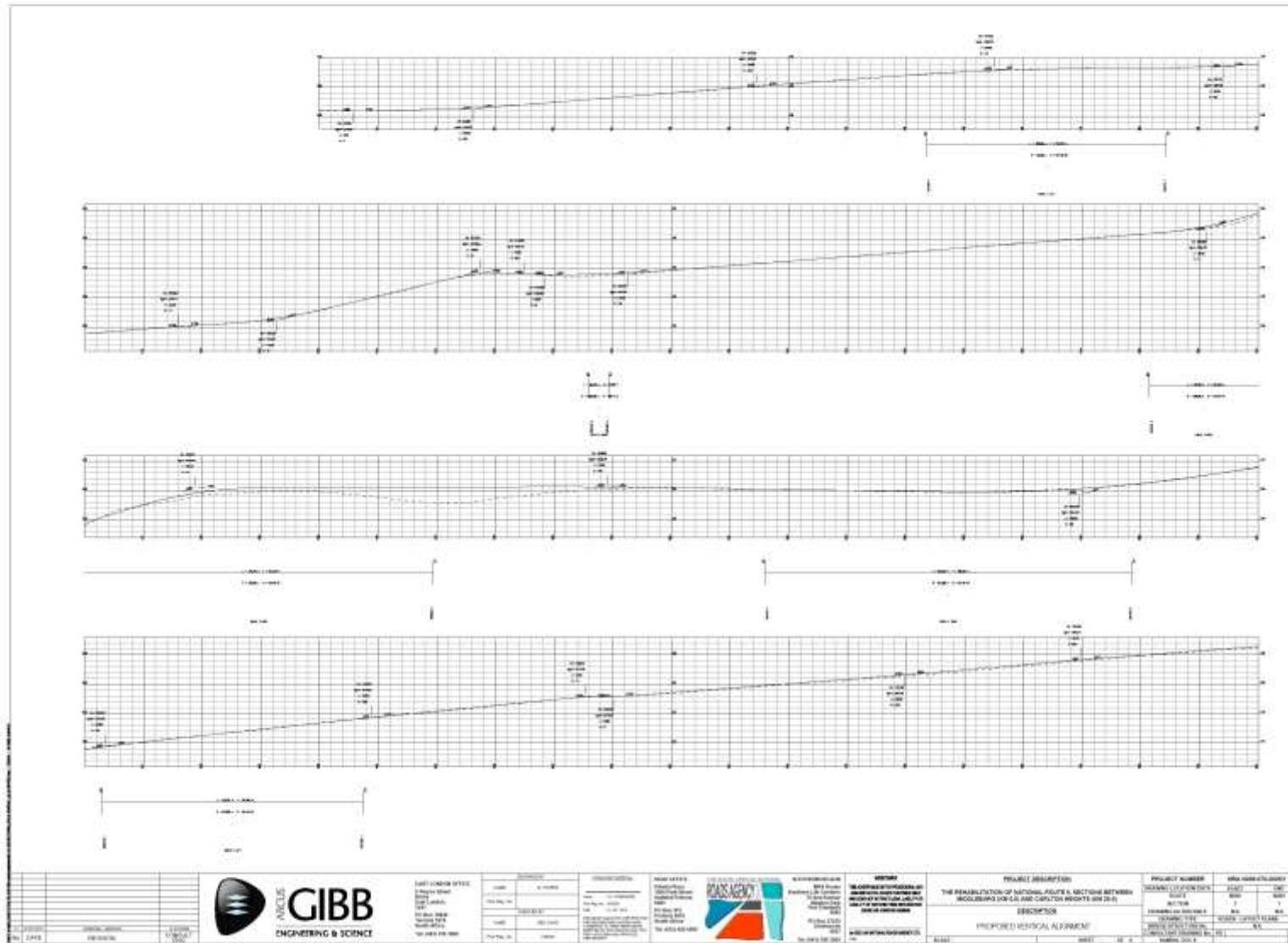
**DESCRIPTION**  
 PROPOSED HORIZONTAL ALIGNMENT

SCALE: 1:2000 SHEET 1 OF 4

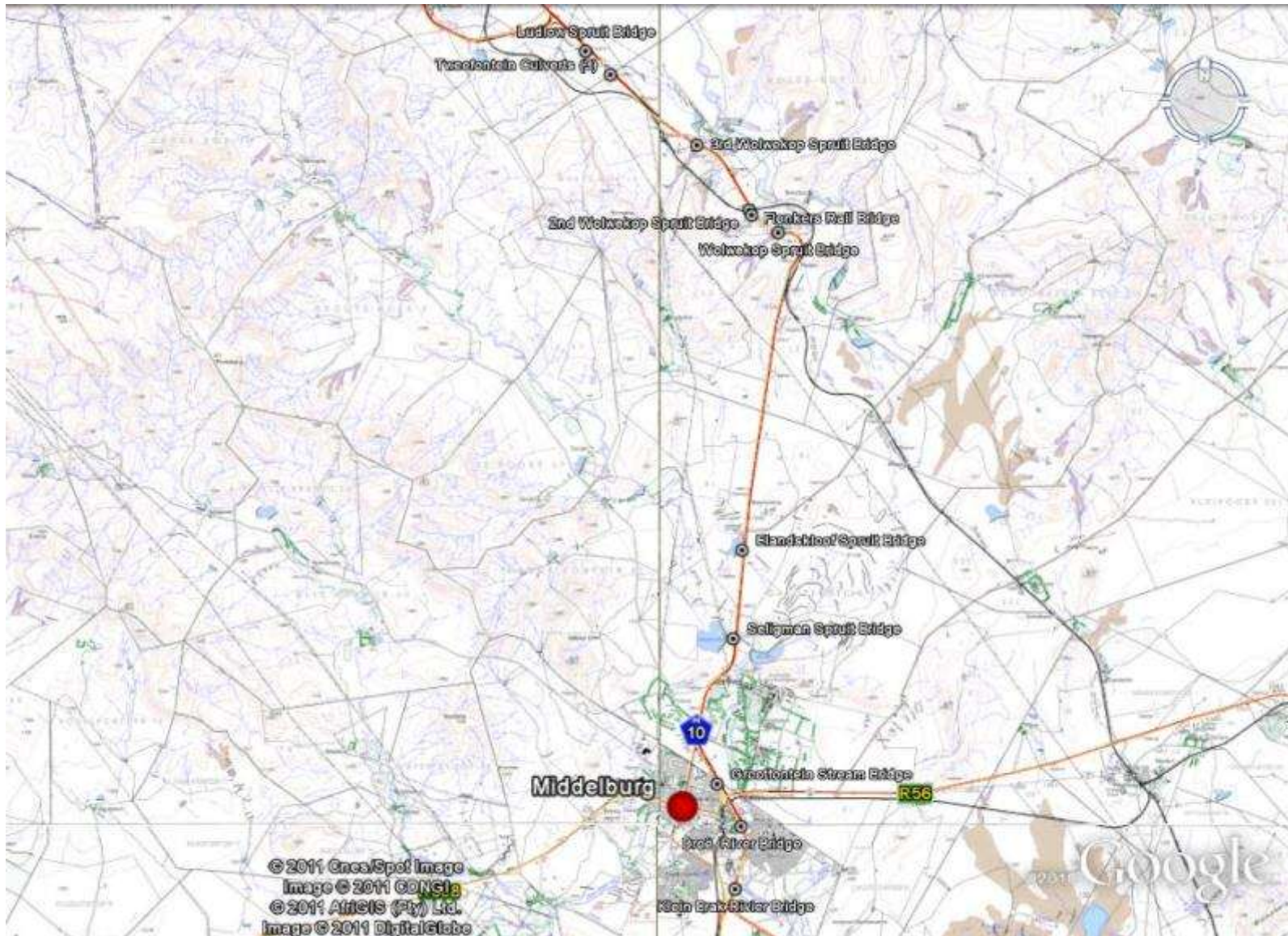
PROJECT NUMBER		NRA M09-070-2005/1	
<b>DRAWING LOCATION DATA</b>		START	END
ROUTE	7	NR8	7
SECTION			
DRAWING NO. DISTANCE	N/A	N/A	N/A
DRAWING TYPE	ROADS - LAYOUT PLANS		
BRIDGE STRUCTURE NO.	N/A		
CONSULTANT DRAWING NO.	PD 1 J18171 LP 001		
SANRAL DOC #			



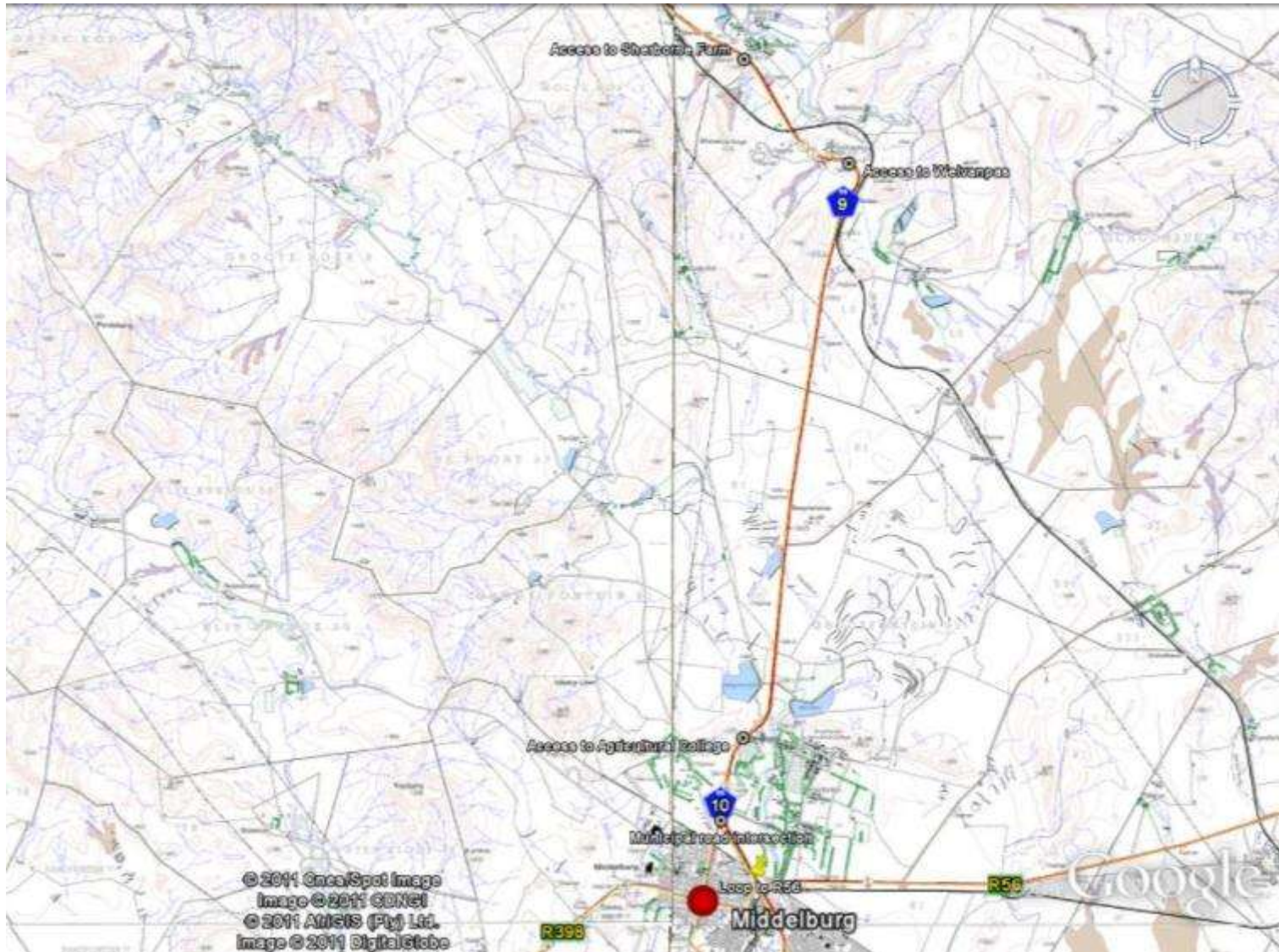
A-1: The vertical alignment of the N9 Road upgrade before construction.



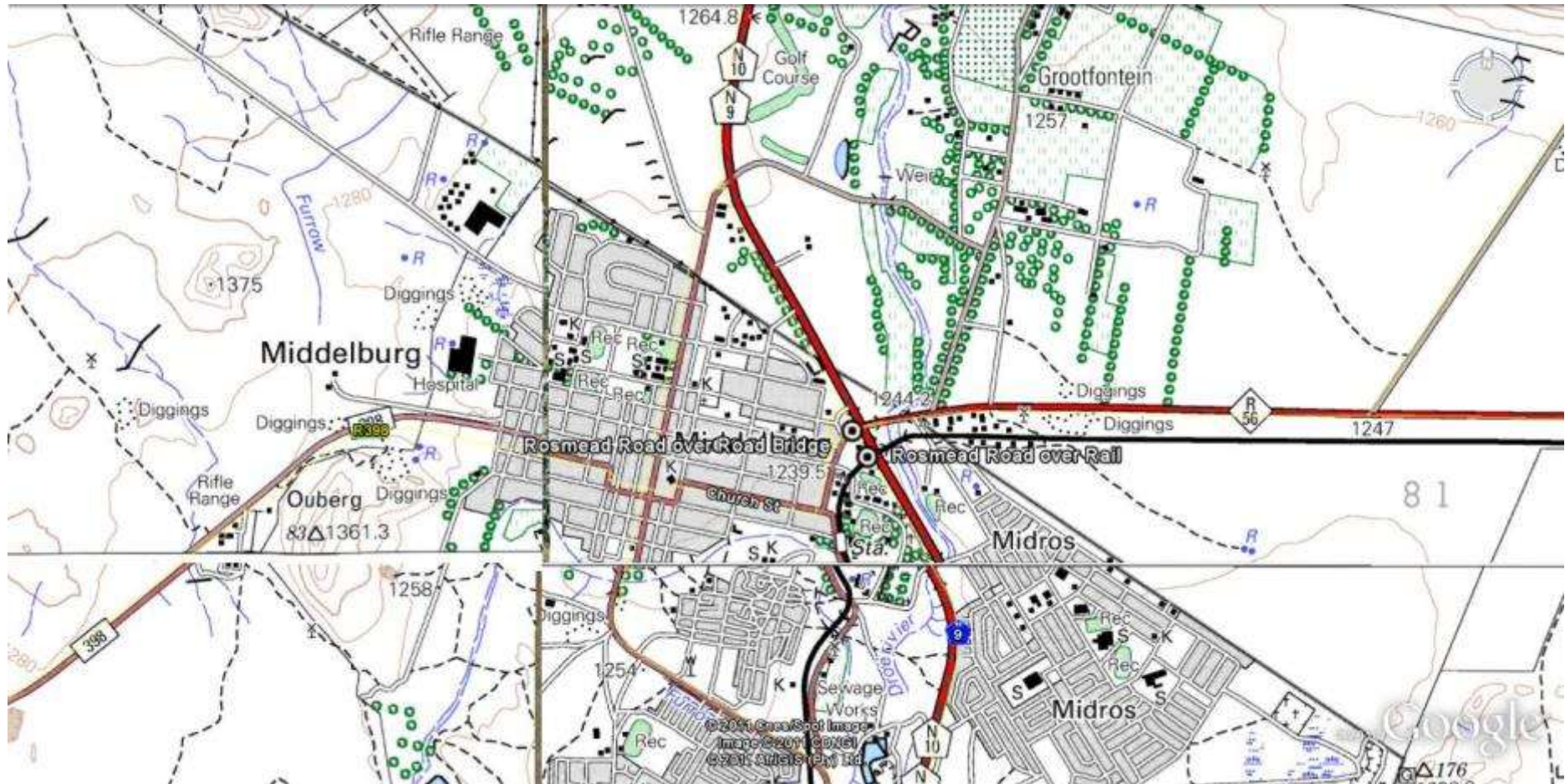
A-2: Showing the proposed vertical alignment of the N9 Road upgrade after construction.



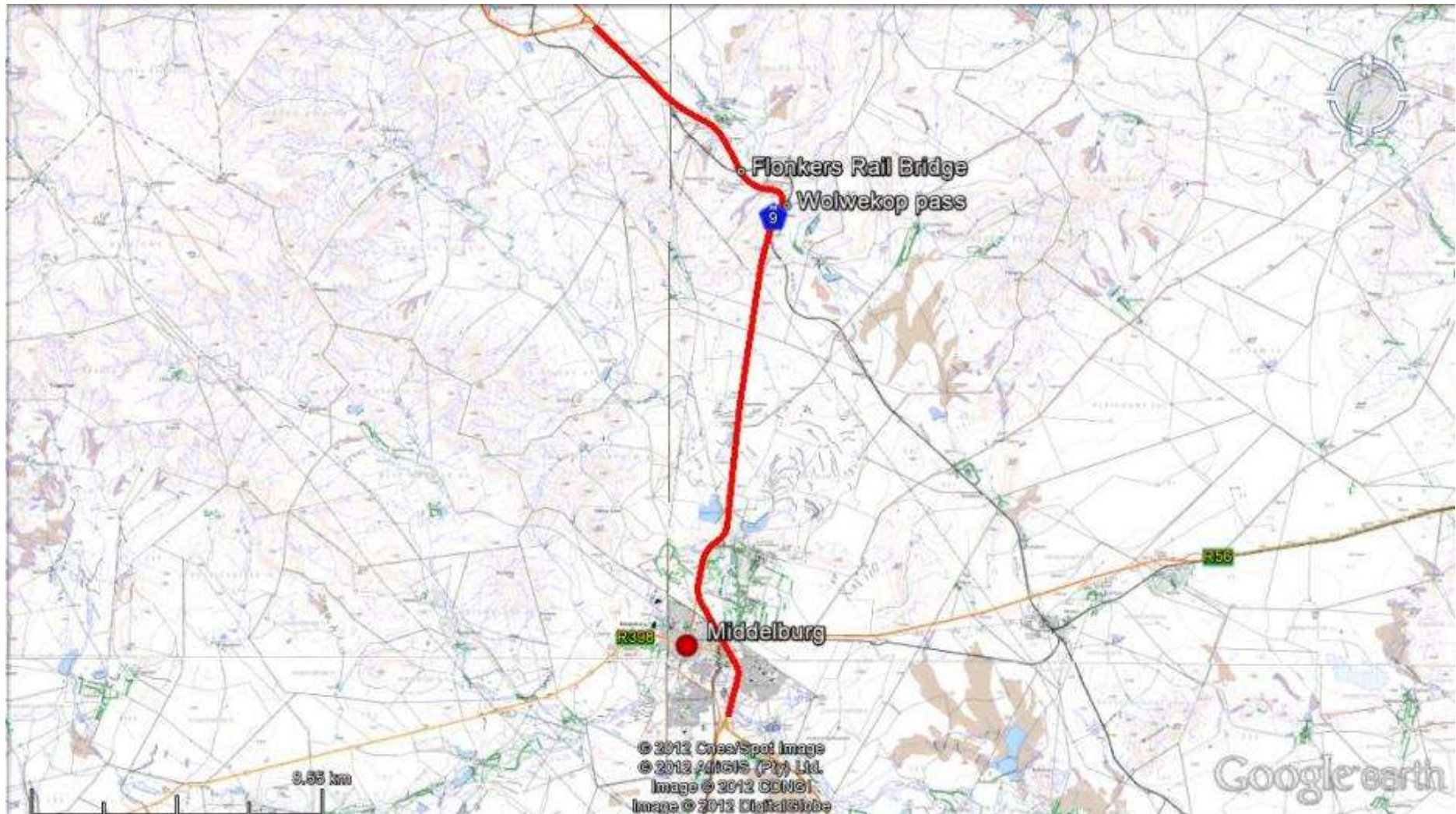
A-3: Locations of the different bridges within the study site.



**A-4: Location of the different intersections that will be upgraded within the study site.**



A-5: Location of the Rosmead road and rail bridges that will be improved in Middelburg.



A-6: Location of the two road re-alignments along the route.

Appendix B  
Site photographs

Photographs were taken every few kilometers from the starting point in Middelburg.









	
<p>Photo 1: Starting point in Middelburg showing the Klein Brak River bridge.</p>	<p>Photo 2: the N9 through Middelburg. The road reserve is clearly seen devoid of vegetation other than dry grass.</p>
	
<p>Photo 3: 4km from the starting point.</p>	<p>Photo 4: 10km from starting point.</p>
	
<p>Photo 5: showing the road twisting before Wolwekop, 10km north of Middelburg.</p>	<p>Photo 6: Flonkers rail over road bridge that will be replaced with a new bridge to the left.</p>
	
<p>Photo 7: Access to the Wolwekop quarry.</p>	<p>Photo 8: The existing Wolwekop quarry which is filled with surface water.</p>





Photo 9: the final section of road before carlton Heights.



Photo 10: The endpoint of the proposed road upgrade.

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Photographs of all the bridges proposed for upgrading (Bridge locations are shown in Figure A-3 above):



**Klein Brak River bridge:** Upgrading involves a new wearing course, service/replace joint seals, and replacing balustrades with standard SANRAL detail.



**Droë River bridge:** Upgrading involves a new wearing course, service/replace joint seals, and replacing balustrades with standard SANRAL detail.



**Grootfontein Stream:** Widen/replace culvert to suit new cross section. Capacity improvements.



**Seligman Spruit bridge:** Widen/replace the existing bridge to suit new road alignment and cross section.



**Elandskloof Spruit bridge:** Widen/replace the existing bridge to suit new road alignment and cross section.



**Wolwekop Stream bridge:** Widen/replace the existing bridge to suit new road alignment and cross section. Capacity improvements.



**2<sup>nd</sup> Wolwekop Spruit bridge:** Replace with a new culvert.



**3<sup>rd</sup> Wilwekop Spruit bridge:** Widen/replace the existing bridge to suit new road alignment and cross section. Capacity improvements.



**Ludlow Stream bridge:** Widen/replace the existing bridge to suite new road alignment and cross section. 2 possible permanent stream deviation alternatives proposed.

GPS Co-ordinates of the River Crossings:

<b>River crossings</b>	<b>GPS Co-ordinates</b>	
1. Droe River Bridge	S 31° 30.006"	E 26° 01.264"
2. Klein Brak River Bridge	S 31° 30.800"	E 25° 01.178"
3. Culvert over Grootfontein Stream	S 31° 29.464"	E 25° 00.905"
4. Bridge over Elandskloof Spruit	S 31° 26.508"	E 25° 01.274"
5. Bridge over Seligman Spruit	S 31° 27.627"	E 25° 01.145"
6. Culvert1 over Tweefontein Stream	S 31° 20.569"	E 24° 59.366"
7. Culvert1 over Tweefontein Stream	S 31° 20.540"	E 24° 59.331"
8. Culvert1 over Tweefontein Stream	S 31° 20.524"	E 24° 59.312"
9. Culvert 1 over Wolwekop Stream	S 31° 22.500"	E 25° 01.795"
10. Culvert 2 over Wolwekop Stream	S 31° 22.288"	E 25° 01.393"
11. Culvert 3 over Wolwekop Stream	S 31° 21.403"	E 25° 00.587"
12. Ludlow Stream Bridge	S 31° 20.214"	E 24° 58.949"

**Appendix G**  
**Other information**

## **BACKGROUND INFORMATION DOCUMENT & INVITATION TO COMMENT: Proposed rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights, Eastern Cape.**

### **AIM OF THIS DOCUMENT**

The aim of this Background Information Document is to provide people affected by and interested in the proposed project with information about this project, the process being followed and to provide them with an opportunity to be involved in the EIA process.

Interested and Affected Parties (I&APs) may raise issues of concern. These will be examined and included in the Reports.

The findings of the EIA will be provided to DEA (Provincial, East London) for final decision making, as to whether or not the project should go ahead and if so under what conditions.

**Return address for comments:**

**Roy de Kock**  
1 Hampton Court  
2 Marine Terrace  
P.O Box 8145  
Nahoon, 5210

**Tel: (043) 742 3302**

**Fax: (043) 742 3306**

**Email:**

**[r.dekock@cesnet.co.za](mailto:r.dekock@cesnet.co.za)**

**Your involvement in this process is critical, and will help ensure that all relevant issues are raised and assessed in the EIA process**



### **BACKGROUND**

SANRAL (South African National Roads Agency Ltd) is proposing the rehabilitation of Section 7 on the N9 National Road between Middelburg and Carlton Heights.

### **PROJECT DESCRIPTION**

Notice is hereby given in terms of Regulation 54(2) published in Government Notice No. R543 under Chapter 5 of the National Environmental Management Act (Act 107 of 1998) (NEMA), of the intent to submit an application for an Environmental Impact Assessment (EIA) to the Department of Environmental Affairs (DEA). The process will also include a Water Use License application as regulated by the National Water Act (Act No. 36 of 1998), and a quarry mining license as regulated by the Minerals and Petroleum Resources Development Act (Act No. 28 of 2002).

Coastal & Environmental Services has been commissioned to undertake the Environmental Impact Assessment. You are hereby invited to register as an Interested & Affected Party (I&AP). Please submit your name, contact information and any comments to the contact person below within 30 days.

### **RELEVANT LEGISLATION**

The Government Notice R.543 in terms of the National Environmental Management Act (Act No 107 of 1998) identifies activities in terms of 24(2) (a) and (d) which may not commence without an authorisation from the competent authority Department of Environmental Affairs (DEA). In order to apply for authorisation for the investigation, assessment and communication of potential impacts of the activities must follow the procedure as described in regulations 27 to 36 of the Environmental Impact Assessment Regulations, (2010), promulgated in terms of section 24(5) of the Act.

The proposed project is subject to a **Basic Impact Assessment** in terms of the following listed activities:

GN R 544: 11 (iii)	The construction of... bridges, where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, where such expansion will result in an increased development footprint but excluding where such expansion will occur behind the setback line.
GN R 544: 39 (iii)	The expansion of... bridges, where such construction occurs within a watercourse or within 32 meters of a watercourse, measured from the edge of a watercourse, excluding where such a construction will occur behind the setback line
GN R 544: 47 (i & ii)	The widening of a road by more than 6 meters, or the lengthening of a road by more than 1 kilometre- (i) Where the existing reserve is wider than 13.5 meters (ii) Where no reserve exists, where the existing road is wider than 8 meters.

A Heritage Impact will be conducted as part of the Basic Assessment Report to identify any sensitive impacted heritage areas and recommend possible mitigation.

### **HOW CAN YOU BE INVOLVED?**

A Public Participation Process (PPP) is being conducted as part of the environmental process. The aim of the PPP is to allow everyone who is interested in, or likely to be affected by the proposed development to provide input into the process.

The Public Participation Process will include:

- Advertisement in the local newspaper
- Notice board on site
- Circulation of the BID (this document) to all identified I&APs
- Comments period
- Review of the report by all registered I&APs and DEA (National)
- A public meeting

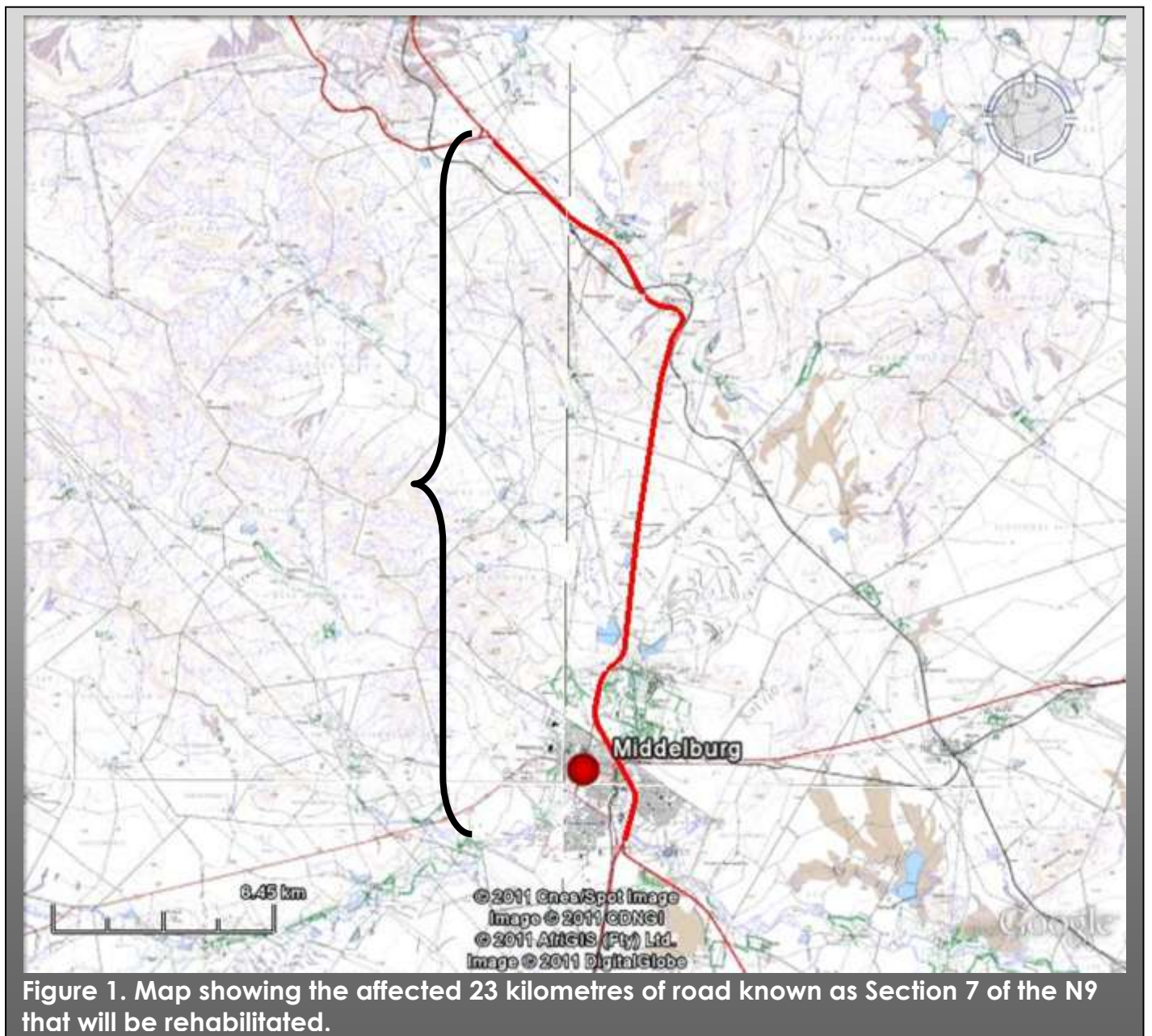
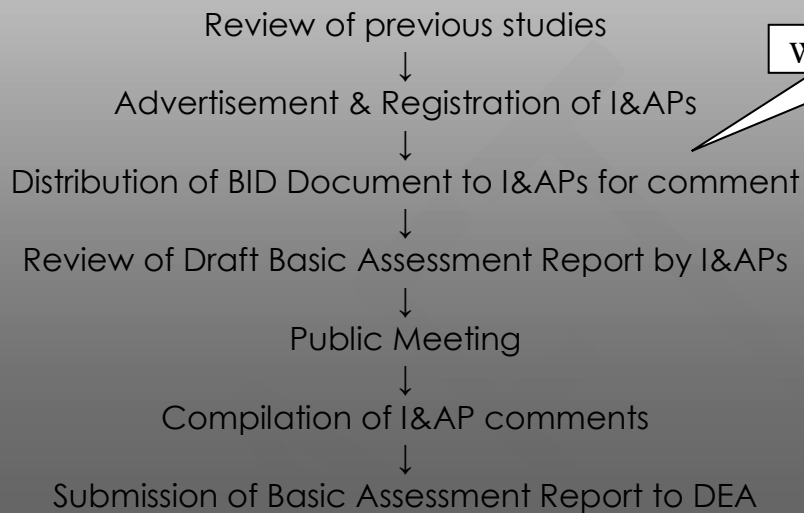


Figure 1. Map showing the affected 23 kilometres of road known as Section 7 of the N9 that will be rehabilitated.

## APPROACH TO THIS BASIC ASSESSMENT REPORT

The process required for the proposed project is a Basic Environmental Assessment. This process serves primarily to inform the public and relevant authorities about the proposed project and to determine any impacts. Should all impacts and issues be adequately addressed in the report, it will serve as the final document. However, if not, the process will proceed into the next stage which is a full Environmental Impact Assessment.

### Basic Assessment Process



DRAFT





## 2. e-mail:



## I&AP database:

Organisation/association	Name/contact person	Address	e-mail	Tel	Fax	cell
<b>Identified Stakeholders</b>						
DWA	Landile Jack (WQM)		<a href="mailto:jackl@dwa.gov.za">jackl@dwa.gov.za</a>	(043) 748 5340		082 887 6458
	Lizna Fourie (Licensing & WMA 12)		<a href="mailto:FourieL4@dwa.gov.za">FourieL4@dwa.gov.za</a>			
	Mgxwati Lungiswa (WMA 15)		<a href="mailto:MgxwatiL@dwa.gov.za">MgxwatiL@dwa.gov.za</a>			
SAHRA	M Galimberti		<a href="mailto:mgalimberti@sahra.org.za">mgalimberti@sahra.org.za</a>			
Municipal Manager (IYM)	Mr Mzwandile Sydney Tantsi	PO Box 24, CRADOCK, 5880		(048) 801 5000	048 881 1421	
Dept of Public Works	Mr Johan van der Walt	Private Bag X3913, Port Elizabeth, 6056	<a href="mailto:johan.vanderwalt@dpw.gov.za">johan.vanderwalt@dpw.gov.za</a>	041 408 2003	041 484 4226	
DEDEA	Mr M Makosonke	PO Box 9636 Queenstown, 5320	<a href="mailto:mncedisi.makosonke@deaet.ecape.gov.za">mncedisi.makosonke@deaet.ecape.gov.za</a>			
<b>Surrounding Landowners</b>						
F12/3, F12/5	John Moore (Wolwekop)	PO Box 441 Middelburg		049 842 3011		
F12/11	Gerhard Beets (Ebenhaeser)	PO Box 542 Middelburg				
Beskuitfontein trust	B.P. ERASMUS (Pieter)	P.O. BOX 62 Middelburg 5900	<a href="mailto:bpe@intekom.co.za">bpe@intekom.co.za</a>	049842 2017	049842 2017	0825587178
Peet Hough Family Trust	F12/2					
RSA	F81/0					
<b>I&amp;AP's</b>						
African Crane Conservation Programme, Endangered Wildlife Trust	Bradley Gibbons	P O Box 40, Middelburg, Eastern Cape, 5899	<a href="mailto:bradleyg@ewt.org.za">bradleyg@ewt.org.za</a>			