



PROPOSED N2 WILD COAST TOLL HIGHWAY

DRAFT SCOPING REPORT

Prepared for:

National Department of Environmental Affairs and Tourism,
Eastern Cape Department of Economic Affairs, Environment and Tourism, and
KwaZulu-Natal Department of Agriculture and Environmental Affairs

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LIST OF ABBREVIATIONS

ABET	Adult Basic Education and Training
ADT	Average Daily Traffic
BAFOs	Best and Final Offers
BAP	Biodiversity Action Plan
B:C	Benefit:Cost Ratio
BID	Background Information Document
BOT	Build-Operate-Transfer
BSAP	Biodiversity Strategy and Action Plan
CBD	Central Business District
CCA	CCA Environmental (Pty) Ltd
CPI	Consumer Price Index
DAEA	KwaZulu-Natal Provincial Department of Agriculture and Environmental Affairs
DBSA	Development Bank of Southern Africa
DEAET	Eastern Cape Provincial Department of Economic Affairs, Environment and Tourism
DEAT	Department of Environmental Affairs and Tourism
DM	District Municipality
DME	Department of Minerals and Energy Affairs
DSR	Draft Scoping Report
EC	Eastern Cape
ECA	Environment Conservation Act (Act No. 73 of 1989), as amended
EIA	Environmental Impact Assessment
EIR	Environmental Impact Report
EMP	Environmental Management Plan
FSR	Final Scoping Report
GCS	Groundwater Consulting Services
GDP	Gross Domestic Product
GGP	Gross Geographic Product
HDI	Historically Disadvantaged Individual
I&AP	Interested and Affected Party
IDP	Integrated Development Plan
IEM	Integrated Environmental Management
IRR	Internal Rate of Return
IUCN	World Conservation Union
KZN	KwaZulu-Natal
LM	Local Municipality
LOS	Level of Service
MPRDA	Minerals and Petroleum Resources Development Act (Act No. 28 of 2002)
MRC	Mineral Resource Commodities
N2WCC	N2 Wild Coast Consortium
NEMA	National Environmental Management Act (Act No. 107 of 1998), as amended
NHRA	National Heritage Resources Act
NMA	Nomi Muthialu & Associates (Pty) Ltd
NPV	Net Present Value
PCE	Pondoland Centre of Endemism
PV	Present Value
RoD	Record of Decision
SA RDB	South African Red Data Book
SAHRA	South African Heritage Resources Agency
SANRAL	South African National Roads Agency Limited
SAPS	South African Police Services
SDI	Spatial Development Initiative
SDF	Spatial Development Framework

SEA	Strategic Environmental Assessment
SED	Socio-Economic Development
SMMEs	Small, Medium and Micro Enterprises
TEM	TransWorld Energy and Mineral Resources (S.A.) Pty Ltd
UDM	Ugu District Municipality
UNDP-GEF	United Nations Development Programme's Global Environment Facility
VOC	Vehicle Operating Cost
WCSDF	Wild Coast Spatial Development Framework

EXECUTIVE SUMMARY

1. INTRODUCTION

This Executive Summary of the Draft Scoping Report (DSR) incorporates the main findings of the Scoping Study undertaken of the proposed N2 Wild Coast Toll Highway. The proposed project would extend over a total distance of approximately 560 km between the N2 Gonubie Interchange (near East London in the Eastern Cape) and the N2 Isipingo Interchange (south of Durban in KwaZulu-Natal) (see Figure 1).

1.1 BACKGROUND TO THE STUDY

A previous environmental Record of Decision (RoD), issued on 3 December 2003, authorised the South African National Roads Agency Limited (SANRAL) to undertake the proposed N2 Wild Coast Toll Highway, but numerous appeals were subsequently lodged with the Minister of Environmental Affairs and Tourism objecting to the authorisation granted to SANRAL.

On 9 December 2004 the Minister upheld the appeals and set aside the authorisation on the grounds that the appointed environmental consultant did not meet the requirement for independence as contemplated in the EIA Regulations (as amended). The Minister's decision also indicated that this did not preclude a new application for environmental authorisation from being submitted, as the authorisation was not set aside on environmental grounds.

Following a proposal call by SANRAL in January 2005, SANRAL subsequently appointed CCA Environmental (Pty) Ltd (CCA), in association with Nomi Muthialu & Associates (Pty) Ltd (NMA), as independent environmental consultant to submit a new application for environmental authorisation and to undertake the required EIA of the proposed project.

1.2 TERMS OF REFERENCE FOR THE CURRENT EIA

The terms of reference for the current EIA include the following:

- To undertake a thorough review of the previous EIA process in order to identify appropriate and/or adequate information suitable for use in the current EIA;
- To undertake a comprehensive audit of all the issues and concerns raised during the previous EIA's Scoping Study, Impact Assessment and Appeals phases in order to identify key shortcomings and/or gaps that need to be addressed in the current EIA;
- To formulate Terms of Reference for specialist studies in order to update existing, appropriate information and/or to address identified shortcomings and/or gaps;
- To include a formal public consultation process in the study, which specifically addresses the distribution of information to I&APs, provision of opportunities for I&APs to raise any new issues and concerns and provision of opportunities for I&APs to comment on the new EIA documentation; and
- To ensure the study complies with the relevant requirements of the key legislation for EIA, namely the Environment Conservation Act, 1989 (Act No. 73 of 1989; ECA) and the National Environmental Management Act, 1998 (Act No. 107 of 1998; NEMA).

1.3 LEGISLATIVE REQUIREMENTS

1.3.1 ENVIRONMENT CONSERVATION ACT, 1989 (ACT NO. 73 OF 1989)

Section 21 of the Environment Conservation Act, 1989 (No. 73 of 1989) (ECA) provides for the control of identified activities that may have a substantial detrimental effect on the environment. These activities are listed in Government Notice R1182 of 5 September 1997 (Schedule 1), as amended. Listed activities applicable to the proposed project (or particular stretches of the route) include the following:

- The construction, erection or upgrading of roads and associated structures (1d);
- With regard to any substance which is dangerous or hazardous and is controlled by national legislation – storage and handling facilities for any such substance [storage and handling of diesel and oil during construction, if required] (1cii);
- The change of land use from agricultural or zoned undetermined use or an equivalent zoning to any other land use (2c);
- The reclamation of land, including wetlands, below the high-water mark of the sea, and in inland waters (7); and
- Scheduled processes listed in the Second Schedule to the Atmospheric Pollution Prevention Act, 1965 (No. 45 of 1965) (9).

The ECA prohibits such activities until written authorisation is obtained from the Minister or his delegated authority. Such authorisation, which may be granted subject to conditions, will only be considered once there has been compliance with Government Notice R1183 of 5 September 1997 (the “EIA Regulations”), as amended.

1.3.2 NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT NO. 107 OF 1998)

Section 2 of the National Environmental Management Act, 1998 (No.107 of 1998; NEMA), as amended, sets out a range of environmental principles that are to be applied by all organs of state when taking decisions that significantly affect the environment. Included amongst the key principles is that all development must be socially, economically and environmentally sustainable and that environmental management must place people and their needs at the forefront of its concern, and serve their physical, psychological, developmental, cultural and social interests equitably. NEMA also provides for the participation of I&APs and stipulates that decisions must take into account the interests, needs and values of all I&APs.

Chapter 5 of NEMA, as amended, outlines the general objectives and implementation of Integrated Environmental Management (IEM). IEM provides a framework for the integration of environmental issues into the planning, design, decision-making and implementation of plans and development proposals. Section 24(4) provides the minimum requirements for procedures for the investigation, assessment and communication of the potential impact of activities.

1.4 ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations apply to the Scoping Study:

- It has been assumed that the description of the proposed project and the technical information on potential alternatives, provided by SANRAL, is accurate;
- SANRAL has indicated that the proposed upgrades may be amended as a result of public input, time delays, the economics of the proposed project, specific requirements from the road authorities, and during the tender process;
- This Scoping Study does not include the description and scoping of potential borrow pits or rock quarries. If required, SANRAL shall ensure that the Preferred Bidder undertake the relevant studies

and obtain the necessary permits in terms of the Mineral and Petroleum Resources Development Act, No. 28 of 2002;

- The identification and description of spoil areas are not included in this study. It is envisaged that this information would be presented as part of the next phase of the EIA; and
- The public consultation process undertaken as part of the previous EIA process is deemed to be sufficient and adequate to not require a repeat of the initial public interaction normally associated with the commencement of a Scoping Study. Further credence to this view is provided in the original RoD issued by DEAT, which states that “the public participation process followed as part of the EIA process conformed to the requirements of the regulations” (Item 8.3).

2. SCOPING STUDY APPROACH

The Scoping Study is informed, to a large degree, by the availability of existing information resulting from the previous EIA of the proposed project. The previous EIA process included an extensive public consultation process, undertaken by independent public consultation consultants in conformance with the requirements of the EIA Regulations. The database of I&APs who received information and were invited to comment on the proposed project stood at approximately 3 500 upon completion of the previous EIA. The proposed project was also widely advertised and featured prominently in local media coverage. Existing information indicates that a total of 340 meetings were held during the previous EIA and that the coverage and range of organisations and sectors canvassed were comprehensive.

2.1 SCOPING PROCESS AND PUBLIC CONSULTATION ACTIVITIES

The following activities have been undertaken to date as part of the Scoping Study process:

- Pre-application meeting on 15 April 2005 with the environmental authorities regarding the proposed project and proposed approach to the EIA;
- Submission of relevant Application for Authorisation forms and a Plan of Study for Scoping (29 April 2005) to the national Department of Environmental Affairs and Tourism (DEAT; the lead environmental authority), Eastern Cape Department of Economic Affairs, Environment and Tourism and KwaZulu-Natal Department of Agriculture and Environmental Affairs. DEAT accepted the Plan of Study for Scoping on 20 June 2005;
- Desk-top audit of issues and concerns raised during previous EIA process and Appeals period;
- Review of previous reports, specialist studies and public consultation process undertaken as part of the previous EIA process;
- Field trips through the study area during May and October 2005;
- Compilation of a list of I&APs (including everyone on the previous EIA database). The database currently consists of about 3 700 I&APs;
- Compilation and distribution of a Background Information Document (BID) to I&APs on the project database. The BID invited I&APs to submit comment on the proposed new EIA process. It was indicated that comments on the proposed project would only be sought on distribution of the DSR. The BID was made available in English, Afrikaans, isiZulu and isiXhosa;
- Public announcement of the new application and EIA process by way of adverts placed in 17 national, regional and local newspapers. The advertisements also announced the availability of the BID and the opportunity to comment on the proposed new EIA process during the three-week comment period. I&APs were invited to register, request a copy of the BID and/or submit comments to NMA;
- Presentations on the EIA process to local authorities;
- Comparative analysis (screening) of alternatives (with specialist botanical, social and economic input);
- Compilation of a Comments and Responses Report on the BID; and
- Compilation and distribution of this DSR for review and comment.

3. GENERAL PROJECT INFORMATION

3.1 LEGISLATIVE FRAMEWORK FOR TOLLING OF NATIONAL ROADS

3.1.1 SOUTH AFRICAN NATIONAL ROADS AGENCY LIMITED AND NATIONAL ROADS ACT, 1998 (ACT NO. 7 OF 1998)

In addition to outlining the governance, staffing, functions, powers, responsibilities and financing of SANRAL, the above Act gives official policies on the declaration, tolling, use and protection of national roads. The following are of relevance to this project:

- The Minister of Transport may declare any existing road or any route, to be a national road. This will be done on the recommendation of SANRAL and with the agreement of the Premier of the province/s in question (Section 40 of the above Act);
- Land required for road building purposes either outside an existing road reserve or within a new road reserve may be acquired on a “willing seller willing buyer” principle in terms of the above Act. Only the Minister of Transport can expropriate land where it is shown that such land is reasonably required (Section 41 of the above Act);
- SANRAL may, with the Minister’s approval, declare any specified national road or portion thereof as a toll road (Section 27 of the above Act);
- SANRAL may authorise, for a fixed period of time, any person to finance, plan, design, construct, maintain or rehabilitate a national road or portions thereof and to operate, manage and control it as a toll road for this purpose (Section 28 of the above Act);
- The Minister, on the recommendation of SANRAL, determines any increase or reduction to the toll tariff charged on a toll road;
- SANRAL may grant exemption from the payment of a toll to certain users or categories of vehicles; and
- SANRAL may withdraw any of the above exemptions, restrictions or suspensions.

In the Notice of Intent for declaration of a national road as a toll road, SANRAL is required to undertake the following:

- Indicate the approximate position/s of toll plaza/s contemplated for the proposed toll road; and
- Invite I&APs to comment and make representations on the proposed declaration and the position/s of the toll plaza/s and direct them to furnish their written comment and representations to SANRAL not later than the date mentioned in the Notice of Intent.

3.1.2 UNSOLICITED PROPOSAL PROCESS

3.1.2.1 Scheme Development

In order to constructively engage the private sector SANRAL’s predecessor, the South African Roads Board, in September 1997 developed the policy in respect of Unsolicited Proposals. This policy was revised in 1999 (the current version) by SANRAL to take into account the comments received from both national and international institutions. Through the policy the private sector is able to submit unsolicited proposals for the development of national road infrastructure, that forms part of the strategic national road network identified by SANRAL, that could ultimately be implemented as toll road concessions such as the N4 Maputo Development Corridor, the N3 Toll Highway and the N4 Platinum Toll Highway.

Where a proposal meets the requirements of the policy, i.e. reflects conformance with governmental aims, is in the public interest, avoids the creation of monopolistic practices, does not seek to place onerous conditions upon Government, is aimed at improvement to the strategic national roads network and reflects environmental, social and economic sustainability, the parties submitting the proposal would

be awarded “Scheme Developer” status. The Scheme Developer is given an opportunity to develop its proposed scheme further in order that SANRAL may ascertain the financial, technical and environmental feasibility of the proposal, before it is considered for open tender. However, the “Scheme Developer” of the proposed N2 Wild Coast Toll Highway, i.e. the N2 Wild Coast Consortium, will play no part in this EIA process.

3.1.2.2 Tender Process

On successful completion of “Scheme Development”, and if environmental authorisation is obtained from DEAT and upheld by the Minister of Environmental Affairs and Tourism, SANRAL will call for open, international tenders for the Concession Contract. The “Scheme Developer” submits a tender with all other interested parties for the right to design, construct, operate, maintain and finance the proposed project. It should be noted that the “Scheme Developer” would not be involved in the tender call or adjudication of tenders.

SANRAL will select the most advantageous tenders, based on best “value for money” and affordability, from whom, including the “Scheme Developer”, Best and Final Offers (BAFOs) will be invited. SANRAL will then evaluate the BAFOs and select a “Preferred Tenderer”. Upon selection, the “Preferred Tenderer” will negotiate the Concession Contract and raise the necessary finance to achieve financial closure.

The concession period may be 30 years, or such a period as offered by tenderers and found acceptable by SANRAL, inclusive of an Initial Construction Period. It should be noted that the EIA and RoD to be issued by DEAT would be based on the work to be undertaken during the Initial Construction Period. At the end of the concession period the entire asset reverts back to the State, at no cost to the State.

3.1.2.3 Notice of Intent for declaration of a Toll Road

Before the project can commence, the national Minister of Transport must declare a road a national road and a toll road. The procedures for the Notice of Intent for declaration of a toll road would be followed as set out in Section 3.1.1 above.

3.1.2.4 Process leading to Financial Closure

Prior to financial closure the following will be completed:

- Compilation and approval of an EMP and agreement on mitigation measures;
- Design;
- Other necessary approvals in terms of relevant legislation;
- Negotiations and setting of final discount structures; and
- Agreement on toll tariffs.

3.2 RATIONALE FOR TOLLING AT A NATIONAL LEVEL

A portion of the “fuel levy” was historically allocated to a dedicated road fund and was used for that purpose. However, in April 1987 this allocation was terminated. All national road funding was thereafter allocated from Central Revenues. The country’s fiscal system treats all tax revenue as fungible and precludes revenue targeting for infrastructure. Revenues raised through a particular tax cannot be preserved for a single pre-specified infrastructure use; instead they go into a central fund and are then allocated across all competing uses via the budgetary process.

Thus, despite widely held public belief, the fuel levy is not allocated automatically to SANRAL. To put this into context, in 2002 the amount paid into the national fiscus by road users was in the region of R 26 billion (derived from the fuel levy, customs and excise duties, VAT on new and second-hand vehicle sales, VAT on vehicle parts and repairs, import duties on vehicles and parts, licence fees and VAT on toll

fees). This was far in excess of the approximately R 7 billion spent by the state in 2003 on building and maintaining national and provincial roads and/or contributed by the State to the cost of metropolitan and municipal roads.

SANRAL's budget allocation for 2003 and 2004 was R 1.1 billion and R 1.4 billion, respectively. According to SANRAL, this funding was only sufficient to manage about half of the non-toll national road network at that time (11 550 km). It is envisaged that SANRAL would eventually be responsible for a 20 000 km national road network. In addition, the primary road network is old and requires structural strengthening and, thus, major capital investment (more than 60% of non-toll road network is older than its 20 to 25-year design life).

Most of the primary road networks in and around South Africa's major economic centres are operating beyond their operational traffic capacity and require an increase in capacity (widening) and/or additional infrastructure. Some of the routes between these centres also require improvements in capacity. Currently 65% of SANRAL's budget allocation is spent on preserving or maintaining the primary road network while the remainder is spent on upgrading the assets. Inherent in this expenditure is keeping the roads in a safe condition for daily use. With an assumed funding level of R 4.4 billion a year for the non-toll national road network, the existing system will deteriorate over the next eight years to a forecasted backlog of R 9.6 billion. Thus, SANRAL sees tolling as an appropriate and successful funding mechanism to create new road infrastructure and to upgrade and maintain existing national routes where this is equitable, achievable and feasible. Furthermore, it allows tax-based revenues to be utilized for the non-toll road network and other much-needed social projects.

3.3 MOTIVATION FOR THE PROPOSED N2 WILD COAST TOLL HIGHWAY

3.3.1 NATIONAL AND REGIONAL ECONOMIC CONTEXT

National road networks link together the main cities and economic regions of a country and thus play an important developmental role in economic growth and social upliftment. National road networks are primarily designed to facilitate the safe and efficient movement of people, goods and services over medium to long distances between economic centres. Trips are undertaken by private vehicles (commuter, business and recreational trips), public transport and commercial heavy vehicles to satisfy the needs and requirements of the unitary economic unit, i.e. the household, in a particular corridor, adjacent regions and the rest of the country. At a regional level, the provincial and local road networks provide the necessary linkages to the local communities thereby providing, with the national network, the required mobility to provide the basic ingredients for socio-economic growth.

The former Transkei, particularly the region between the Kei River and the Mthamvuna River is doubly handicapped in this respect. Not only does it currently have few economically realisable natural resources and poor soils for agriculture, but the rugged and mountainous terrain has ensured that access is barely adequate at best and rudimentary at worst. The alignment of the existing N2, for instance, was determined in 1936 (the actual road was substantially completed by 1946) and has remained the only primary access to the area to date. The paved R61, which is the only other primary access, was only completed in the late 1970's and early to middle 1980's. There has been no improvement in provision of access since then. Secondary and local road networks are inadequate, at best, where they exist or are non-existent.

The existing N2 and R61 tend to follow "watershed alignments" in order to avoid crossing deeply incised gorges and river valleys on the scale and extent of the "Valley of a Thousand Hills" and the Oribi Gorge in KwaZulu-Natal. Hence, the existing N2 is located up to more than 100 km inland (at Mount Frere) and reaches a height of approximately 1 700 metres above mean sea level at Brookes Nek before it descends to sea level at Port Shepstone. The R61, in turn, is located up to almost 60 km inland (at Flagstaff) and is at a height of about 1 000 m at that point. Access to the coast is poor where it exists at all. Access parallel to the coast is non-existent because of the deeply incised gorges and valleys. For example, in many cases it is only possible to drive between certain locations along the coast by first returning to the

R61. This can involve a round trip of about 100 to 120 km, whereas the locations are often only 20 to 30 km apart. Not surprisingly, this region is one of the most impoverished areas in South Africa. The proposed project aims to improve access and linkage to the Wild Coast region while reducing road-user costs and optimising safety and socio-economic benefits.

The Wild Coast region has been identified as an area for strategic economic development in accordance with Government's Spatial Development Initiative (SDI) strategy. The Wild Coast SDI identified the provision of a major road, such as the proposed toll road, as an important catalyst for achievement of its objectives since it would enhance access to the region and would facilitate development of the eco-tourism potential of the area.

The existing N2 south of Mthatha requires major upgrades to fulfil its function as a primary national road between economic centres and to cater for rapidly growing traffic volumes. The existing R61 and N2 between Port Edward and Durban currently require the same upgrading over some of their length although not to the same extent as the other sections forming part of the proposed toll highway. However, the anticipated and current traffic growth along the section between Port Edward and Durban requires that such upgrades would be required sooner rather than later.

The proposed N2 Wild Coast Toll Highway aims to provide an improved, shorter and safer road link between the Eastern Cape/Western Cape and KwaZulu-Natal. A shorter, more efficient transport route is viewed as an improvement to the national road network and is considered of strategic importance to the region and the country as a whole. It is considered that such a national road or "spine" would provide the necessary linkages and impetus to improve the secondary and local networks while facilitating sustainable economic growth along the entire corridor.

3.3.2 SUMMARY OF KEY ROAD PROBLEMS ALONG THE EXISTING N2 AND R61 SECTIONS OF THE PROPOSED N2 WILD COAST TOLL HIGHWAY AND POTENTIAL BENEFITS TO THE ROAD USER

The key road problems currently experienced along the existing N2 and R61 sections of the proposed toll highway and the potential benefits of the proposed project to the road user are provided in Table 1.

Table 1 Current road problems along the existing N2 and R61 sections of the proposed toll highway and potential benefits of the proposed project to the road user

ROAD SECTIONS AND CURRENT PROBLEMS	POTENTIAL BENEFITS TO THE ROAD USER
GONUBIE INTERCHANGE TO NGOBOZI (77.9 km; existing N2)	
<ul style="list-style-type: none"> Extensive deterioration of the pavement (rutting and cracking) on certain sections. Some capacity problems at steep inclines. Extensive pot-hole/patching repairs on certain sections. Few climbing/passing lanes. 	<ul style="list-style-type: none"> Improved riding quality. Improved road user safety. Reduced Vehicle Operating Cost (VOC).
NGOBOZI TO DUTYWA (52.6 km; existing N2)	
<ul style="list-style-type: none"> Pedestrian and livestock traffic pose a safety risk in some areas due to proximity of rural settlements. Conditions at Ndebakazi Intersection are very dangerous due to turning traffic and pedestrians. Road markings very indistinct on the main street through Butterworth. Large numbers of vehicles executing turns at intersections in Butterworth. Large numbers of pedestrians in Butterworth. Riding quality fair to poor. Fencing and signage poor. 	<ul style="list-style-type: none"> Improved capacity. Improved riding quality. Improved road user safety. Reduced VOC. Reduced travel time. Improved safety for communities, pedestrians and other road users.

ROAD SECTIONS AND CURRENT PROBLEMS	POTENTIAL BENEFITS TO THE ROAD USER
DUTYWA TO MTHATHA (84.7 km; existing N2)	
<ul style="list-style-type: none"> • Riding quality fair to very poor. • Road surface is extensively deformed with frequent potholes/patching repairs in some areas. • Many illegal accesses. • Surface is extensively deformed with widespread cracking over entire length and width between Viedgesville and Mthatha. • Large numbers of vehicles executing turning movements at intersections through Mthatha. • Large numbers of pedestrians in Mthatha. 	<ul style="list-style-type: none"> • Improved capacity. • Improved riding quality. • Improved road user safety. • Reduced VOC. • Reduced travel time. • Improved safety of communities, pedestrians and road users.
MTHATHA TO NDWALANE (79.5 km; existing R61)	
<ul style="list-style-type: none"> • Section of the route near Mthatha characterised by peri-urban development along the road corridor, which requires the formalisation of access and cross-access. • Road in very poor condition in some sections. • The route passes through an area of geotechnical instability in the mountain pass (Tutor Ndamase Pass). • Culvert failure near Ndwalane in 2001. 	<ul style="list-style-type: none"> • Improved road user safety. • Improved and controlled access. • Increased traffic capacity. • Improved riding quality. • Reduced VOC. • Reduced travel time.
NDWALANE TO NTAUFUFU RIVER (16.5 km; new road section)	
<ul style="list-style-type: none"> • Existing design speed is 40-50 km/h. 	<ul style="list-style-type: none"> • Much reduced travel time since existing pass is 12 km longer than the proposed new route between Ndwalane and Ntafufu. The alignment of the proposed new route would also be far superior to the existing pass. • Reduced VOC. • Improved road user safety.
NTAFUFU RIVER TO LUSIKISIKI (18 km; existing R61)	
<ul style="list-style-type: none"> • Design speed of existing road 40 km/h over certain sections to minimise initial construction costs. • Pavement deterioration evident. • Patches and cracks. 	<ul style="list-style-type: none"> • Reduced VOC. • Reduced travel time. • Improved road user safety.
LUSIKISIKI TO MTHAMVUNA RIVER (80 km; new road section)	
<ul style="list-style-type: none"> - No access or road link exists. 	<ul style="list-style-type: none"> • Much reduced travel time associated with approximately 80 km shorter route. • Reduced VOC. • Improved road user safety. • Provide access across major river gorges where none currently exists.
MTHAMVUNA RIVER TO ISIPINGO INTERCHANGE (147.5 km; existing R61 and N2)	
<ul style="list-style-type: none"> • Mthamvuna River to Southbroom section is characterised by frequent access points, which currently serve a number of coastal resorts and the more rural areas of KwaZulu-Natal. • Sub-standard interchange at Adams Road. • Capacity problems during peak periods between Adams Road and Isipingo interchanges. 	<ul style="list-style-type: none"> • Improved road user safety. • Improved access control. • Reduced VOC. • Reduced travel time. • Improved riding quality. • Alleviation of traffic congestion. • Safer access at Adams Road Interchange.

3.3.3 CURRENT AND PREDICTED FUTURE TRAFFIC VOLUMES

Historic trends have shown that traffic volumes generally grow in line with Gross Domestic Product (GDP) growth and usually at about one to two percentage points above GDP growth. Thus, for the last 20 years national road traffic has grown between 3% - 5% per annum, which means that one can expect the future traffic to more than double in a 20-year period, and more than triple in a 30-year period.

Traffic volumes in the corridor between East London and Durban have grown above the national average since 2001, although there was a general slump and negative growth in traffic volumes during the late 1990's. The current and predicted future traffic flows for the proposed N2 Wild Coast Toll Highway is shown in Table 2. At this stage of planning, the predicted future traffic growth is based on an average annual growth rate of 3.5% for a 20-year design period.

Table 2 Current and predicted future daily traffic flows on the N2 and R61

ROUTE SECTION	YEAR 2005 TRAFFIC FLOWS (PRESENT AVERAGE DAILY TRAFFIC - ADT)	YEAR 2020 TRAFFIC FLOWS (FUTURE ADT)
East London to Butterworth	4 800 to 5400	6 900 to 8 000
Butterworth to Mthatha	3 600 to 6 800	5 400 to 10 100
Mthatha to Ntafufu	1 000 to 1 300	5 200 to 6 500
Ntafufu to Southbroom	1 000 to 6 000	3 000 to 8 900
Southbroom to Hibberdene	5 800 to 7 300	8 900 to 10 800
Hibberdene to Winkelspruit	11 900 to 22 300	17 600 to 33 100
Winkelspruit to Isipingo	24 200 to 45 800	35 900 to 68 000

The proposed project includes the addition of at least one additional lane and wide paved shoulder to each carriageway between the Adams Road and Isipingo interchanges in order to relieve current congestion and to accommodate future congestion in the medium- to long term. The existing south-bound carriageways, although only a nominal 2-lane width, have been re-marked to three lanes over a short, steep section to help alleviate at least some of the current congestion. Currently, north-bound peak hour traffic on a workday morning on this section varies between 3 700 and 3 800 vehicles per hour, about 110% of theoretical capacity at Level of Service (LOS) D. Absolute theoretical capacity for this section is about 3 950 vehicles per hour. The above indicates that this section is operating at or beyond its maximum LOS D capacity, that future growth is likely to induce unstable flow and thus severe congestion (stop-start conditions) and that the peak flows now extend over more than the normal peak "hour". Any adverse conditions such as rain or fog would further exacerbate this situation.

The north-bound capacity of the only other viable alternative route (Kingsway) is limited to about 800 vehicles per hour. Normal traffic growth on Kingsway will also take place, with peak hour traffic on Kingsway expected to reach 785 vehicles per hour, i.e. close to or at capacity, by 2007. According to SANRAL, it can thus be anticipated that most of the future traffic growth will be attracted to the N2.

3.4 TOLL STRATEGY AND TOLL SECTIONS

In establishing a tolling strategy, tenderers would likely consider the following:

- The traffic volumes expected along each road section;
- The proposed technical upgrade required;
- The benefits associated with the upgrade with respect to the "do nothing" and other alternatives;
- The willingness to pay (price elasticity) for the utility with respect to the "do nothing" and other alternatives;
- Number of affected local users and likely discounts;
- The location of the toll plazas and associated tolling strategy; and
- The likely impact of the toll rates on traffic diversion.

Each tenderer would submit their proposed tolling strategy, toll tariffs, discounts and proposed escalation over time in relation to the Consumer Price Index (CPI). SANRAL would evaluate these tenders and would, where appropriate, include negotiation of lower toll tariffs and higher discounts. The toll tariffs would then be fixed in the Concession Contract entered into between SANRAL and the Concessionaire. Before tolling could commence, the toll tariffs would need to be approved by the Minister of Transport and thereafter advertised in the Government Gazette.

It is common practice in South Africa to offer discounts to certain user groups. This could be done in a number of ways, including discounts to frequent users, discounts to local or regional users and discounts based on the time of day the road user passes through the plaza. The potential Concessionaire would, to some extent, be responsible for negotiating these discounts. However, SANRAL could also specify applicable discounts to certain user groups before-hand, i.e. in the tender specifications.

The toll strategy and location of the plazas would be such that, as equitably as possible, the motorist would pay only for the extent of the road that is used. Consequently each plaza would have a unique toll applicable to each individual class of vehicle. The applicable toll tariffs would be within the norms currently utilised in South Africa.

The proposed N2 Wild Coast Toll Highway would include seven mainline toll plazas (four mainline plazas in the Eastern Cape and three in KwaZulu-Natal) and 24 ramp/interchange toll plazas (i.e. 12 sets of ramp plazas), of which one mainline and four sets of ramp toll plazas already exist on the N2 South Coast Toll Road.

Table 3 shows the proposed toll sections, the preferred mainline toll plaza locations and the length of the toll sections of the proposed project.

Table 3 Toll sections and associated mainline toll plazas

PROPOSED TOLL SECTION	ASSOCIATED MAINLINE TOLL PLAZA	LENGTH OF PROPOSED TOLL SECTION
East London to Butterworth	Ngobozi	97.8 km
Butterworth to Mthatha	Candu	120.8 km
Mthatha to Ntafufu	Ndwalane	92.3 km
Ntafufu to Southbroom	Mthentu	121.1 km
Southbroom to Hibberdene	Existing Oribi	50.1 km
Hibberdene to Winkelspruit	Park Rynie	60.7 km
Winkelspruit to Isipingo	Isipingo	16.2 km

3.5 OPERATION AND MAINTENANCE

On being awarded the Concession Contract, a Concessionaire would become responsible for the operation and maintenance of the road for the duration of the Concession Contract (normally a 30-year period). This would entail toll collection, plaza and equipment maintenance, route operations, safety, traffic management and overloading control and all aspects of road maintenance.

3.6 EMPOWERMENT STRATEGY

A Socio-Economic Development (SED) strategy would be a requirement of the Concession Contract. The SED strategy is aimed at the empowerment of local and previously disadvantaged communities within the project area. It would maximise job opportunities for local people and promote the involvement of local entrepreneurs, particularly Historically Disadvantaged Individuals (HDIs) and Small, Medium and Micro Enterprises (SMMEs) during all phases of the project. The principal elements of the SED strategy are:

- Equity Participation by HDIs;
- Capacity Development and Empowerment of Emerging Entrepreneurs and SMMEs;
- Local Employment;
- Skills Transfer in Civil Engineering; and
- Social Development Programmes encompassing Education, Training and Development.

SMMEs and HDIs would be awarded contracts in terms of Design and Construction and Operation and Maintenance work in accordance with Government's Broad Based Black Economic Empowerment initiatives and Sector charters.

4. PROJECT DESCRIPTION

4.1 BROAD DESCRIPTION OF PROPOSED PROJECT

It is proposed that the design, construction, financing, operation and maintenance of the proposed highway be undertaken as part of a 30-year Concession Contract.

The key components of the proposed project include:

- Upgrading and widening of existing road sections (of the N2 and R61) included within the proposed project (approximately 470 km);
- New road construction within two greenfields sections (approximately 90 km);
- Construction of eight new major bridges;
- Upgrading and/or construction of new road interchanges and intersections; and
- Construction of associated structures (such as toll plazas, pedestrian overpasses and animal underpasses).

The proposed project aims to provide a national route that improves access and linkage to the east coast region of South Africa while reducing road-user costs and optimising safety, comfort and socio-economic benefits, through the following:

- Upgrading and/or construction of the route to an appropriate design speed (90 to 120 km/h) for the majority of its length, while maintaining a minimum of 60 km/h design speeds in short sections such as mountain passes (e.g. the Kei Cuttings);
- Construction of a two-lane single carriageway with wide shoulders, while dual carriageways and/or climbing lanes would be constructed where warranted by traffic volumes and safety requirements;
- Construction and maintenance of appropriate safety devices such as fencing and vehicular / pedestrian / livestock over- or underpasses and walkways while maintaining an attractive road reserve along the length of the route;
- Consolidation and formalisation of accesses onto the proposed toll highway in order to ensure road user safety (in terms of sight distances and provision of traffic turning lanes);
- Rehabilitation and overall improvement of the road surface along existing sections of the route;
- Installation and maintenance of road signage, road furniture and roadside emergency facilities; and
- Provision of a well-maintained road reserve along the length of the proposed route.

The proposed route alignment (see Figure 1) would connect major economic centres, including East London, Butterworth, Mthatha, Lusikisiki, Port Edward, Port Shepstone and Durban, and would be approximately 75 km shorter than the existing N2 route between East London and Durban via Mount Frere, Kokstad and Harding. Approximately 80% of the proposed route utilises existing road sections, as follows:

- Existing N2 between the Gonubie Interchange and Mthatha;
- Existing R61 between Mthatha and Ndwalane;

- Existing R61 between Ntafufu River and Lusikisiki; and
- Existing R61 and N2 between the Mthamvuna River and the Isipingo Interchange.

New road construction is proposed between Ndwalane and Ntafufu, and between Lusikisiki and the Mthamvuna River (“greenfields” sections). Within the new road sections, major bridge crossings are required at eight deeply incised gorges, namely the Mzimvubu, Msikaba, Kwadlambu, Mthentu, Mnyameni, Kulumbe, Mpahlane and Mzamba rivers.

4.2 DESCRIPTION OF INITIAL CONSTRUCTION WORKS

The proposed Initial Construction Works would take place within the first three years of the concession. The description of the initial works has, for convenience, been divided into seven sections.

4.2.1 SECTION 1: GONUBIE INTERCHANGE TO NGOBOZI

All construction activities are proposed to take place within the existing road reserve, with the exception of the Komga Interchange and the mainline toll plaza at Ngobozi.

The proposed construction activities per road section between the Gonubie Interchange and Ngobozi are provided in Table 4.

Table 4 Proposed construction activities per road section between the Gonubie Interchange and Ngobozi

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Gonubie Interchange to Mooiplaas (31 km)	<ul style="list-style-type: none"> • Rehabilitation, where required. • Resurfacing. • Upgrading of intersections, where required. • Repairing of structures, as required. • Replacement of guard rails, signage and fencing, where required.
Mooiplaas to Komga (20.4 km)	<ul style="list-style-type: none"> • Rehabilitation. • Widening to make provision for climbing lanes, where required. • Repairing of structures, as required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.
Komga to Great Kei River (10.5 km)	<ul style="list-style-type: none"> • Resurfacing. • Upgrading of intersections, where required. • Construction of Komga Interchange. • Repairing of structures, as required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.
Great Kei River to Ngobozi (16 km)	<ul style="list-style-type: none"> • Construction of mainline toll plaza at Ngobozi. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Community access roads.

It is proposed to construct a mainline toll plaza north-east of the Kei River crossing, just outside Ngobozi – the Ngobozi Toll Plaza.

4.2.2 SECTION 2: NGOBOZI TO MTHATHA (NGQELENI)

All proposed initial construction works would take place within the existing road reserve, with the exception of the interchanges, intersection upgrades, community access roads, safety and access upgrades in Butterworth and Dutywa and the mainline toll plaza near the Candu River.

The proposed construction activities per road section between Ngobozi and Mthatha are provided in Table 5.

Table 5 Proposed construction activities per road section between Ngobozi and Mthatha (Ngqeleni)

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Ngobozi to Butterworth (18.2 km)	<ul style="list-style-type: none"> • Safety features such as over and underpasses, improved intersections, fencing, road signs and guard rails. • Construction of Ndabakazi Interchange. • Upgrade of section between Ndabakazi and Butterworth to a 4-lane undivided road. • Provision of pedestrian walkways and guard rails, where required.
Main Street through Butterworth (1.4 km)	<ul style="list-style-type: none"> • Upgrade of through-road to support traffic flow and safety (such as median and pedestrian barriers, restricted turning movements, restricted parking in through-road, improved access to taxi pick-up points, provision of lighting, traffic signals, etc.)
Butterworth to Ibika (8.8 km)	<ul style="list-style-type: none"> • Upgrading of intersections, including widening of road where required. • Upgrade of section between Butterworth and Msobomvu Intersection to a 4-lane undivided road. • Replacement of guard rails, signage and fencing, where required. • Repairing of structures, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.
Ibika to Dutywa (24.2 km)	<ul style="list-style-type: none"> • Resurfacing. • Repairing of structures, as required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Community access roads.
Main street through Dutywa Municipal Area (1.2 km)	<ul style="list-style-type: none"> • Construction of second carriageway through Dutywa and implementing a one-way system through the town. • Traffic flow and safety upgrades (such as median and pedestrian barriers, restricted turning movements, restricted parking in through-road, improved access to taxi pick-up points, provision of lighting, traffic signals, etc.)
Dutywa to Candu River (26.6 km)	<ul style="list-style-type: none"> • Construction of mainline toll plaza near the Candu River. • Resurfacing. • Widening, where required. • Replacement of guard rails, signage and fencing, where required. • Repairing of structures, as required. • Provision of pedestrian walkways and guard rails, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Community access roads.
Candu River to Viedgesville (38.5 km)	<ul style="list-style-type: none"> • Resurfacing/rehabilitation. • Widening to 12.5 m and to make provision for climbing lanes, where required. • Upgrading of intersections, where required. • Repairing of structures, as required. • Provision of pedestrian walkways and guard rails, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Community access roads. • Construction of Elliotdale Interchange.
Viedgesville to Mthatha (12.9 km)	<ul style="list-style-type: none"> • Rehabilitation. • Construction of Viedgesville Interchange. • Widening to make provision for climbing lanes, and 4-lane undivided road where required. • Upgrading of intersections, where required. • Repairing of structures, as required. • Provision of pedestrian walkways and guard rails, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Community access roads.
Mthatha (Ultra City) to Ngqeleni (14.5 km)	<ul style="list-style-type: none"> • Widening to 4-lane dual carriageway, rehabilitation and resurfacing as required. • Upgrading of intersections, where required. • Implementation of one-way system at Madeira and Sprigg Streets. • Improved signage, lighting, etc. • New carriageway bridges at Corana and Mthatha rivers.

SANRAL's preferred mainline toll plaza in this section is located in the Bashee Bridge region, close to the Candu River – the Candu Toll Plaza. An alternative toll plaza location approximately 1 km west of the preferred locality was considered, but was excluded based on poor sight distance and road geometrics.

4.2.3 SECTION 3: MTHATHA (NGQELENI) TO NDWALANE

All initial construction works would take place within the existing road reserve, with the exception of short sections requiring widening, intersection upgrades, vehicular overpasses and interchanges. Measures to stabilise cuts and fills may also require additional land outside the existing road reserve.

The proposed construction activities per road section between Mthatha and Ndwalane are provided in Table 6.

Table 6 Proposed construction activities per road section between Mthatha (Ngqeleni) and Ndwalane

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Mthatha (Ngqeleni) to Libode (23 km)	<ul style="list-style-type: none"> • Widening and resurfacing. • Upgrading of intersections, where required. • Improvement of access control. • Widening and construction of climbing lanes, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.
Libode to Ntlaza (8.1 km)	<ul style="list-style-type: none"> • Widening and rehabilitation. • Upgrading of intersections, where required. • Climbing lanes, where required. • Provision of pedestrian and taxi facilities, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Construction of dual carriageway at St Barnabas Hospital (2 km).
Ntlaza to Mgwenyana (15.7 km)	<ul style="list-style-type: none"> • Widening and resurfacing. • Construction of climbing lanes, where required. • Upgrading of intersections, where required. • Implementation of slope stability measures, where required. • Possible construction of alternative mainline toll plaza (Ntlaza). • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.
Mgwenyana to Thombo (16.2 km)	<ul style="list-style-type: none"> • Widening and surface rehabilitation. • Addition of climbing lanes, where required. • Upgrading of intersections, where required. • Implementation of slope stability measures, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails. • Construction of dual carriageway at Thombo (2 km).
Thombo to Ndwalane (9.5 km)	<ul style="list-style-type: none"> • Widening and resurfacing. • Bridge widening at Mngazi River. • Provision of pedestrian and taxi facilities, where required. • Upgrading of intersections, where required. • Implementation of slope stability measures, where required. • Safety features such as over- and underpasses, improved intersections, fencing, road signs and guard rails.

SANRAL's preferred mainline toll plaza is located at Ndwalane – the Ndwalane Toll Plaza. An alternative toll plaza location in the vicinity of the Ntlaza Mission, near the Tutor Ndamase Pass, has been identified.

4.2.4 SECTION 4: NDWALANE TO NTAUFUFU RIVER

This section begins approximately 10 km inland of Port St Johns and would bypass the existing Mzimvubu Pondoland Bridge. It would involve the construction of a new "greenfields" road to national

road standards between Ndwalane and Ntafufu. A major high-level bridge crossing would be required over the Mzimvubu River.

The proposed new road would comprise a 2-lane single carriageway highway, with climbing lanes where required and a minimum design speed of 100 to 120 km/h. The width of the road would generally be a minimum of 12.4 m (2x3.7 m lanes and 2x2.5 m paved shoulders) within a road reserve of 80 m.

The proposed construction activities for the road section between Ndwalane and the Ntafufu River are provided in Table 7.

Table 7 Proposed construction activities for the road section between Ndwalane and Ntafufu River

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Ndwalane to Ntafufu River (16.5 km)	<ul style="list-style-type: none"> • Construction of new road to national road standards. • Construction of new bridge across the Mzimvubu River. • Construction of new interchanges at Ndwalane and Ntafufu. • Over- and underpasses, interchanges, fencing, road signs and guard rails. • Construction of new mainline toll plaza and ramp plazas at the proposed Ndwalane Interchange.

It is proposed to construct a mainline toll plaza in the vicinity of Ndwalane – the Ndwalane Toll Plaza. This toll plaza would toll future long-distance through-traffic on the proposed toll highway and traffic to/from Lusikisiki from/to Mthatha. Ramp plazas are proposed on the southern ramps of the proposed Ndwalane Interchange.

4.2.5 SECTION 5: NTAUFUFU RIVER TO LUSIKISIKI (MAGWA INTERSECTION)

The proposed construction activities for the road section between the Ntafufu River and Lusikisiki (Magwa Intersection) are provided in Table 8.

Table 8 Proposed construction activities for the road section between the Ntafufu River and Lusikisiki (Magwa Intersection)

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Ntafufu River to Lusikisiki (Magwa Intersection) (24.5 km)	<ul style="list-style-type: none"> • Upgrade pass to a minimum design speed of 60 km/h, widen and realign as required. • Construction of climbing lanes, where required. • Widening of road cross-section, where required. • Widening of the Mzintlava River bridge. • Construction of 4-lane undivided road through Lusikisiki. • Construction of Lusikisiki Interchange. • Upgrading of Magwa Intersection. • Safety features such as over and underpasses, improved intersections, fencing, road signs and guard rails.

4.2.6 SECTION 6: LUSIKISIKI (MAGWA INTERSECTION) TO MTHAMVUNA RIVER

This section would involve the construction of a new “greenfields” road to national road standards.

A number of deeply incised gorges and minor streams would be crossed. The gorges, some in the order of 200 to 300 m deep, include the Msikaba, Mthentu, Kwadlambu, Mnyameni, Kulumbe, Mpahlane and Mzamba River gorges.

The proposed construction activities per road section between Lusikisiki (Magwa Intersection) and the Mthamvuna River are provided in Table 9.

Table 9 Proposed construction activities per road section between Lusikisiki (Magwa Intersection) and the Mthamvuna River

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Lusikisiki (Magwa Intersection) to Msikaba River (19.5 km); new road section	<ul style="list-style-type: none"> • New road construction on alignment of existing district road up to Msikaba Village, new frontage and feeder roads. • New greenfields construction from Msikaba Village to Msikaba Gorge on a preferred alignment. • High-level bridge crossing over Msikaba River. • Safety features such as over- and underpasses, improved and new intersections, fencing, road signs and guard rails.
Msikaba River to Mthentu River (22 km); new road section	<ul style="list-style-type: none"> • New road construction on a preferred alignment. • High-level bridge crossing over the Mthentu River. • Safety features such as over- and underpasses, new intersections, fencing, road signs and guard rails.
Mthentu River to Mthamvuna River (33 km); new road section	<ul style="list-style-type: none"> • New road construction on a preferred alignment. • New R61 Interchange. • Construction of high-level bridge structures across the Mnyameni, Kulumbe, Mpahlane and Mzamba Rivers. • Maintenance and rehabilitation of the existing Mthamvuna River bridge. • Safety features such as over and underpasses, new intersections, fencing, road signs and guard rails.

It is proposed to construct a mainline toll plaza in the greenfields section north of the Mthentu River crossing – the Mthentu Toll Plaza. An alternative locality for a toll plaza in this section has been identified, namely in the vicinity of the proposed intersection with the Holy Cross/Mkambati road.

4.2.7 SECTION 7: MTHAMVUNA RIVER TO ISIPINGO INTERCHANGE

All construction activities would occur within the existing road reserve, with the exception of the Adams Road Interchange and the proposed mainline toll plazas at Park Rynie and Isipingo.

A detailed description of the proposed construction activities per road section between the Mthamvuna River and the Isipingo Interchange is provided in Table 10.

Table 10 Proposed construction activities per road section between the Mthamvuna River and the Isipingo Interchange

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Mthamvuna River to Southbroom (23 km)	<ul style="list-style-type: none"> • Upgrading of at-grade intersections. • Construction of Port Edward and Southbroom interchanges. • Improvement of intersection layout, where required. • Consolidation of access points.
Southbroom to Marburg Interchange (22 km)	<ul style="list-style-type: none"> • Safety improvements. • Minor rehabilitation and resurfacing, as required.
Marburg Interchange to St Faiths Interchange (6 km)	
St Faiths Interchange to Umhlungwa Interchange (Hibberdene) (23 km)	
Umhlungwa Interchange (Hibberdene) to Park Rynie Interchange (31.7 km)	<ul style="list-style-type: none"> • Safety improvements. • Minor rehabilitation and resurfacing, as required. • Construction of ramp plazas on the southern ramps of the Pennington Interchange. • Construction of ramp plazas on the southern ramps of the Park Rynie Interchange.
Park Rynie Interchange to Winkelspruit Interchange (29 km)	<ul style="list-style-type: none"> • Safety improvements. • Minor rehabilitation and resurfacing, as required. • Construction of proposed Park Rynie mainline toll plaza. • Construction of ramp plazas on the northern ramps of the Scottburgh Interchange. • Construction of ramp plazas on the northern ramps of the Umkomaas Interchange.

ROAD SECTION	PROPOSED CONSTRUCTION ACTIVITIES
Winkelspruit Interchange to Adams Road Interchange (Amanzimtoti) (5.5 km)	<ul style="list-style-type: none"> • Resurfacing and rehabilitation, as required. • Widening of Amanzimtoti River Bridge. • Addition of third lane and paved shoulder from Amanzimtoti River northwards. • Reconstruction of Adams Road Interchange to improve the operational safety of the interchange. • Construction of ramp plazas on the southern ramps of the Adams Road Interchange.
Adams Road Interchange (Amanzimtoti) to Dickens Road Interchange (Athlone Park) (5.1 km)	<ul style="list-style-type: none"> • Resurfacing and rehabilitation of existing road pavement. • Addition of a third lane in each direction. • Construction of ramp plazas on the southern ramps of the Moss Kolnick Drive Interchange.
Dickens Road Interchange (Athlone Park) to Isipingo Interchange (4.0 km)	<ul style="list-style-type: none"> • Resurfacing and rehabilitation of existing road pavement. • Addition of a third lane and paved shoulders in each direction. • Addition of a fourth lane between Dickens Road and Joyner Road in each direction. • Construction of ramp plazas on the southern ramps of the Joyner Road Interchange. • Construction of proposed Isipingo mainline toll plaza south of the Prospecton Road (Isipingo) Interchange.

A mainline toll plaza is proposed in the Park Rynie area, in close proximity to the Park Rynie on- and off-ramps – the Park Rynie Toll Plaza while a second mainline toll plaza is proposed between the Joyner Road Interchange and the Prospecton Road (Isipingo) Interchange, at the limit of the concession – the Isipingo Toll Plaza. Seven sets of ramp plazas are proposed on existing interchanges, as indicated in Table 10.

The existing Oribi mainline Toll Plaza between Izotsha and Umtentweni would be incorporated into the proposed project. The following existing ramp plazas would also be included:

- Shelly Beach Interchange (existing Izotsha ramp plazas);
- Marburg Interchange (existing Oribi northern and southern ramp plazas); and
- Umtentweni Interchange (existing Umtentweni ramp plazas).

5. CONSIDERATION OF ALTERNATIVES

The Scoping Study includes consideration of the “do nothing” alternative, alternative route alignments and alternative positions of toll plazas and indicates which would be carried forward for further investigation in the Impact Assessment phase of the EIA. Specialist botanical, social and economic input was obtained in order to provide key information for a comparative analysis of the alternative alignments, as follows:

- Upgrade the existing N2 between Mthatha and Port Shepstone;
- Upgrade the existing R61 between Mthatha and Port Shepstone; and
- Alternative greenfields alignments between Lusikisiki and the Mthamvuna River.

A comparative analysis of the environmental, technical, financial and economic implications of the proposed toll highway between Mthatha and Port Shepstone versus upgrading the existing N2 or R61 in relation to the “do nothing” alternative is provided in Table 11.

Table 11 Comparison of the environmental, technical, financial and economic implications of the proposed toll highway versus upgrading the existing N2 or R61 between Mthatha and Port Shepstone in relation to the “do nothing” alternative

CRITERIA / ASPECT	PROPOSED TOLL HIGHWAY	UPGRADE EXISTING N2	UPGRADE EXISTING R61
ENVIRONMENTAL CONSIDERATIONS			
Potential loss of sensitive ecosystems	Medium to High	Low	Low to Medium
Estimated number of homesteads and businesses to be relocated	216 (excluding sections of Mthatha)	208 (excluding sections of Mthatha, Qumbu and Mount Frere)	303 (excluding sections of Mthatha, Lusikisiki, Flagstaff and Bizana)
Potential loss of access routes	Medium	High	High
Community fragmentation	Medium	High	High
Improvement in access to the Wild Coast area	Very High	No change	No change
TECHNICAL CONSIDERATIONS			
Length of route (km)	235	310	329
Estimated travel time (light vehicle)	2hrs 26 min	3 hrs 35 min	4 hrs 14 min
Vertical alignment	Moderate to Good	Poor to Moderate	Poor
FINANCIAL AND ECONOMIC CONSIDERATIONS (Net Present Value)			
Capital and operational costs (R Millions)	-1,244.4	-757.3	-920.2
Bridge and bypass costs (R Millions)	-530.3	0.0	-45.2
Road user cost savings (R Millions)	5,996.2	1,122.0	1,041.9
Total Financial Benefits (R Millions)	4,221.6	364.6	76.5
Financial Benefit:Cost Ratio	3.4	1.5	1.1
Financial Internal Rate of Return (%)	26	15	11

The following conclusions are drawn in terms of upgrading the existing N2 or R61:

- Upgrading the existing R61 would result in similar environmental risks as compared to upgrading the existing N2. However, it would result in higher risks to social functions/processes, more capital and operational costs and lower road user cost savings and total financial and economic benefits. These are primarily due to it being approximately 19 km longer and of poorer vertical and horizontal alignment than the existing N2. Road users would thus prefer to use the existing N2 between Mthatha and Port Shepstone, rather than an upgraded R61. The costs associated with upgrading the existing R61 would thus not be justifiable. In light of these considerations, it is proposed that upgrading the existing R61 is not carried forward for further investigation in the Impact Assessment phase of the EIA; and
- Upgrading the existing N2 would result in lower risks to sensitive ecosystems and in lower capital and operational costs as compared to the proposed toll highway. However, upgrading the existing N2 would result in higher risks to social functions/processes and substantially (i.e. orders of magnitude) lower road user cost savings and total financial (and economic) benefits (linked to it being approximately 75 km longer and of poorer alignment than the proposed toll highway). Its vertical alignment would be less energy/fuel efficient compared to the proposed toll highway as substantially more ascents and descents would be encountered. Moreover, upgrading the existing N2 between Mthatha and Port Shepstone would result in no change to the current poor access to the Wild Coast area. This would be so since a relatively small portion of the required travelling would be undertaken on the upgraded road relative to the required travelling on district and local roads. In light of these considerations, it is proposed that upgrading the existing N2 between Mthatha and Port Shepstone is not carried forward for further investigation in the Impact Assessment phase of the EIA.

Four alternative greenfields alignments between Lusikisiki and the Mthamvuna River have been considered, namely (see Figure 2):

- SANRAL’s preferred alignment;
- The Inland Mzamba route;
- The coastal route; and
- The SDI route.

A comparative analysis of the environmental, technical, financial and economic implications of the alternative greenfields routes between Lusikisiki and the Mthamvuna River is provided in Table 12.

Table 12 Comparison of the environmental, technical, financial and economic implications of alternative greenfields alignments between Lusikisiki and the Mthamvuna River

CRITERIA / ASPECT	SANRAL'S PREFERRED ROUTE	INLAND MZAMBA ROUTE	SDI ROUTE	COASTAL ROUTE
ENVIRONMENTAL CONSIDERATIONS				
Potential loss of sensitive ecosystems	Medium to High	Medium to High	High	High
Estimated number of homesteads and businesses to be relocated	99	114	91	89
Potential loss of access routes	Low to Medium	Medium	Low to Medium	Low to Medium
Community fragmentation	Low to Medium	Medium	Low to Medium	Low to Medium
TECHNICAL CONSIDERATIONS				
Length of route (km)	78	87	78	78.5
Integration with provincial road network and provision of access to communities on the Wild Coast	Very Good	Very Good	Moderate to Poor	Poor
Estimated travel time (light vehicle)	46 min	53 min	47 min	48 min
Vertical alignment	Moderate to Good	Poor to Moderate	Good	Good
FINANCIAL AND ECONOMIC CONSIDERATIONS (Present Value)				
Capital and operational costs (R Millions)	-664.9	-660.8	-664.9	-669.2
Large bridge costs (R Millions)	-530.3	-671.7	-232.7	-191.5
Road user costs (R Millions)	-1,899.1	-2,294.9	-1,899.1	-1,911.2
Total Costs (R Millions)	-3,094.3	-3,627.4	-2,796.7	-2,771.9

The following conclusions are drawn in terms of the alternative greenfields alignments between Lusikisiki and the Mthamvuna River:

- The SDI and Coastal routes would result in similar environmental, technical, financial and economic costs and would be substantially less expensive than the other greenfields alignments. However, the SDI and Coastal routes would have major disadvantages, as follows:
 - ❑ Both would traverse the Mkambati Nature Reserve and would result in high risks to the ecological integrity of the statutorily proclaimed reserve;
 - ❑ The SDI route would impact directly on the habitat of a known vulture colony at the Msikaba River; and
 - ❑ The Coastal route would have poor linkages with the existing local road network and existing communities, i.e. it would be remote from the geographical centres of communities situated between the river gorges. The SDI route would be more favourable than the Coastal route in this regard, but is considered less favourable than SANRAL's preferred route and the Inland Mzamba route.
- SANRAL's preferred route and the Inland Mzamba route would pose similar, but lower, risks to sensitive ecosystems as compared to the SDI and Coastal routes since the former would affect lower proportions of habitats with high sensitivity. However, the Inland Mzamba route would result in higher risks to social functions/processes and higher bridge construction costs and road user costs. It is thus considered that the Inland Mzamba route would provide no advantage over SANRAL's preferred route and would thus not be carried forward for further investigation in the Impact Assessment phase of the EIA.

An additional greenfields route, which would be situated north-west of the Msikaba Sandstone Formation and would thus avoid the Pondoland Centre of Endemism, has also been considered for comparison with the other alternative greenfields alignments. This alignment was derived from the "Quantm Pathfinder" corridor route selection computer programme, an "artificial intelligence" software package that can theoretically determine the most cost-effective corridor for a route based on pre-determined exclusion zones, costs and design criteria. This programme determined a minimum of 50 possible alignments and

the cheapest and most logical alignment was chosen to be included in this analysis. The findings are discussed below:

- The route is considered of low to medium risk to ecologically sensitive habitats and is thus considered the most favourable of the greenfields alignments in terms of potential loss of sensitive ecosystems. It would, however, affect the highest number of homesteads and businesses, and is considered to pose medium to high risks to cultural and social functions/processes. This route would be substantially more expensive than the other alignments (Total Costs of R 5.73 billion); it would cost almost twice as much as SANRAL's preferred route (R 3.09 billion) and would be about 10 km longer. The route would need the construction of three long bridges (with spans totalling 4.8 km) and a tunnel 3.1 km in length. Also, its vertical alignment would be less energy/fuel efficient compared to the other greenfields routes as substantially more ascents and descents would be encountered, resulting in much lower road user benefits. This route is thus not considered financially and economically viable.

In summary, the following alternatives are considered "feasible" and are proposed to be carried forward for assessment in the Impact Assessment phase of the EIA:

- The "do nothing" alternative;
- SANRAL's preferred alignment between Lusikisiki and the Mthamvuna River;
- Site-specific alternative route alignments in the greenfields sections of the proposed project, i.e. in the sections between Ndwalane and Ntafufu and between Lusikisiki and the Mthamvuna River, as follows:
 - for the proposed alignment between Ndwalane and the Mzimvubu River;
 - for the proposed alignment in the vicinity of Ntafufu village and the Ntafufu River;
 - for the proposed alignment of the approach to the Msikaba bridge crossing site;
 - for the proposed alignment across the Mthentu River; and
 - for the proposed alignment across the Mnyameni River.
- Alternative mainline toll plaza positions to SANRAL's preferred Ndwalane and Mthentu mainline toll plazas.

6. AFFECTED ENVIRONMENT

The proposed N2 Wild Coast Toll Highway Project would be located in the eastern part of South Africa, and would traverse sections of both the Eastern Cape and KwaZulu-Natal provinces. The region is predominantly a summer rainfall area with most rains occurring in the spring and summer months (October to March). There is a gradation in climatic regime across the study area, with the northern part of the Eastern Cape experiencing cool sub-tropical conditions, while KwaZulu-Natal is classified as warm sub-tropical.

The general topography of the route is characterised by undulating to rolling terrain with deeply incised river valleys, particularly within the greenfields section between Lusikisiki and the Mthamvuna River. The area inland of the coastal plateau is characterised by extremely broken and rugged mountainous terrain with widely eroded river basins. The terrain generally rises steeply inland (800 m at Holy Cross, 1000 m at Flagstaff) to culminate in the 3000 m high Drakensberg range some 200 km inland.

The proposed project would cross numerous drainage lines and rivers, ranging from low to very high importance. Estuaries along the Wild Coast have been identified nationally as having high botanical importance, include the Mngazana, Mbashe and Keiskamma. Estuaries north of Port Edward, although more disturbed by development, are also reservoirs of biodiversity and play an important role in the ecosystem. No major wetland systems would be crossed by the proposed road alignment. In general, the wetlands along the route are small, occurring in the form of palustrine seepage slope systems due to the topography and geology of the region. A variety of Red Data Book fish species occur in the aquatic systems along the entire route.

The study area includes a variety of grassland, bushveld and forest vegetation types. The greenfields section between Luskikisiki and Port Edward would bisect the Pondoland Centre of Endemism (PCE) and would pass through sections of the proposed Pondoland Biosphere Reserve. The PCE has recently been recognised by Conservation International, the IUCN and World Wildlife Foundation as one of 235 botanical global hotspots of plant diversity. A call for its protection has also come from the Strategic Assessment of Biodiversity in the Eastern Cape. The Pondoland Biosphere Reserve would extend from the north banks of the Mzimvubu River at Port St Johns to the south bank of the Mthamvuna River near Port Edward, an overall distance of about 80 km.

Faunal knowledge of the former Transkei region, specifically the proposed greenfields corridor, remains poor. Available information does indicate that within protected areas there is high faunal biodiversity and numerous endemic species. Outside of these areas, the fauna of this region is, in general, considered to be impoverished due to large-scale overgrazing and other human-induced impacts. The birds of the region are relatively well studied.

The Eastern Cape is one of the poorer provinces in South Africa, with a consistently higher unemployment rate than the national average and a relatively large rural population. It includes the former Eastern Province, Border, north-eastern Cape areas and the former “homelands” of Transkei and Ciskei. Major communities along the proposed toll highway include commercial farming communities, small rural towns (e.g. Dutywa), larger secondary and regional towns (e.g. Mthatha), “subsistence” rural villages and scattered communities typical of the Eastern Cape. Some of these communities are among the poorest in South Africa.

Tourism is an important economic activity in the two regions through which the proposed toll highway would pass. The Eastern Cape is the fifth most popular province visited by foreign tourists, whilst KwaZulu-Natal is the third, after Gauteng and the Western Cape. In the category of domestic overnight trips, KwaZulu-Natal is placed second behind Gauteng, while the Eastern Cape is placed third.

The planning, legal and policy context of the proposed project is provided at a number of levels, i.e. national, provincial, district, metropolitan and local. Various pieces of national legislation would be applicable to the proposed project. These include a number of permit requirements that would apply to specific aspects of the proposed project, such as development of borrow pits or quarries and potential water use activities. In terms of biodiversity conservation in the Eastern Cape, a number of strategic documents have recently been compiled under the Wild Coast Conservation and Sustainable Development Programme including, amongst others, a Conservation Assessment, Biodiversity Strategy and Action Plan and Strategic Environmental Assessment.

7. ISSUES AND CONCERNS

7.1 PREVIOUS EIA PROCESS

The issues and concerns raised during the previous EIA process have been synthesised and classified into 12 main categories. It should be noted that these categories are by no means definitive and exclusive and have been used for convenience only. The categories, with relevant sub-categories, are as follows:

- a) Social issues – health and safety impacts; environmental justice implications; social responsibility; impact on cultural values; access to farming land; social benefits/impacts; compensation, expropriation and relocation; severance; land claims; graves, burial sites and historical heritage; and indirect social impacts.
- b) Economic issues – impact of tolling on commuters; impact on communities of Pondoland; impact on tourism to Pondoland; impacts on by-passed towns; impacts on towns along the KwaZulu-Natal Upper South Coast; impacts on tourism to KwaZulu-Natal South Coast; impacts on towns and

communities between Port St Johns and East London; Job creation; financial and economic viability of the proposed project; economic efficiency of tolling; empowerment; impacts on businesses; impacts on agricultural practices; road user costs and benefits; benefits of the toll road; macro-economic impacts; impact on property values; and environmental resource economics.

- c) EIA process and legal issues – inadequacy of information and assessment; assessment of alternative route alignments; assessment of alternative financing mechanisms; assessment of alternative modes of transport; assessment of other alternatives including the no go option; assessment of alternative toll plaza positions; assessment of cumulative impacts; flawed EIA process; bias towards the Applicant; lack of SEA and other development planning studies; link to mining; statutory obligations; legal issues; commencement of construction; Scoping; Record of Decision; sustainable development; project description; and Draft EMP.
- d) Alternative routes – provision and upgrading of alternative routes; and impact of traffic diversion on alternative routes.
- e) Tolling issues – rationale for tolling at a national level; fuel levy; excessive taxation; insufficient information on toll fees; National Roads Act, Unsolicited Proposal Process and Declaration to Toll process; cross-subsidisation; location and number of toll plazas; congestion caused by toll plazas; toll fees and collection methods; and discounts.
- f) Specialist studies issues – hydrology; botanical; air pollution; visual; noise pollution; economic; health; climate, soils and agriculture; fauna; aquatic; heritage; social; planning/development in the Eastern Cape; tourism; and traffic impact study.
- g) Public consultation process – transparency of process and provision of information; public consultation process; concerns raised not included; distribution of documents for review; input into specialist studies; consultation with authorities; use of the media; and public consultation required in the future.
- h) Scope of work and construction issues – rehabilitation; monitoring; EMP; Construction phase; culverts, underpasses and overpasses; bridges; intersections and interchanges; road widening, improved vertical and horizontal alignment; access to the toll road; location of route through greenfields section; road signage and lighting; lay-byes and rest areas; road maintenance; fencing; secondary access roads; design standards; costs of project; and incident management.
- i) Biophysical issues – effect on wilderness areas; effects on biodiversity; effects on Pondoland Centre of Endemism; effects on wetlands, rivers, estuaries and gorges; soil erosion; impacts on fauna; and coastal areas.
- j) Road, traffic and transport issues – traffic congestion; traffic and transportation studies and data; upgrade existing roads rather than build a toll road; ring roads and bypasses; impact on Durban International Airport; impact on public transport/taxi industry; heavy vehicles; status of, and impact on, the current N2 route; and road safety issues.
- k) Planning and policy issues – ribbon development; impact of improved access to the remote Pondoland area; Wild Coast SDI; land use planning and IDPs; creation of the Pondoland National Park/Conservation Area; housing and other new developments; impact on local authorities; capacity of authorities; and Provincial Growth and Development Strategy.
- l) Motivation/need for the project – motivation for the project; motivation for tolling the existing N2 on the KwaZulu-Natal South Coast; motivation for tolling the existing N2 in the Eastern Cape; and motivation for tolling the existing R61 in the Eastern Cape.

7.2 KEY SHORTCOMINGS AND/OR GAPS TO BE ADDRESSED IN THE CURRENT EIA PROCESS

The issues and concerns raised during the previous EIA process were audited in order to identify key shortcomings and/or gaps that need to be addressed in the new EIA process.

The following key shortcomings and/or gaps have been identified:

a) EIA and public consultation process

- Adequacy of the motivation for the development of the road;
- Adequacy of the analysis of alternatives;
- Detailed description of the alignment of the proposed road;
- Adequacy and integration of specialist studies;
- Consideration of recent strategic planning and policy documentation (e.g. reports forming part of the Wild Coast Conservation and Sustainable Development Project);
- Consideration of construction-related impacts; and
- Assessment of impacts in relation to the “do nothing” alternative.

b) Biophysical aspects

- Adequacy of botanical survey;
- Consideration of potential impacts on ecosystem processes (and, in particular, those linked to the Pondoland Centre of Endemism); and
- Assessment of the ecological sustainability of the proposed project.

c) Socio-economic aspects

- Consideration of mining and other regional planning/development initiatives;
- Assessment of potential impacts of the proposed project on the small towns along the existing N2 between Mthatha and Port Shepstone and existing R61 between Lusikisiki and Port Edward;
- Consideration of tolling and associated socio-economic impacts [it should be noted, however, that tolling aspects will be considered by the Minister of Transport in terms of the applicable legislation];
- Consideration of macro-transportation issues and potential impacts of traffic diversion due to tolling;
- Consideration of potential impacts on sites of spiritual and religious significance;
- Consideration of rural livelihoods and the use of medicinal and other natural veld products; and
- Assessment of the social and economic sustainability of the proposed project.

7.3 CURRENT EIA PROCESS

The issues and concerns raised on this EIA process, as set out in the BID, have been synthesised and classified into 20 categories. It should be noted that these categories are by no means definitive and exclusive and have been used for convenience only. The categories are as follows:

- | | |
|--|---|
| • Role of SANRAL and N2 Wild Coast Consortium | • Use of information from the previous EIA |
| • Plan of Study for Scoping | • Assessment of alternatives |
| • Declaration to Toll process and assessment of tolling impacts in the EIA | • Provision of information in the EIA |
| • Information in Background Information Document | • Project Description |
| • EIA Timeframes | • Validity of information from the previous study |
| | • EIA Regulations |
| | • Motivation for the project |
| | • Scope of issues to be assessed in the EIA |

- Choice of main consultants
- Independence of consultants
- Public consultation process
- EIA process
- Specialist consultants
- Validity of curtailed Scoping Study process
- Lack of SEA.

A detailed Comments and Responses Report on the BID is presented as an appendix to the DSR.

8. WAY FORWARD

8.1 FINALISATION OF SCOPING REPORT

The completion of the Scoping Study would involve public notification of the availability of the DSR for review and comment and the presentation of the DSR at public meetings, Focus Group meetings and *imbizos*. I&APs will be provided with an eight-week comment period on the report. Details on public venues/sites where the DSR will be made available for review, and public meetings to be held during the comment period, are provided in the DSR and will be included in the public notification of the availability of the DSR. The full report will also be made available on the websites www.ccaenvironmental.co.za and www.nra.co.za. For inclusion in the Final Scoping Report (FSR), comments should reach NMA no later than **Friday 9 June 2006**.

The DSR will be updated to a FSR giving due consideration to the comments received. All comments received would be collated into a Comments and Responses Report which will form part of the FSR. On completion of the FSR it will be submitted for acceptance to DEAT (the lead environmental authority) and the Eastern Cape and KwaZulu-Natal environmental authorities. It is envisaged that the provincial environmental authorities would provide comment to DEAT on the adequacy of the Scoping Study and FSR and way forward on the EIA process.

8.2 IMPACT ASSESSMENT PHASE

8.2.1 SPECIALIST STUDIES

The previous specialist reports are considered to reflect independent specialist studies suitable for use in the current EIA, except in two cases. The specialist Eastern Cape planning study and the visual study would need to be re-done in light of the deemed lack of independence of the previous environmental consultant.

General and specific Terms of Reference for updated or new specialist studies have been formulated in order to ensure that all relevant issues and concerns are adequately addressed in the current EIA. In particular, the specialist studies are aimed at:

- Reviewing previous independent specialist reports, where applicable, in order to determine the continued relevance thereof;
- Updating existing information, where applicable, in light of any relevant new information and current project details; and
- Ensuring that all relevant issues/potential impacts and key shortcomings and/or gaps are adequately addressed.

The following specialist studies would be applicable:

- Vegetation and flora;
- Fauna;
- Aquatic ecosystems;

- Soils, land use and agriculture;
- Social;
- Tourism;
- Cultural and historical heritage;
- Noise;
- Air quality;
- Visual;
- Traffic;
- Planning/development; and
- Economic.

Specialists would be required to assess and rate potential impacts in terms of a rigorous assessment methodology. This would include consideration of uncertainty and potential cumulative effects. Specialists would also be required to consider recommended mitigation measures in light of their likely effectiveness and practicability.

The specialists will be required to attend an initial workshop to facilitate integration between the various specialist studies. In parallel with the specialist studies, various meetings with key interest groups and/or communities will be held to further discuss and understand the potential impacts relating to the proposed project.

Prior to completion of the specialist reports, the findings will be presented to the project technical team in order to provide a clear picture of where any likely problems exist and to enable the technical team to identify attainable alternatives (e.g. design or alignment changes).

Independent specialists in the various specialist study fields will review the adequacy of the specialist reports before they are finalised and integrated into the next phase of the EIA.

8.2.2 INTEGRATION AND ASSESSMENT

The aims of this phase would be to bring together the findings of the specialist studies and other relevant, available information into a Draft Environmental Impact Report (EIR) and to elicit public comment on the report. Comments received would be collated in a Comments and Responses Report. A Final EIR would then be compiled, with due consideration of comments received, and submitted to DEAT and the relevant provincial environmental authorities for consideration and decision-making. Following the issuing of the RoD, any I&AP (including the Applicant) would be given a statutory 30-day period in which to appeal the decision.

8.2.3 ENVIRONMENTAL MANAGEMENT PLAN

It is envisaged that a Draft EMP would be submitted simultaneously with the submission of the Final EIR, as required by DEAT. The Draft EMP would set out actions, responsibilities and schedules for the implementation of the mitigation measures as prescribed in the EIA. The EMP would also include monitoring and review methods to measure the degree of success of the mitigation measures. The monitoring programme would describe the aspects to be monitored, the proposed nature of the monitoring, and evaluation procedures during the construction and operational phases of the proposed project.

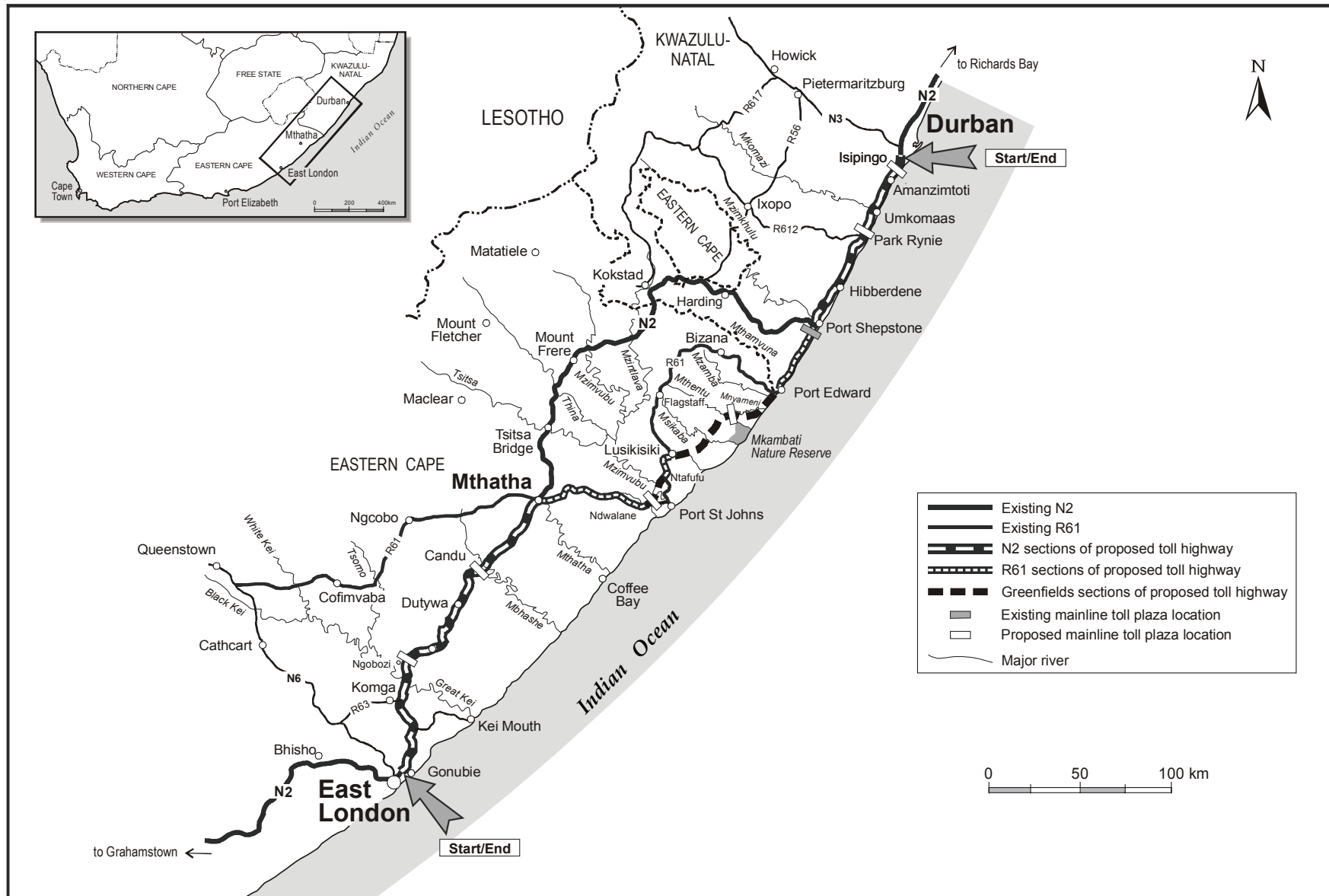


Figure 1 The proposed N2 Wild Coast Toll Highway route between the Gonubie Interchange (Eastern Cape) and the Isipingo Interchange (KwaZulu-Natal)

