



**agriculture
& environmental affairs**

Department:
Agriculture
& Environmental Affairs
PROVINCE OF KWAZULU-NATAL

KZN Department of Agriculture & Environmental
Affairs
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Reference No.: DM/AMEND/0044/2013

Fax Transmission

18/03/2014

eThekweni Municipality: Transport Authority
30 Archie Gumede Place
Durban
4000

Attention : Mr. Robin Chetty
Tel no. : 031 311 7403
Fax no. : 031 311 7695

Dear Sir/Madam

DM/AMEND/0044/2013: AMENDMENT TO THE ENVIRONMENTAL AUTHORIZATION TO AMEND THE ROUTE ALIGNMENT IN PINETOWN FOR THE INTERGRATED RAPID PUBLIC TRANSPORT NETWORK – TRUNK ROUTE 03, LINKING BRIDGE CITY VIA THE M25 AND MR577 TO PINETOWN CBD, WITH A SPUR FROM CLERMONT, LOCATED WITHIN THE ETHEKWINI MUNICIPALITY.

1. The environmental authorization for the abovementioned activity dated 04 October 2013 and your application for an amendment received by the Department on 13 December 2013 and amended application form received by the Department on 18 February 2014 of this environmental authorization in terms of the provisions of sub-regulation 39(1) of the National Environmental Management Act (NEMA) Environmental Impact Assessment (EIA) Regulations, 2010 as amended, refers.
2. The KwaZulu-Natal Department of Agriculture and Environmental Affairs in terms of the powers vested in it by sub-regulation 42(5) of the EIA Regulations, 2010 as amended, hereby amends the **Layout Plan for the route in Pinetown**, of the environmental authorization, to read as follows:

"Included in Corridor 3 route is the amendment to the route alignment in Pinetown as depicted in Annexure 7: Layout Plan for amended route in Pinetown:

The route within Pinetown is as follows: Dinkleman Road to Qashana Khuzwayo Road to Beviss Road; onto Josiah Gumede Road and onto Anderson Road where the route turns around the circle at the corner of Anderson Road and Davidson Road South/Roselle Road. From here the route continues back along Anderson Road and back onto Josiah Gumede Road. The route then continues along the original alignment joining back to Bevis Road which becomes a two-way BRT corridor. This may be categorized as a collector road system as it offers to the residential and commercial properties along its path."

Reasons for amendment

3. Corridor 3 route is amended due to space constraints in Pinetown Central Business District.

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4. A section of the original initial route has been changed and an alternative identified which eradicates the restrictive one-way system and reduces the anticipated construction of the route along certain roads in Pinetown.

Key decision factors

5. The request for an amendment in the change of route is considered a non-substantive change (05 March 2014), as it does not affect the findings in the final Environmental Assessment Report.
6. In terms of impacts associated to the amendment, the turning circle facility disregards the route along Kings Road and Crompton Street and no longer includes the two stations.
7. The removal of stations has minimal socio-economic impacts and the operation workstream will adjust the bus schedule accordingly.
8. As per the conceptual design, there is minimal impact on the road reserve in creating a turning circle for articulated buses.
9. The amendment and change in the route will affect fewer landowners and businesses as the deviation eliminates roughly 2.2km of the original route and adds approximately 350m of the new route along Anderson Road.
10. No physical environmental impacts are anticipated, as the route will run within the existing road reserve.
11. No sensitive areas have been identified along the deviation.
12. Although the amendment and change in layout is a non-substantive amendment, all stakeholders along the new alignment as well as stakeholders surround the site were notified of the amendment. Site notices were also erected along the new route.
13. For the above reasons, this Department has decided to grant this amendment.
14. In terms of subregulation 10(2) of the EIA Regulations, 2010 as amended, you are instructed to notify all registered interested and affected parties in writing within **twelve (12) calendar days** of receipt of this Department's decision in respect of your application. You are also instructed to provide all registered interested and affected parties with information on the appeal process in accordance with Chapter 7 of the EIA Regulations, 2010 as amended.

Yours faithfully



for: Head of Department

Signed by: N.C. ZUNGE

Department of Agriculture and Environmental Affairs

Date: 18/03/2014

Cc : Ms. Michelle Evans of Messrs SiVEST SA (Pty) Ltd
Tel : 031 581 1579
Fax : 031 566 2371

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GIBELA UMKHUMBI OLWA NOBUBHA



agriculture & environmental affairs

Department:
Agriculture
& Environmental Affairs
PROVINCE OF KWAZULU-NATAL

Amended Environmental Authorization

**In terms of regulation 42 (5) of the
Environmental Impact Assessment Regulations,
GNR 543, 18 June 2010, as amended**

Project Title Integrated Rapid Public Transport Network (IRPTN): Corridor 3, Bridge City to Pinetown Central Business District (CBD)

Local Municipality eThekweni Municipality

Application number:	DM/AMEND/0044/2013
Date of first issue:	04 October 2013
Date of second issue:	18 MARCH 2014
Environmental Authorization holder:	eThekweni Municipality: Transport Authority
Location of activity:	Various Portions (Linear Activity)

Decision

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) as amended and the Environmental Impact Assessment (EIA) Regulations, June 2010 as amended, the **KwaZulu-Natal Department of Agriculture and Environmental Affairs** (hereafter referred to as the "Department")

grants Environmental Authorization

to:

eThekwinl Municipality: Transport Authority (herein after referred to as "the authorization holder")

Details of the contact person:

Mr. Robin Chetty
30 Archie Gumede Place
Durban
4000

Tel: 031 311 7403

Fax: 031 311 7695

to undertake the following activities (hereafter referred to as "the activities") as described in section 1 below.

1 Activities authorized

The eThekwinl Municipality: Transport Authority is authorized to construct a Bus Rapid Transit (BRT) service, supported by a road based feeder and complementary services, known as the Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City, KwaMashu to Pinetown Central Business District as indicated in **Annexure 3A and 3B**. The Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City in Kwa-Mashu to Pinetown Central Business District comprises of:

- Bus Right of Way, dedicated bus ways and associated priority infrastructure;
- Terminal stations;
- On route stations and station precincts;

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- Control centre (Transport Management Centre);
- Bridge City Depot as indicated in Annexure 5,
- Vehicle fleets; and
- Integrated Fare Management Systems.

Corridor 3, from Bridge City in KwaMashu to Pinetown Central Business District forms part of the Phase 1 network and is the subject of this environmental authorization.

Corridor 3 is approximately 27.5km in length, starting at Bridge City in Kwa-Mashu and traverses areas of Kwa-Mashu, Ntuzuma, Kwa-Dabeka, New Germany and ends in Pinetown. Corridor 3 can be segregated into two road classifications:

1. From Bridge City in Kwa-Mashu to Pinetown, it may be categorized as an arterial road. This is defined by having "uninterrupted traffic flow except at intersections and midblock pedestrian crossings", and
2. The route within Pinetown may be categorized as a collector road system as it offers access to the residential and commercial properties along its path.

Included in the Corridor 3 route, is the Bridge City Depot as indicated in **Annexure 5: Layout Plan, Bridge City Depot**. This depot is situated mainly on Portion 508 of Erf 789 which can be accessed from the north using Phoenix Road. The construction of the depot will include the installation of 2 underground storage tanks sized which will be 83m³ each and 1 aboveground storage tank which will be 1m³. The project area under assessment is approximately 59 000m². The depot site will consist of wash bays, ablution facilities, canteen, administration building, security building, and underground washday tanks. All IRPTN busses will utilise this depot site to refuel whilst authorization is being sought for the remainder of the depot sites.

Included in Corridor 3 route is the amendment to the route alignment in Pinetown as depicted in **Annexure 7: Layout Plan for amended route in Pinetown**. The route within Pinetown is as follows: Dinkleman Road to Qashana Khuzwayo Road to Beviss Road; onto Josiah Gumede Road and onto Anderson Road where the route turns around the circle at the corner of Anderson Road and Davidson Road South/Roselle Road. From here the route continues back along Anderson Road and back onto Josiah Gumede Road. The route then continues along the original alignment joining back to Bevis Road which becomes a two-way BRT corridor. This may be categorized as a collector road system as it offers to the residential and commercial properties along its path.

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The following activities in Government Notice No. R. 544 and R 546, 18 June 2010 (as amended) is triggered by the abovementioned project:

Component (or phase) of the project	Listing Notice/ Activity No.
In routing the IRPTN from Bridge City to Pinetown, a number of watercourses will be crossed and upgrades to or new crossing points maybe required.	Activity 11 of GNR 544, 18 June 2010 (as amended) "The construction of: (iii) bridges; (vi) bulk storm water outlet structures; (x) buildings exceeding 50 square metres in size; or (xi) infrastructure or structures covering 50 square metres or more where such construction occurs within a watercourse or within 32m within a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line."
Fuel will be stored on site at the Bridge City depot and the total storage capacity is more than 80m ³ , but less than 500m ³ .	Activity 13 of GNR 544, 18 June 2010 (as amended) "The construction of facilities or infrastructure for the storage, or for storage and handling, of a dangerous good, where such storage occurs in containers with a combined capacity of 80 but not exceeding 500 cubic metres."
Construction of the IRPTN will entail the infilling and depositing of material close to the Umgeni River, Umhlangane River and their tributaries.	Activity 18 of GNR 544, 18 June 2010 (as amended) "The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles, or rock of more than 5 cubic metres from: (i) a watercourse (iv) the littoral active zone, an estuary or distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater but excluding where such infilling, depositing, dredging, excavation, removal or moving; (a) is for maintenance purposes undertaken in

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**Amended environmental authorization for the Integrated Rapid Public Transport Network (IRPTN): Corridor 3, Bridge
City to Pinetown Central Business District (CBD)**

	<p>accordance with a management plan agreed to by the relevant environmental authority; or</p> <p>(b) occurs behind the development setback line."</p>
<p>The roads will be widened to accommodate additional dedicated bus lanes. The widening of the road may vary at different portions along the route. The required width for the road reserve varies from 23.2m along Beviss onto Qashana Khuzwayo Roads in Pinetown area. The width increases from Escom Road to Regent Street to 30.25m (along Qashana Khuzwayo Road) and decreases thereafter (Regent Street) to Dinkelman Road in the New Germany area. In Clermont, Dinkelman required road reserve is 34.6m in width. Over the Umgeni River bridge, width is 28.55m. The remainder of MR577, width is 31.5m and 50.35m on the M25.</p>	<p>Activity 47 of GNR 544, 18 June 2010 (as amended)</p> <p>"The widening of a road by more than 6 metres, or the lengthening of a road by more than 1 kilometre –</p> <p>(i) where the existing reserve is wider than 13.5 metres; or</p> <p>(ii) where no reserve exists, where the existing road is wider than 8 metres excluding widening and lengthening occurring inside urban areas."</p>
Component (or phase) of the project	Listing Notice/ Activity No.
<p>Road infrastructure will be constructed in an urban area within 32m of the Umgeni River (zoned for Public Open Space).</p>	<p>Activity 16 of GNR 546, 18 June 2010 (as amended)</p> <p>"The construction of:</p> <p>(iii) buildings with a footprint exceeding 10 square metres in size; or</p> <p>(iv) infrastructure covering 10 square metres or more where such construction occurs within a watercourse or within 32m within a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line inside urban areas:</p> <p>(aa) area zoned for use as public open space;</p> <p>(bb) areas designated for conservation use in Spatial Development Frameworks adopted by the component</p>

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	authority, zoned for a conservation purpose; or (cc) Areas seawards of the development setback line."
Road infrastructure will be constructed in an urban area within 32m of the Umgeni River (zoned for Public Open Space).	Activity 19 of GNR 546, 18 June 2010 (as amended) "The widening of a road by more than 4 metres, or the lengthening of a road by more than 1 kilometre inside urban areas: (aa) area zoned for use as public open space; (bb) areas designated for conservation use in Spatial Development Frameworks adopted by the component authority, zoned for a conservation purpose."
Road infrastructure will be constructed in an urban area within 32m of the Umgeni River (zoned for Public Open Space).	Activity 24 of GNR 546, 18 June 2010 (as amended) "The expansion of: (vii) buildings where the buildings will be expanded by 10 square metres in size more; or (viii) infrastructure where the infrastructure will be expanded by 10 square metres or more where such construction occurs within a watercourse or within 32m within a watercourse, measured from the edge of a watercourse, excluding where such construction will occur behind the development setback line inside urban areas: (aa) area zoned for use as public open space; (bb) areas designated for conservation use in Spatial Development Frameworks adopted by the component authority, zoned for a conservation purpose."

as described in the Basic Assessment Report (BAR) dated 24 April 2013 and amended BAR dated 27 September 2013, prepared by Messrs SiVEST SA (Pty) Ltd.

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Geographical coordinates of the preferred route

Authorized alternative	Latitude (S)	Longitude (E)
Starting geographical coordinates of activity:	29°44'05.16"	31°00'11.26"
Ending geographical coordinates of activity:	29°48'25.58"	30°52'17.26"

2. General

2.1. Compliance with the conditions of this environmental authorization

In terms of section 24F of the National Environmental Management Act (NEMA), 1998 (Act No. 107 of 1998), failure to comply with the conditions of this environmental authorization constitutes an offence for which a convicted person may be liable to a fine not exceeding R5 million or imprisonment for a period not exceeding ten years or both such fine and such imprisonment.

2.2. Understanding the conditions of this environmental authorization

It is the responsibility of the authorization holder to understand the conditions of this environmental authorization. Any queries regarding this environmental authorization must be submitted in writing to the Department at the address below. The holder of the environmental authorization must acknowledge in writing that he/she understands and will comply with the conditions contained in this environmental authorization within **thirty (30) calendar days** of receipt of this Department's decision to authorize the activity. This correspondence must be forwarded to the Control Environmental Officer: Compliance Monitoring and Enforcement Component as per the contact details specified below in 2.4 below.

2.3. Amendments to the project or Environmental Management Programme (EMPr)

- 2.3.1. Any changes to, or deviations from, the project description set out in this environmental authorization must be approved, in writing, by the Department before such changes or deviations may be effected¹.
- 2.3.2. Any subsequent amendments to the EMPr must also be submitted to the Department for review. The amendments must only be implemented after being approved by the Department.

¹ The holder of the environmental authorization is advised to contact the Department to check if any proposed changes are regarded as material or substantive prior to commencement.

2.4. Contact details for the Department

The following contact details for the Department must be used for all reports, notices etc., which must be submitted to:

Department of Agriculture & Environmental Affairs
eThekweni District Office
P. O. Box X54321
Durban
4000

Tel No. 031 302 2851/76

Fax No. 031 302 2824

3. Conditions of authorization

3. This Environmental Authorization is subject to the conditions set out below:

- 3.1 **Period of Validity:** The listed activities authorized must commence within **seven (07) years** from the date of issue. If commencement of the authorized activities does not occur within that period, this environmental authorization lapses and the holder of the environmental authorization must re-apply, by submitting an application subject to environmental authorization.
- 3.2 The activities authorized must only be carried out at the location as described in **section 1** above and as indicated in **Annexure 2: Locality Map**.
- 3.3 This environmental authorization does not negate the holder's responsibility to comply with any other statutory requirements that may be applicable to the carrying out of the activities as described in **section 1** of this environmental authorization.
- 3.4 This environmental authorization is only applicable to the activities as described in **section 1** above.
- 3.5 The holder of the environmental authorization is responsible for ensuring compliance with the conditions by any person acting on his or her behalf, inclusive of an agent, contractor, sub-contractor, employee or person rendering a service to the holder of the environmental authorization.
- 3.6 This environmental authorization and the conditions are binding on the holder of the environmental authorization.

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- 3.7 Should the need arise to develop further infrastructure that falls within the ambit of the EIA Regulations GNR 544, 545 and 546 of June 2010 (as amended), the holder must obtain environmental authorization from the Department of Agriculture and Environmental Affairs prior to the commencement of construction and/or the installation/ commissioning of such an activity.
- 3.8 The environmental authorization must be produced to any authorized official of this Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the environmental authorization who works or undertakes work at the premises.
- 3.9 In the event of any dispute concerning the significance of a particular impact, the opinion of this Department in respect of its significance will prevail.

Notification to interested and affected parties

- 3.10 The environmental authorization holder must notify every registered interested and affected party, in writing and within **12 (twelve) calendar days from date of the Department's decision** to authorize the activities.
- 3.11 The notification referred to in condition 3.10 above must –
- 3.11.1 Specify the date on which the environmental authorization was issued;
 - 3.11.2 Inform the interested and affected parties of the appeal procedure provided for in Chapter 7 of the EIA Regulations, 2010 as amended.
 - 3.11.3 Advise interested and affected parties that a copy of the environmental authorization will be furnished on request.
 - 3.11.4 Draw the attention of all registered interested and affected parties to the manner in which they can access the decision.
 - 3.11.5 Publish a notice in the newspapers used for the placing of advertisements as part of the public participation process; informing interested and affected parties of the decision, informing interested and affected parties where the decision can be accessed.

Approval of the Environmental Management Programme (EMPr)

- 3.12 The Environmental Management Programme (EMPr) dated November 2012 and prepared by Messrs SiVEST SA (Pty) Ltd for the IRPTN, Corridor 3, from Bridge City in Kwa-Mashu to Pinetown Central Business District, as submitted for the environmental authorization of

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this project complies with section 24N of NEMA and regulation 33 of the EIA Regulations 2010 as amended, however, the EMPr must be amended to include:

- 3.12.1 Detailed description of impacts and mitigation measures specific to the activities in corridor 3, example identified impacts and mitigation measures for watercourse and wetland crossings, traffic, fauna and flora and heritage resources.
- 3.12.2 Technical information and final approved layout plans of the activity.
- 3.12.3 Measures to rehabilitate the environment affected by the activity, to its natural or predetermined state or to a land use which conforms with the generally accepted principle of sustainable development.
- 3.12.4 The process for managing any environmental damage, pollution, pumping and treatment of extraneous water or ecological degradation as a result of undertaking the activity.
- 3.12.5 Alien Invasive Management Plan.
- 3.12.6 The protocol for the sweeping, collection and relocation of the Black-headed Dwarf Chameleon.
- 3.13 The EMPr must be amended and it must be submitted to the Department of Water Affairs and eThekweni Municipality: Environmental Planning and Climate Protection for comment.
- 3.14 Once the above-mentioned stakeholders have provided comment, the EMPr must be amended to include measures that address these comments and the final EMPr must be submitted to the Department for written approval. The final EMPr must be submitted to the Control Environmental Officer – Environmental Impact Assessment, eThekweni District Office contact details as per specified in 2.4.

Monitoring and Reporting to the Department

- 3.15 The holder of the environmental authorization must appoint an experienced and independent Environmental Control Officer (ECO)² for the activity to ensure that the mitigation and rehabilitation measures and recommendations referred to in this environmental authorization are implemented and to ensure compliance with the provisions of the approved EMPr.
- 3.16 Upon appointment of the ECO his/her details must be communicated to the Control Environmental Officer CME Component as per contact details specified in 2.4.

² The ECO must be independent and have the necessary experience and qualifications to understand, interpret, monitor, audit and implement the EMPr and the conditions of the environmental authorization. Feedback must be given in the form of an audit report which must address any non-compliance that may have arisen from the audit.

- 3.17 Should the ECO for the development change at any time, this must be communicated, in writing, to this Department within **fourteen (14) calendar days** of appointing the new ECO. This notification must be sent to the Control Environmental Officer: CME Component as per contact details specified in 2.4 herewith.
- 3.18 The ECO must be appointed **prior** to the commencement of the activity.
- 3.19 The ECO must perform all tasks as stipulated in the amended and approved EMPr. This includes keeping record of all activities on site, problems identified and transgressions noted.
- 3.20 The ECO must be employed until all activities and rehabilitation measures are completed.
- 3.21 The responsibilities of the ECO must include (but not limited):
- 3.21.1 Performing all tasks assigned to the ECO in the approved EMPr;
 - 3.21.2 Ensuring the holder of the environmental authorization is enforcing the implementation of the approved EMPr; and,
 - 3.21.3 Providing guidance/advice that ensures implementation of appropriate environmental management measures and adherence with environmental legislation/regulations.
- 3.22 All requirements for the management, monitoring and reporting of impacts for all phases of the project are specified in the approved EMPr, and must be kept on site and made available for inspection to this Department and other relevant authorities.
- 3.23 The holder of the environmental authorization or ECO must submit environmental audit reports to this Department as per the time intervals specified below. The reports must be addressed to the Control Environmental Officer: CME Component as per the contact details specified in 2.4 herewith. The intervals for the environmental audit reports are as follows:
- 3.23.1 **One (01)** environmental audit report every **month** during the construction phase; and,
 - 3.23.2 A post construction environmental audit report. This report must be submitted within **sixty (60) days** from the date that construction is completed.
- 3.24 Records must be kept of all incidents/accidents and root cause analysis must be conducted for each impact with risk mitigation actions implemented.

Construction of the Activities

- 3.25 The activity must comply with the Layout Plan attached as Annexure 3A, 3B, 4 and 7 of this environmental authorization.
- 3.26 All staff and contractors/sub-contractors/suppliers/service providers must be provided with environmental awareness, occupational safety, and/or legal information training on the approved EMPr and environmental authorization. The training must take into account language and literacy requirements as well as measures to determine the effectiveness of the training. Proof of this training must be attached to the audit report.
- 3.27 Measures must be implemented at the site to minimise the potential noise impacts by informing the surrounding land users of unusually noisy activities. Noisy activities must be kept to a minimum and conducted simultaneously at the start of construction if possible and piling or other noisy activities must take place during normal working hours.
- 3.28 Noisy activities must take place during allocated construction hours only as per Section 25 of the Noise Control Regulations of the Environment Conservation Act, 1989 (Act no. 73 of 1989).
- 3.29 Environmental awareness training regarding Black-headed Dwarf chameleon protection must be conducted with all persons operation within areas that the chameleons maybe found.
- 3.30 The site must be demarcated with proper signage erected along affected roads and areas, to warn both pedestrians and motorists of the construction activity and all construction work must be kept within the demarcated area.
- 3.31 The location and use of temporary toilets during construction must not cause any pollution to the water resources neither must it be a health hazard to the general public. Further, these toilets must be situated at a minimum distance of 50m away from any river/stream/watercourse or wetland.
- 3.32 Waste material of any kind cannot be buried or burnt on the site.
- 3.33 Alien invasive clearing must be undertaken in accordance with the approved Alien Invasive Management Plan prior to construction activities commencing.
- 3.34 A Black-headed Dwarf Chameleon sweep must be undertaken prior to construction commencing. The sweep must be undertaken according to the approved protocol.
- 3.35 All natural vegetation outside of the development footprint must be retained if any and enhanced if applicable. Vegetation outside of the development footprint must be protected

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- by preventing access of construction vehicles and personnel into these areas, unless for rehabilitation purposes.
- 3.36 Should any protected indigenous vegetation be removed, cut or pruned, to accommodate the development, a permit must be obtained from the Department of Agriculture, Fisheries and Forestry (DAFF) and/or Ezemvelo KwaZulu-Natal (EKZNW) prior to such vegetation been removed, cut or pruned.
- 3.37 No development is permitted or allowed within any watercourse, wetland, river or stream; except for where there are expansions to the road reserve to accommodate the activity as per the layout plan.
- 3.38 No excavated material or fill material must be stored within the watercourse or within 15m of the watercourse.
- 3.39 Measures to contain the water containing waste and safe disposal thereof must be implemented.
- 3.40 Water containing waste must not contaminate stormwater and must not be discharged into the natural environment for attenuation.
- 3.41 The Stormwater Design Parameters for Quality and Quantity Stormwater Control prepared by Messrs Goba dated 28 August 2012 must be approved by eThekweni Municipality: Coastal, Stormwater and Catchment Management and must be attached to approved EMPr.
- 3.42 All stormwater infrastructure and structures for underground stormwater pipes, attenuation tanks, small channels, manholes and kerb inlets must be sized, positioned and designed according to the eThekweni Municipality Municipality: Design Manual "Guidelines and Policies for the Design of Stormwater Drainage and Stormwater Management Systems".
- 3.43 In the event of a spillage/incident that cannot be contained and which poses a potential threat to the local environment, the following Departments must be informed of the incident within 48 hours and in accordance with Section 30 of the National Environment Management Act, Act 107 of 1998:
- 3.43.1 The Local Authority, eThekweni Municipality;
- 3.43.2 Department of Water Affairs (DWA);
- 3.43.3 Department of Agriculture and Environmental Affairs (Pollution and Waste Management, eThekweni District, Private Bag X54321, Durban, 4000);
- 3.43.4 The local Fire Department; and
- 3.43.5 Any other mandated authority.

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- 3.44 The site Engineer or ECO must ensure that the storage and utilisation of potentially hazardous materials such as diesel, petrol, oils and/or lubricants do not result in any form of soil and water contamination.
- 3.45 The following conditions refer to the storage of hazardous/dangerous substances on site solely for the construction phase:
- 3.45.1 Hazardous substances must be stored in the construction camp under lock and key;
- 3.45.2 Chemical storage areas must be protected by bunded areas of a volume equal to 150% of the volume of the container storing the substance. Bunded areas must be constructed of concrete blocks lined with suitably dense plastic sheeting. Fuel and oil storage tanks and drums, including internal installations and waste oil tanks, must be situated on an impermeable base within an oil-tight bund. Any oils, fuels and spilled substances must be removed weekly and recycled or disposed off at a licensed waste disposal facility able to accommodate such waste; and
- 3.45.3 Chemicals or hazardous substances must not be allowed to contaminate the soil or groundwater. In the event of this occurring, the necessary clean up measures must be undertaken immediately. Any soil/groundwater contaminated during construction must be removed, stored in a sealed container and disposed thereof at a licensed disposal facility. Safe disposal certificates must be obtained.
- 3.46 Measures must be implemented such that erosion is minimised during construction and after construction, in accordance with the approved EMP. These measures may include:
- 3.46.1 The suitable use of sand bags or Hessian sheets;
- 3.46.2 The prompt rehabilitation of exposed soil areas with indigenous vegetation to ensure that soil is protected from the elements;
- 3.46.3 The removal of vegetation, only as it becomes necessary for work to proceed; and
- 3.46.4 Prevent the unnecessary removal of vegetation especially on steep areas.
- 3.47 Amafa AkwaZulu-Natali must be contacted if any heritage resources, objects or features and sites be identified during construction. All construction activities must cease until further notice from Amafa AkwaZulu-Natali as in accordance with the South African Heritage Resources Act, 1999 (Act No. 25 of 1999) and the KwaZulu-Natal Heritage Act (Act No. 4 of 2008).
- 3.48 On completion of the construction activity, the site must be rehabilitated in accordance with the approved EMP.

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Construction of the Bridge City Depot

In addition to the above conditions, the following conditions are specific to the Bridge City Depot:

- 3.49 The activity must comply with the Layout Plan attached as **Annexure 5: Layout Plan – Bridge City Depot** of this environmental authorization.
- 3.50 The construction of the Bridge City Depot and installation of 2 underground storage tanks sized at 83m³ each and 1 aboveground storage tank sized at 1m³ and associated infrastructure must meet the requirements of all South African National Standards (SANS) and the relevant National Building Regulations Standards Act No. 103 of 1977.
- 3.51 The Bridge City Depot must be constructed 10m away from the edge of the Piesang River and River embankment as indicated in **Annexure 6: Wetland Buffer Map**.
- 3.52 The Underground Storage Tanks (UST's) must be jacketed underground with leak detection mechanism.
- 3.53 All fuel leaks and contamination of surface water runoff from hydro-carbons must be minimized or eliminated.
- 3.54 Stormwater management must be managed during and after the construction of the Bridge City Depot.
- 3.55 After the installation of the UST's and Aboveground Storage Tank (AST), the site must be contoured to ensure free flow of stormwater run-off and to prevent ponding of water and the AST must be banded.

Operation of the Activity

- 3.56 Rehabilitation of all sensitive areas must be undertaken in accordance with the approved EMP. Rehabilitation must commence at the earliest time as prescribed by the ECO.
- 3.57 The developer and contractor must ensure that no construction material foreign to the site, including construction debris, is left unattended after construction activities have ceased/completed. All construction materials including rubble, cement bags, chemicals, fuels and oils must be safely stored in appropriate containers and disposed off at a license waste facility in accordance with the approved EMP.
- 3.58 The holder of the environmental authorization must ensure that indigenous landscaping with suitable local coastal vegetation is supported throughout rehabilitation of the site.
- 3.59 The storage of petrol and diesel must not cause a risk to the surrounding environment and monthly checks must be undertaken.

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- 3.60 Should there be any soil and groundwater contamination, the Control Environmental Officer: Pollution and Waste Component as per the contact details specified in 2.4 must be informed within **five (05) working days**.

Written notice of the commencement of the decommissioning phases

- 3.61 Not less than **seven (07) days** written notice must be given to the Department that the decommissioning phase will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that decommissioning will commence.
- 3.62 The applicant is responsible for compliance with the provisions for *Duty of care and remediation of Damage* in accordance with Section 28 of the Environmental Management Act (NEMA), Act no. 107 of 1998. Determination of damage vests in this Department.

Availability of this environmental authorization

- 3.63 A copy of this environmental authorization must be kept by the authorization holder and made available to any official of the Department on request.
- 3.64 The Department shall not be held responsible for any damages or losses suffered by the holder or successor in title in any instance where decommissioning be temporarily or permanently stopped for reasons of non-compliance by the holder of the environmental authorization with the conditions of environmental authorization as set out in this document or any other subsequent document emanating from these conditions of environmental authorization.
- 3.65 All correspondence pertaining to this application must clearly include the EIA reference number: DM/AMEND/0044/2013.



for Head of Department,
KwaZulu-Natal Department of Agriculture and Environmental Affairs.

Signed by : N.C. Zungu
Date : 18/03/2014

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Annexure 1: Reasons for Decision

1. The eThekweni Municipality: Transport Authority applied for environmental authorization to carry out the following activities as described in GNR 544, 18 June 2010, as amended and is authorized to construct a Bus Rapid Transit (BRT) service, supported by road based feeder and complementary services, known as the Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City, KwaMashu to Pinetown Central Business District as indicated in **Annexure 3A and 3B**.
2. The Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City in Kwa-Mashu to Pinetown Central Business District comprises of:
 - Bus Right of Way, dedicated bus ways and associated priority infrastructure;
 - Terminal stations;
 - On route stations and station precincts;
 - Control centre (Transport Management Centre);
 - Bridge City Depot,
 - Vehicle fleets; and
 - Integrated Fare Management Systems.

Corridor 3, from Bridge City in KwaMashu to Pinetown Central Business District forms part of the Phase 1 network and is the subject of this environmental authorization.

Corridor 3 is 27.5km in length, starting at Bridge City in Kwa-Mashu and traverses areas of Kwa-mashu, Ntuzuma, Kwa-Dabeka, New Germany and ends in Pinetown. Corridor 3 can be segregated into two road classifications:

- a. From Bridge City in Kwa-Mashu to Pinetown, it may be categorized as an **Arterial** road. This is defined by having "uninterrupted traffic flow except at intersections and midblock pedestrian crossings".
- b. The route within Pinetown may be categorized as a **Collector** road system as it offers access to the residential and commercial properties along its path.

Included in the Corridor 3 route, is the Bridge City Depot as indicated in **Annexure 5**. This depot is situated chiefly on Portion 508 of Erf 789 which can be accessed from the north using Phoenix Road. The construction of the depot will include installation of 2 underground storage tanks sized

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at 83m³ each and 1 aboveground storage tank sized at 1m³. The area under assessment totals to 59 000m². This depot site will provide a facility for busses to refuel whilst authorization is being sought for the remainder of the depot sites.

Included in Corridor 3 route is the amendment to the route alignment in Pinetown as depicted in **Annexure 7: Layout Plan for amended route in Pinetown**. The route within Pinetown is as follows: Dinkleman Road to Qashana Khuzwayo Road to Beviss Road; onto Josiah Gumede Road and onto Anderson Road where the route turns around the circle at the corner of Anderson Road and Davidson Road South/Roselle Road. From here the route continues back along Anderson Road and back onto Josiah Gumede Road. The route then continues along the original alignment joining back to Bevis Road which becomes a two-way BRT corridor. This may be categorized as a collector road system as it offers to the residential and commercial properties along its path.

3. Information considered in making the first decision

In reaching its decision, the Department took, *inter alia*, the following into consideration -

- a) Application form received by the Department on 16 August 2012;
- b) The Final Basic Assessment Report (BAR) received by the Department on 24 April 2013;
- c) The comments received from the organs of state and interested and affected parties as included in the Final BAR dated 24 April 2013 and amended BAR received by the Department on 27 September 2013;
- d) Mitigation measures as proposed in the Final BAR and amended BAR, (including specialist studies);
- e) Updated listed activities in terms of GNR 544, 18 June 2010, as amended, received by the Department on 30 July 2013;
- f) Notification letter requesting comments from Department of Transport in terms of the public participation process received by the Department on 13 August 2013;
- g) Comments from Amafa Akwa-Zulu Natali received by the Department on 14 August 2013; and
- h) The findings of the site visit undertaken by Mr. Shawn Janneker, Mrs. Shanthinie Francis, Ms. Lethiwe Mabanga and Mrs. Viloshnee Pillay from the Department, together with Ms. Michelle Evans and Ms. Michelle Nevette of Messrs SiVEST SA (Pty) Ltd and Mr. Robin Chetty of eThekweni Municipality: Transport Authority on 28 May 2013.

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4. Information considered in making the amended decision

In reaching its decision, the Department took, *inter alia*, the following into consideration –

- a) The amendment application form received by the Department on 13 December 2013,
- b) The findings of the site visit undertaken by Mrs. Shanthinie Francis and Mr. Shawn Janneker, from the Department, together with Ms. Michelle Nevette of Messrs SiVEST SA (Pty) Ltd and Mr. Vishan Dhanuk and Ms. Anusha Naraidu of eThekweni Municipality: Transport Authority on 11 February 2014; and
- c) The amended application form to the amendment received by the on 18 February 2014.

5. Key factors considered in making the decision:

a) Amended BAR dated 27 September 2013:

- i. The amended BAR complied with the requirements of the EIA Regulations, GNR 543, 2010, as amended and has been accepted by the Department on 16 July 2013.
 - ii. The final and amended BAR included a description of the environment that may be affected by the activity and the manner in which the physical, biological, social, economic and cultural aspects of the environment may be affected by the activity.
 - iii. The methodology used in assessing the potential impacts identified in the final and amended BAR and the specialist studies have been adequately indicated.
- b) All information presented to the Department was taken into account in the Department's consideration of the application. A summary of the issues which, in the Department's view, were of the most significance is set out below.
- c) Details provided of the qualifications of the Environmental Assessment Practitioner (EAP) indicate that the EAP is competent to carry out the environmental impact assessment procedures adequately and in accordance with the environmental impact assessment regulations according to GNR 544, 18 June 2010, as amended.

d) Public participation:

The public participation process complies with the requirements of Chapter 6 of the EIA Regulations, 18 June 2010, as amended and the comments from the organs of state and interested and affected parties have been included in the final and amended BAR.

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e) Need and desirability:

- i. Corridor 3 has a variety of land uses, consisting of established townships, low density suburbs, commercial and light industrial and retail uses.
- ii. Corridor 3 is to provide a new connection between Bridge City and Pinetown in a corridor that is not easily traversed at present. Most trips are commuter trips that have their destinations along the business and commercial areas of Pinetown Central Business District. Interchange opportunities will also be important both at Bridge City and Pinetown.

f) Site description:

- i. Corridor 3 will run for almost its entire length within the central median of the existing roads. As such, many of the wetlands and watercourses have already been highly modified during the construction activities for the original roads.
- ii. The portion of the route between Bridge City and the P577, along the M25 is the only segment where the road will run in close proximity to a watercourse. The portion of the route through Pinetown may require the removal of some trees along the road edges. Most of these trees are exotic or locally common indigenous species.
- iii. As the planned IRPTN route will run largely within the central median of the existing roads, impacts to watercourses and vegetation have already occurred in the construction of the original road. Limited and localised impact on water and vegetation resources will occur. The approved EMPr will include steps to ensure that the construction activities do not impact further on the watercourses, wetlands and remaining areas of natural vegetation.

g) Emissions into the atmosphere:

- i. During the construction phase, the construction vehicles will release emissions into the atmosphere. This will however not be significant and will be of a short term nature.

h) Energy Efficiency:

- i. Energy efficiency power options have been identified for Corridor 3 and these include Bus Based Options, Clean (City) Diesel, Bio-diesel, Liquefied Petroleum

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Gas (LPG), Compressed Natural Gas (CNG), Electric (Trolleybus), Clean Diesel Engines, Hybrid Options, Stored Energy by Batteries and Capacitors, Flywheel Stored Energy, Fuel Cells, Internal Combustion Trams as well as Ground-Level Power Supply (APS).

- ii. The advantages and disadvantages of these energy efficiency power options have been identified and discussed further in the Mode Choice Assessment. There will be an increase in emissions released into the atmosphere during the operational phase as a result of an increase in vehicles and buses on the route. However the increase in emissions as a result of the project should be set off by the reduction in cars on the road in the future.

i) Generation of noise:

- i. Noise will be produced by construction activities but will be limited to the development footprint for the duration of the construction phase as per the approved EMPr.
- ii. Consequently, ambient noise levels are likely to only increase temporarily during the construction phase however, measures are implemented at the site to minimise the potential noise impacts by informing the surrounding land users of unusually noisy activities, noisy activities must take place during allocated construction hours only as per Section 25 of the Noise Control Regulations of the Environment Conservation Act, 1989 (Act no. 73 of 1989), noisy activities must be kept to a minimum and conducted simultaneously at the start of construction. Piling or other noisy activities must take place during normal working hours.

j) Heritage Impacts:

- i. A Heritage Impact Assessment was conducted by Messrs Active Heritage cc dated 09 September, to assess whether any heritage resources or sites have been identified in the road reserve.
- ii. The Heritage Impact Assessment for the activity identified no heritage sites or features within the road reserve and within 30m on either side of the road reserve.

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k) Faunal Impacts:

- i. A Faunal Impact Assessment was conducted by Messrs SiVEST SA (Pty) Ltd dated 18 October 2012 to identify whether there were any species of conservation importance, or areas that would be considered no-go areas due to the presence of significant, diverse and conservable ecosystem functions on the site identified for development.
- ii. The development of the Integrated Rapid Public Transport Network (IRPTN), Corridor 3 within the centre median of the existing road reserve will not significantly impact upon the fauna of the identified corridor if alien invasive species are cleared prior to development, no hunting or poaching is done by contractors, all riparian crossings are planned properly and the Black-headed Dwarf Chameleon is relocated if found on site.

l) Wetland and Vegetation Impacts:

- i. A Wetland and Vegetation Assessment was conducted by Messrs SiVEST SA (Pty) Ltd dated 24 September 2012 to delineate and assess all wetlands potentially impacted by the activity.
- ii. Impacts to the watercourses and vegetation have already occurred in the construction of the original roads. The activity will have a very limited and localised impact on water and vegetation resources along the planned alignment.
- iii. The approved EMPr will include steps to ensure that the construction activities do not impact further on the watercourses, wetlands and remaining areas of natural vegetation.

m) Traffic Impacts:

- i. A Traffic Modelling Assessment was conducted by Messrs Goba dated 28 August 2012 to design Corridor 3, by detailing traffic modelling and the operational planning of the system.
- ii. A Base Year Microsimulation Model was developed, representing the 2011 existing network and operations. The objective of developing the Base Year Model was to produce a model that was consistent with existing conditions, that was accurate and could be used with confidence to determine the impact of Bus Rapid Transport (BRT) infrastructure changes to operating conditions.

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- iii. The model was calibrated to ensure that the acceptable targets of comparison between observed and modelled traffic volumes, journey times and queue lengths were obtained.
- iv. The forecast network incorporates several major and minor network improvements, some of which include: Josiah Gumede Road/St Johns Ave been upgraded to a single point interchange, The Dumisani Makhaye Dr (P577)/Inanda Road/Malandela Road intersection being upgraded to a grade separated interchange, Dinkelman Road/Otto Volek Road intersection geometric improvements with additional turning lanes added, to accommodate BRT operations on the existing roadway and reduce the number of right turning traffic across the BRT lanes, minor priority junctions were converted to left in, left out junctions; major priority or important access junctions were converted to signalized intersections.

n) Alternatives:

- i. Alternative sites have not been explored and assessed by the environmental authorization holder and Environmental Assessment Practitioner (EAP) because the activity occurs within the existing road reserve and runs for almost its entire length within the central median.
- ii. Design alternatives were considered and included various bus based modes, guidance options as well as power options. Based on the assessment, the Bus Rapid Transport (BRT) system is the municipality's preferred option.
- iii. Modelling shows that the BRT buses will run smoothly along the corridor and will have important benefits to transport-dependent people in terms of journey time savings and a safe, reliable system.

o) No-go option:

- i. The No-Go option was considered in the report. The No-Go option would imply that the Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City, KwaMashu to Pinetown Central Business would not be implemented and the status quo will remain the same.

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6. Objectives of integrated environmental management:

The Department is satisfied that, subject to compliance with the conditions contained in the environmental authorization, the general objectives of integrated environmental management laid down in Chapter 5 of NEMA will be met.

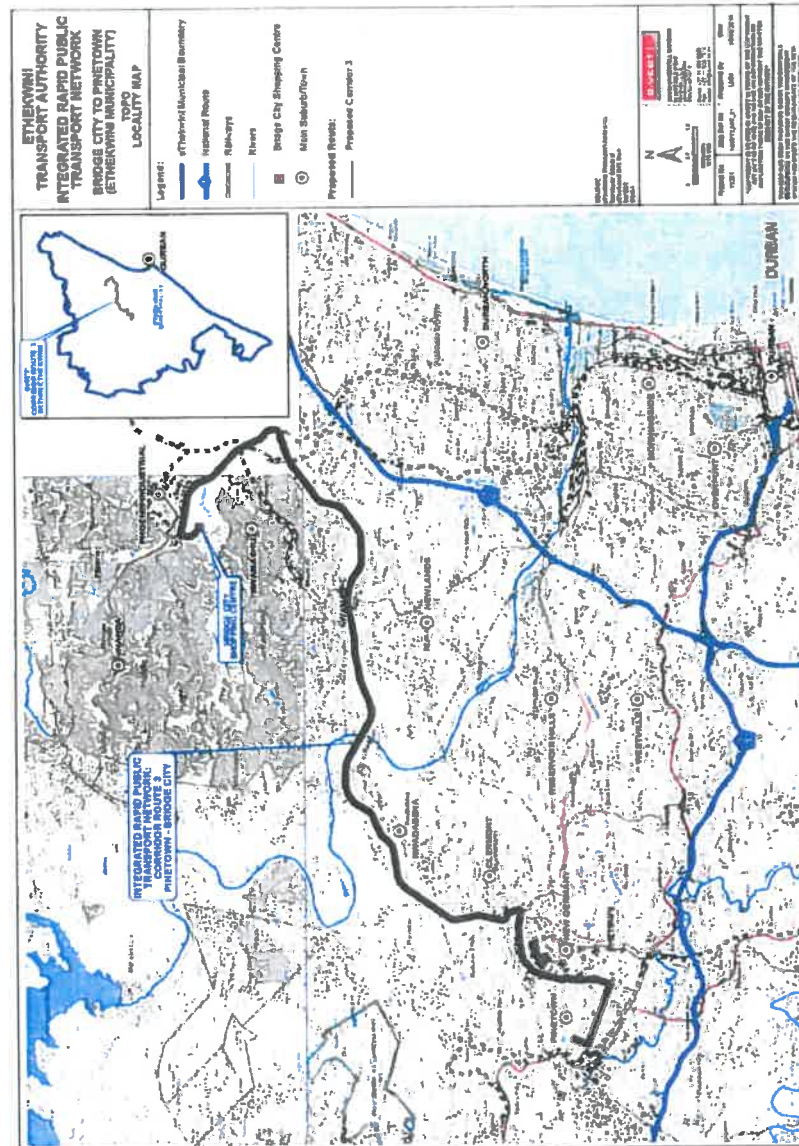
7. After consideration of the information and factors listed above, the Department made the following findings –

- a. The identification and assessment of impacts are detailed in the Basic Assessment Report and amended Basic Assessment Report. Sufficient assessment of the key identified issues and impacts have been completed.
- b. The public participation process was adequate and carried-out sufficiently according to Regulation 56 of GNR 543, 18 June 2010. The relevant guidelines were adopted and followed in respect of the process.
- c. Issues and responses were adequately addressed during the Public Participation process and registered Interested and Affected Parties (I&AP's) were given opportunities to comment. All comments were responded to adequately by the EAP.
- d. The rights of the public will not be adversely affected.
- e. Alternative sites were not explored and assessed by the environmental authorization holder and EAP because the activity occurs within the road reserve.
- f. The preferred construction process alternative has incorporated environmental investigations.
- g. No development and expansion activities are expected within the nearby watercourse and open space, except within the road reserve.
- h. The mitigation measures for identified and assessed impacts are adequate.
- i. All legal and procedural requirements have been met and no land claims have been made against the properties.
- j. No significant emissions or pollution is anticipated from the undertaking.
- k. The procedure followed for impact assessment is adequate for the decision-making process.
- l. The need and desirability for the activity has been identified.
- m. The corridor 3 public transport corridor is a significant investment in infrastructure by the eThekweni Municipality: Transport Authority. The modelling shows that the BRT buses will run smoothly along the corridor and will have important benefits to transport-dependent people in terms of journey time savings and a safe, reliable system.

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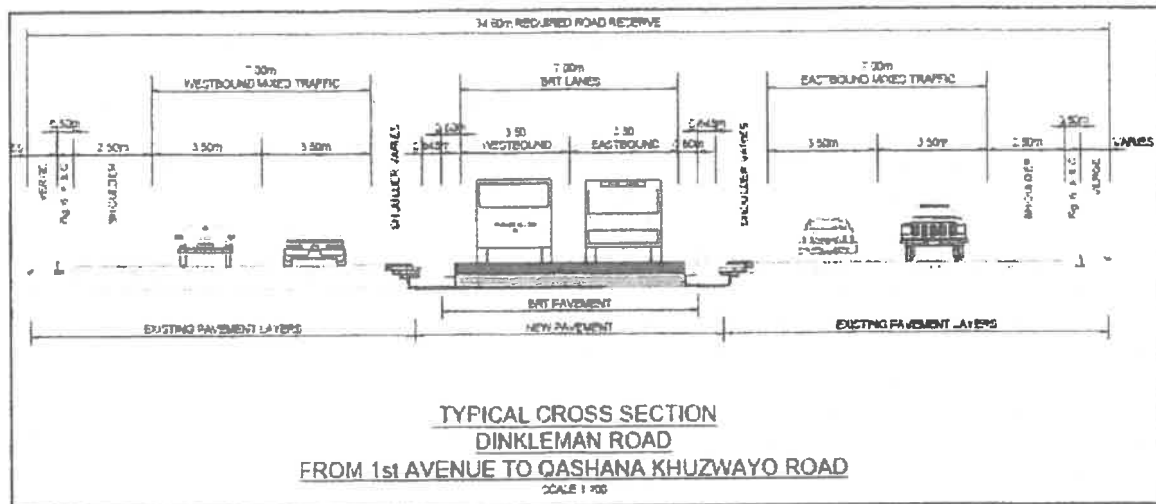
- n. Corridor 3 is also competitive enough to induce a shift in transport modes from private to public transport and to prevent current captive public transport users from transferring to private vehicle modes.
- o. Corridor 3 route can operate in mixed traffic along the P577 and M25 in the short to medium term while free flow conditions exist. The exclusive BRT median would be provided for in the Pinetown loop only.
- p. This arrangement would reduce the capital expenditure while providing similar journey times.
- q. No significant detrimental environmental impacts are anticipated, should compliance with conditions of this environmental authorization, the amended and approved EMPr and the mitigation measures stipulated in the Basic Assessment Report and amended Basic Assessment Report be adopted and adhered to.
- r. The construction of the Bus Rapid Transit (BRT) service, supported by road based feeder and complementary services, known as the Integrated Rapid Public Transport Network (IRPTN), Corridor 3, from Bridge City, KwaMashu to Pinetown Central Business District is according granted.

Annexure 2: Locality Map



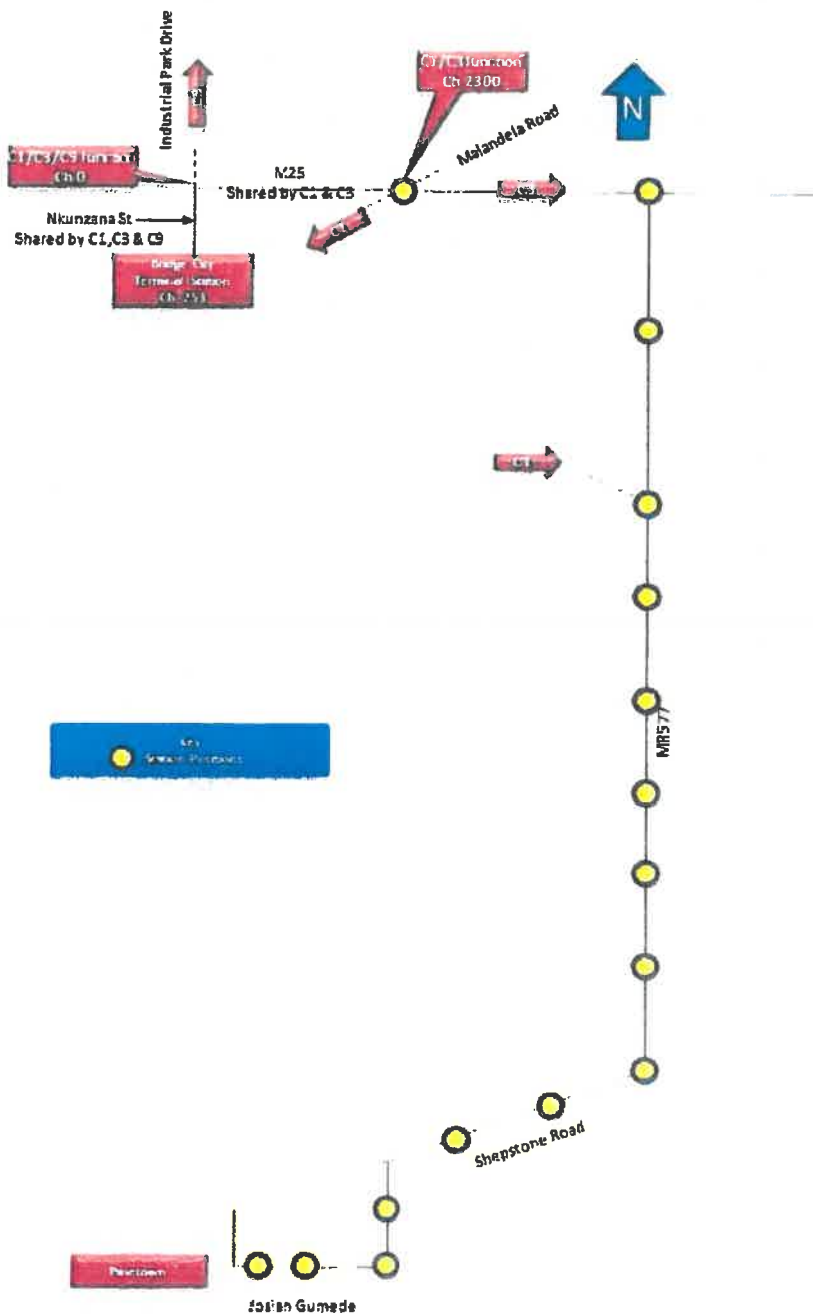
Annexure 3B:

Layout Plan – Route of activity, Illustrating typical cross section of route

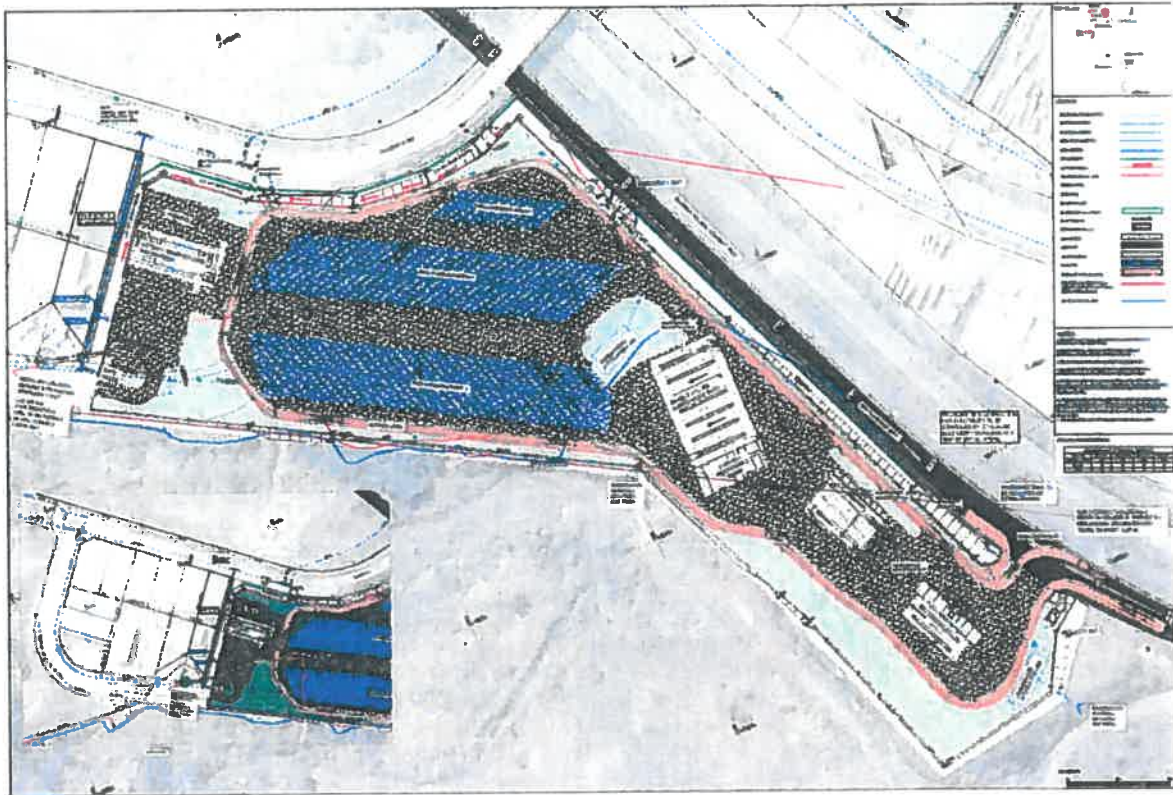


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Annexure 4:
Diagram of Corridor 3, illustrating the overall route length in relation to Corridor 1 and 9

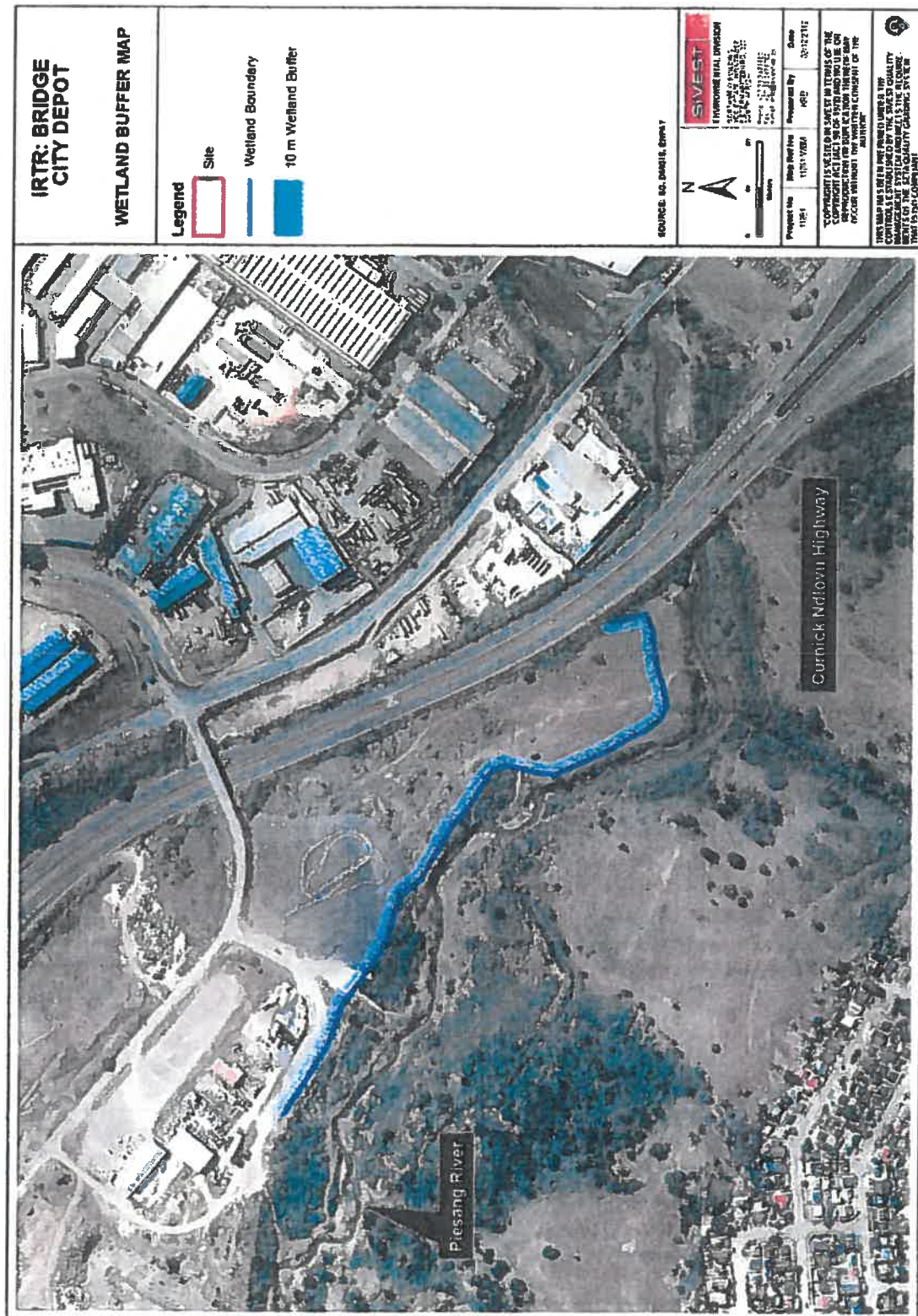


Annexure 5: Layout Plan – Bridge City Depot



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Annexure 6: Layout Plan – Bridge City Depot



Annexure 7: Layout Plan – Amended route in Pinetown

