



# transport

Department:  
Transport  
Province of KwaZulu-Natal

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## TRANSPORTATION ENGINEERING SUB - DIRECTORATE

Aurecon SA (Pty) Ltd  
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Enquiries: Mrs M.D. Schmid  
Extension: 0581  
Reference: T10/2/2/1947/1  
Your Reference: 108498

**ATTENTION: MR RISHAAL SAHADEW**

Date: 5 December 2016

Dear Sir,

**NATIONAL ROUTE 2-27 AND MAIN ROAD 228: TRAFFIC IMPACT ASSESSMENT REPORT (TIA): PROPOSED TINLEY MANOR SOUTHBANKS DEVELOPMENT: SITUATE IN THE KWADUKUZA LOCAL MUNICIPALITY: SITUATE IN THE ADMINISTRATIVE DISTRICT PROVINCE OF KWAZULU-NATAL.**

1. With reference to your Traffic Impact Assessment Report (TIA) Reference No. 108498 dated 30 August 2016 and prepared by Aurecon Consulting Engineers for the abovementioned proposed **TINLEY MANOR SOUTHBANKS DEVELOPMENT**, I have to inform you that the Minister as the Controlling Authority as defined in the Kwazulu-Natal Roads Act No. 4 of 2001, has in terms of the said Act, no objection in principle to the proposed development and the proposals recommended in the TIA.
2. The proposed development of **TINLEY MANOR SOUTHBANKS DEVELOPMENT** may proceed in terms of the Spatial Planning and Land Use Management Act No 16 of 2013 read with chapter 4 of the Kwadukuza Municipality Spatial Planning and Land Use Management By-laws. ). However, prior to any development taking place, in terms of sections 20 and 21 of the Kwazulu-Natal Provincial Road Act No. 4 of 2001 detailed to-scale site development plans for the Technical College adhering to the following requirements are to be submitted for assessment and comment.
  - 2.1 In terms of section 13 of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001, no buildings or any structures whatsoever, other than a fence, hedge or a wall which does not rise higher than 2,1 meters above or below the surface of the land on which it stands, shall be erected on the land within a distance of 15 meters measured from the road reserve boundary of Main Road 228.
  - 2.2 No service road or parking as required in the KwaDukuza Town Planning Scheme shall be erected on the land within a distance of 7,5 meters measured from the road reserve boundary of Main Road 228.
  - 2.3 The road reserve boundary of Main Road 228 shall be determined in consultation with this Departments Road Information Services, Head Office (Tel: 033-355 8600).

- 2.4 The applicant's attention is drawn to the relevant stormwater clause contained in section 12 of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001 and section 5 of the Roads Regulations, wherein it is advised that the disposal of stormwater emanating from the road reserve through the layout, or any stormwater emanating from the layout through the road reserve, **shall be indicated on a detailed to-scale site development plan which is to be submitted to this Department for assessment and comments.** The implementation of stormwater disposal, shall be undertaken in consultation with and to the satisfaction of this Departments Cost Centre Manager, KwaDukuza (Telephone: 032-4373800) during the development of the property concerned.
3. On assessing the (TIA) there are a number of questions and matters that need to be investigated and included in the report.
- 3.1 The first major factor that needs to be addressed is whether SANRAL would agree to a full Interchange at this location. Bearing in mind that the spacing between Salt Rock Interchange and the proposed Sheffield Interchange is approximately 2,6km apart, and the distance between the proposed Sheffield Interchange and the Tinley Manor Interchange is 5km. The report does not indicate approval from SANRAL; first and foremost this needs to be confirmed. If SANRAL do not give approval for the Interchange, the TIA will have to be withdrawn and reviewed taking into account the Salt Rock and Tinley Manor Interchanges.
- 3.2 The report factors in the developments of Seaton Delaval, Nkwazi (now Springfield Estate) and Palm Lakes. It is this Departments view that the following factors should also be considered.
- 3.2.1 No mention is made of the Blue Gum Estate development. It is this Departments view that this development should also be factored into the report. The initial application in 2008 was for 26 Residential Units. An amended application has been made for 97 Single Residential Units, 48 Medium Density Housing Units, A Club House Facility and a Mixed Use Development Erf.
- 3.2.2 Nkwazi Estate, now Springvale Estate, has a reduced number of single Erven. It is recommended that an approach to AF Planning and NDA consulting Engineers is made to obtain these development details.
- 3.2.3 Another aspect of traffic which must be considered is the delivery of fuel to the Avon Peaking Power Plant situate on Main Road 103-1 where at present delivery trucks are travelling on Main Road 467 via the Tinley Manor Interchange. This will change once the proposed Sheffield Interchange is constructed as there was a request by the developers of the Plant to use the Sheffield I/C during the discussions regarding Seaton Delaval and Power Plant applications.
- 3.2.4 In chapter 8 referring to Traffic Generation, no mention is made of traffic generated by the quarry on Main Road 228 which at present uses Main Road 467 and the potential traffic that will use Main Road 228 taking children to the Trinity House School at Palm Lakes.
4. The diagrams for the intersection of Main Roads 228 and 474 in Chapters 6.3.4; 8.7.4 and 10.6.2 does not show through movement but rather a right turn movement into Melinda Lane. It is the intention of the Department that within its planning for the upgrade of the intersection to relocate the intersection approximately 70 meters to the north so as to form a T-junction.

5. In view of the potential of this traffic on Main Road 228 there is a concern that the structure over the Mhlali River at the intersection of Main Roads 228 and 467 would not be able to sustain the impact of the traffic envisaged. This would need to be determined in consultation with the Departments Bridge Component. It is also this Departments view that Main Road 228 from the proposed Sheffield I/C through to its intersection with Main Road 467 should be upgraded to 4 lanes, 2 in each direction, and not only up to the proposed Technical College.
6. In response to the conclusion to the sharing of costs, it is not the norm for the Department to share in the upgrading of road infrastructure due to the development of residential Estates. These costs are generally borne by arrangement between the Developers and Municipality agreements. In the planning, design and the cost of the Road infrastructure upgrades, the question of assistance from the Department can be requested but it may not be supported.
7. Accordingly upon Municipal approval of the application all Provincial Road upgrade designs and construction upgrades shall be undertaken in consultation with and to the satisfaction of the Departments Road and Bridge Design Components.
8. As the property concerned is also affected by National Route 2-27, the matter must, in terms of the National Roads Act No. 7 of 1998, be referred, by you, to the Regional Manager Kwazulu-Natal, South African National Roads Agency Limited, P. O. Box 100410, Scottsville, 3209, for his consideration and recommendations and from whom you shall receive a reply in due course.
9. All costs incurred, as a result of these requirements shall be borne entirely by the developer.
10. This correspondence does not grant authorization or exemption from compliance with any other relevant and applicable legislation.
11. In terms of section 22 of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001 this approval is granted for a period of 18 months. Any amendment, rescission or lapsing of this application the application must be resubmitted to this Department for re-consideration

Yours faithfully,



**HEAD : TRANSPORT**

MDS/an

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CC. Regional Manager: Durban  
Cost Centre Manager: KwaDukuza



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South Africa

Our reference: 108498/Tinley Manor Southbanks  
Your reference: T10/2/2/1947/1

30<sup>th</sup> January 2017

Department of Transport  
Attn: Mr Wlodek Gorny

Dear Sir

**NATIONAL ROUTE 2-27 AND MAIN ROAD 228: TRAFFIC IMPACT ASSESSMENT REPORT (TIA): PROPOSED TINLEY MANOR SOUTHBANKS DEVELOPMENT: SITUATE IN THE KWADUKUZA LOCAL MUNICIPALITY: SITUATE IN THE ADMINISTRATIVE DISTRICT PROVINCE OF KWAZULU-NATAL**

Please see below our response to your letter for the above mentioned development Transport dated 5 December 2016. For ease of reference, we have numbered the responses in the same numerical order used in your letter.

1. Thank you very much for approving the above mentioned development. Your favourable consideration in this regard is greatly appreciated.
2. As requested, detailed plans for the Technical College that adhere to the conditions stipulates to paragraphs 2.1, 2.2, 2.3 and 2.4 in your letter will be submitted to the Department prior to commencing with any work on the site.
- 3.1. The TIA was submitted to SANRAL for approval and we are awaiting a response from them. As a full interchange in the Sheffield Area formed part of the SANRAL's approval for the Seaton Deleval development, therefore it is envisaged that SANRAL will be still amenable to a new interchange in the Sheffield Beach area. Aurecon had a meeting with SANRAL late last year where approval in principle was given to Aurecon for the new interchange. We eagerly await their written comment.
- 3.2.1 As requested by yourselves, the traffic generated by Blue Gum Estate development has now been included in the analysis, based on the TIA that was obtained from AF Planning. This TIA revealed that the Blue Gum Estate development will generate 204 two-way trips in the AM peak hour and 204 two- way trips in the PM peak hour. These additional trips were then modelled in AIMSUN which revealed that these additional trips will have no impact on the surrounding road network. The model for the proposed Sheffield

interchange reveals the road network will operate at acceptable levels of service despite the inclusion of the traffic from the Blue Gum estate.

- 3.2.2. As requested, the new TIA for Nkwazi (now Springvale Estate) was obtained from AF Planning and was compared to the old TIA for this development. The comparison showed that the previous TIA consisted of 1750 residential units, 7490m<sup>2</sup> of commercial and a 600 pupil primary school. As such, the old development scheme yielded a total trip generation of 1786 two-way trips in the AM peak hour and 1821 two way trips in the PM peak hour.

The development scheme in new the TIA for the Springvale Estate only consists of a mere 110 residential units which only generate a paltry volume of a 110 two-way trips in each peak hour. The generated traffic volumes for the AM and PM peak hours will decrease by 1 676 two-way trips and 1 711 two-way trips respectively. This reduction of trips by the Springvale Estate will certainly improve the envisaged LOS on the overall road network in the future planning horizons. Furthermore, this huge reduction in trips from the Springvale Estate will certainly negate the impact of any slight increases in traffic by the other developments.

The AIMSUN model for the proposed Sheffield Beach interchange confirmed that the surrounding road network will operate more efficiently with the reduced traffic volumes from the Springvale Estate.

Since we analysed much higher traffic volumes on the overall road network, as a result of us using the old TIA for the Springvale Development, we are confident that our recommended road network improvements will suffice for the new generated traffic volumes for the study area which are significantly lower than the volumes analysed in our TIA for the Tinley Southbanks Development.

- 3.2.3. According to the management of the Avon Peaking Plant, a maximum of 3 to 4 trucks a day deliver fuel to the plant which equates to less than 1 vehicle per hour and therefore this traffic from the Avon Peaking Plant which may opt to use the new interchange will have a negligible impact on the surrounding road network. Furthermore, these deliveries are made during the off-peak hours and therefore will have no impact on the peak hour traffic conditions. As such, it can safely stated these fuel trucks will not have any major impact on the traffic operations on the proposed Sheffield interchange.
- 3.2.4. The Quarry is currently served by 2 access roads. One access road is on the P228. The quarry traffic from this access uses the P228 and P467. The other access road is off the R102. It is evident from the traffic counts undertaken at the P228/P467 intersection that the hourly volumes of heavy traffic using P228 is very low i.e. during the AM peak hour there are only 19 heavy vehicles entering P228 from P467 and only 15 heavy vehicles were observed exiting from P228 onto P467. Similarly, during the PM peak hour only 15 heavy vehicles were observed entering P228 from P467 and only 11 heavy vehicles were observed exiting from P228 onto P467. These low traffic volumes will have a negligible impact on the traffic operations on P228.

Aurecon was involved in the development of the Trinity Palms School at the Palm Lakes development. As such, we are aware that the target market for this school is largely focused on the residents of the Palm Lakes development therefore majority of the trips to and from the school will be internal trips. Furthermore, given the long distance of this school away from other developments it is highly unlikely that the students will walk to school

therefore the impact of the existing heavy vehicle traffic will be minimal on scholars in the area.

4. Duly noted. Once the Department has completed the design for the upgrade of this intersection, please kindly forward the design to Aurecon such that our plans can be amended accordingly.
5. As mentioned in 3.2.4, there will be a significant reduction in the traffic volumes that will be generated by the Springvale development onto P228. Therefore, there is no need to upgrade P228 to a 4 lane, 2 way road in the 20 year horizon on the section between the proposed Technical College and the P467.

The heavy vehicles travelling to and from the quarry currently use this bridge and since there has been no reported structural integrity problems with this bridge, it is safe to assume that this bridge will suffice in the future.

Should you have any queries with regard to our responses, please feel free to contact us.

Yours faithfully,

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Rishaal Sahadew  
Aurecon SA (Pty) Ltd



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Enquiries: Mrs M.D. Schmid  
Extension: 0581  
Reference: T10/2/2/1947/1  
T10/2/2/1550/44  
Your Reference: 108498

Date: 24 February 2017

### **ATTENTION: MR RISHAAL SAHADEW**

Dear Sir,

#### **NATIONAL ROUTE 2-27 AND MAIN ROAD 228: TRAFFIC IMPACT ASSESSMENT REPORT (TIA): PROPOSED TINLEY MANOR SOUTHBANKS DEVELOPMENT: SITUATE IN THE KWADUKUZA LOCAL MUNICIPALITY: SITUATE IN THE ADMINISTRATIVE DISTRICT PROVINCE OF KWAZULU-NATAL.**

1. With reference to your response dated 30 January 2017 to the Departments letter dated 5 December 2016 refers.
2. The content and recommendations are noted. In light of your findings regarding the concerns raised, this Department has no objections to the proposed **TINLEY MANOR SOUTHBANKS DEVELOPMENT** and for road infrastructure upgrading planning to proceed.
3. The Department is to be engaged in all planning matters pertaining to the design and road infrastructure upgrading of Main Road 228 and its impact on the N2-27.
4. Accordingly upon Municipal approval of the application all road design and construction upgrade requirements determined in the consultation with the Department shall be implemented in consultation with and to the satisfaction of the Department Cost Centre Manager Stanger.
5. The KwaDukuza Municipality must assess or appoint an assessor to determine the required proportionate contribution for the funding of upgrading the road network, as was required in accordance with the initial Development Facilitation Act approvals. The determined funding must be paid to the KwaDukuza Municipality for the implementation of the road upgrades as determined in the TIA.

6. As the property concerned is also affected by National Route 2-27, the matter must, in terms of the National Roads Act No. 7 of 1998, be referred, by you, to the Regional Manager Kwazulu-Natal, South African National Roads Agency Limited, P.O. Box 100410, Scottsville, 3209, for his consideration and recommendations and from whom you shall receive a reply in due course.
7. All costs incurred, as a result of these requirements shall be borne entirely by the developer.
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9. In terms of section 22 of the Kwazulu-Natal Provincial Roads Act No. 4 of 2001 this approval is granted for a period of 18 months. Any amendment, rescission or lapsing of this application the application must be resubmitted to this Department for re-consideration

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CC. Regional Manager: Durban  
Cost Centre Manager: Stanger