

TERRESTRIAL BIODIVERSITY, AQUATIC, PLANT AND ANIMAL SPECIES THEME SITE VERIFICATION REPORT PROPOSED DUALLING OF MAIN ROAD 201 BETWEEN N1 AND KLIPRUG ROAD, PAARL, WESTERN CAPE.

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Prepared For

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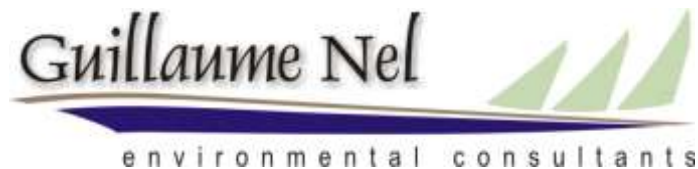
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1. INTRODUCTION AND BACKGROUND

1.1 Introduction

Guillaume Nel Environmental Consultants (GNEC) has been appointed by the Western Cape Government: Department of Transport and Public Works to facilitate the Environmental Impact Assessment (EIA) Basic Assessment and Water Use Licence Application process for the proposed dualling of Main Road 201 from the N1 to Kliprug Road, Paarl, Western Cape.

A Screening Tool Report has been generated for the proposed development. According to the screening tool report the Animal Species Theme has a Medium sensitivity rating; while the Aquatic Theme has a Very High sensitivity rating; Plant Species has a High Sensitivity Rating and Terrestrial Biodiversity There has a Very High sensitivity rating. Therefore, this site sensitivity verification report is compiled to determine whether additional specialist studies are required for the proposed development.

1.2 Background

Main Road 201 (also referred to as the R301) originates in the Breede River Valley, with the Km 0.00 marker being located at the intersection with the R46. MR201 extends through the Haweqwa Nature Reserve with the Bainskloof Pass being located within the nature reserve. MR 201 then extends through the towns of Wellington and Paarl before transecting the N1 roadway and terminating at the intersection with the R45 (close to the small community of Wemmershoek). MR201 largely supports one lane in each direction, with the amount of lanes increasing to two lanes in each direction in the urban areas. MR201 is entirely located within the Cape Winelands District Municipality; while sections of the road are located within the Witzenberg, Breede Valley, Drakenstein and Stellenbosch local municipalities.

MR201 is an important connecting roadway between Paarl and Franschhoek. MR201 is one of two roadways which can be utilised in order to reach Franschhoek. Travellers living outside of the Paarl-Franschhoek valley also make use of MR201 and the R45 as a gateway to regional areas which include the Overberg, Cape Agulhas and Garden Route areas.

The town of Paarl, supporting important business and education sectors, have led to the town experiencing a steady influx of permanent residents. It should be mentioned that Paarl is home to a total of 55 schools which automatically attracts large volumes of permanent residents as well as traffic volumes.

Numerous large scale private residential and lifestyle estates have also been developed South of the N1 which has resulted in an increased amount of vehicular movement on MR201. A number of residential estates have also recently been approved in the area that should still be constructed. Development of the approved residential estates will increase the amount of road users and hence traffic volumes.

The increased traffic volumes will result in increased travelling times being experienced. In order to better accommodate the current and future traffic volumes, as well as to ensure the safety of

road users, it is proposed that MR201 be converted into a dual carriageway. The proposed works will also entail the upgrading and expansion of existing stormwater structures.

1.3 Location

The proposed development entails the conversion of MR201 to a dual carriageway, as well as the upgrading and expansion of the existing stormwater infrastructure. The applicable section of the MR201 roadway starts approximately 145 metres south of the N1 roadway and terminates approximately 320 metres south of Kliprug Minor Road.

The proposed dualling of MR 201 will result in the proposed development taking place outside of the current registered road reserve. It is proposed that the road reserve width vary between 40 to 50 metres.

Please refer to Figure 1 below for a copy of the locality map, as well as to Figure 2 below for a copy of an aerial image of the proposed site.





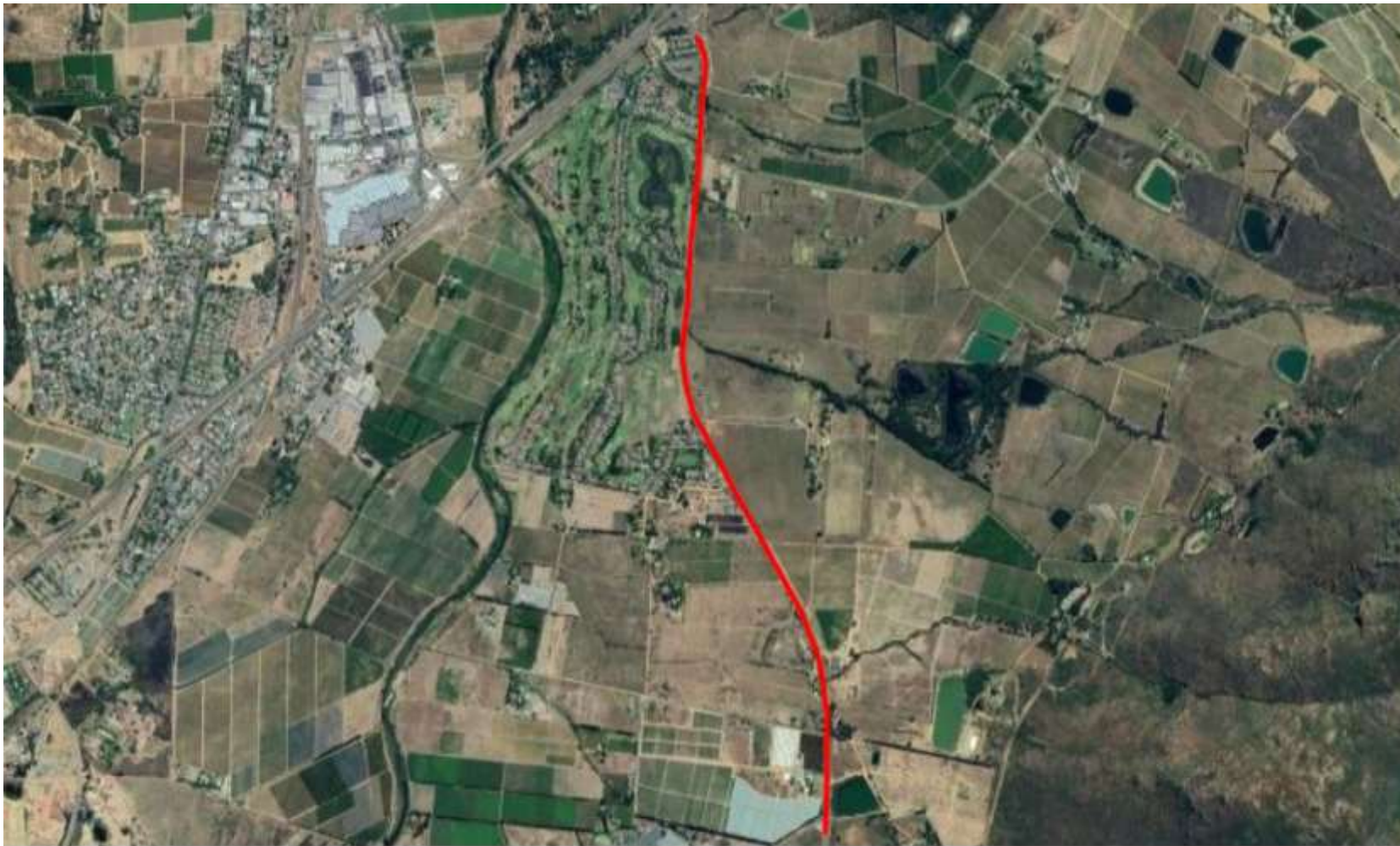
Main Road 201, Paarl	 Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321	
Locality Map		

FIGURE 1 LOCALITY MAP OF THE PROPOSED DUALLING OF MAIN ROAD 201, PAARL



Main Road 201, Paarl	 Tel: (021) 870 1874 Fax: 086 6933 802 Cell: 072 1571 321	
Aerial Image		

FIGURE 2 AERIAL IMAGE OF THE PROPOSED DEVELOPMENT SITE

2. DESKTOP ANALYSIS OF THE SITE

The vast majority of the proposed development site is an existing surfaced road within a registered road reserve. It is proposed that the dualling of MR201 be extend outside of the existing registered road reserve. The widening of the road reserve will be to the East of the road.

It is also important to note that the development proposal is the dualling of an existing roadway. The proposed development will therefore result in land adjacent to the existing road reserve being incorporated.

Freshwater

According to Cape Farm Mapper, a number of watercourses are located at locations where the culverts are proposed to be upgraded. Please refer to Figure 3 below for a freshwater resources map.



FIGURE 3 FRESHWATER RESOURCES MAP (CAPE FARM MAPPER, 2019)

Botanical

According to the National Vegetation Map of South Africa, Lesotho and Swaziland (Mucina & Rutherford 2006) sections of the site would have historically been covered in FFa3 Swartland Alluvium Fynbos and FFG2 Boland Granite Fynbos vegetation types. It should however be noted that the current road reserve area have previously have been disturbed from its natural state due to the construction of MR201. The widening of MR201 however will entail that the road reserve be redefined and hence there is a possibility that indigenous vegetation may be removed

as part of the proposed development. Please refer to Figure 4 below for the vegetation types map.

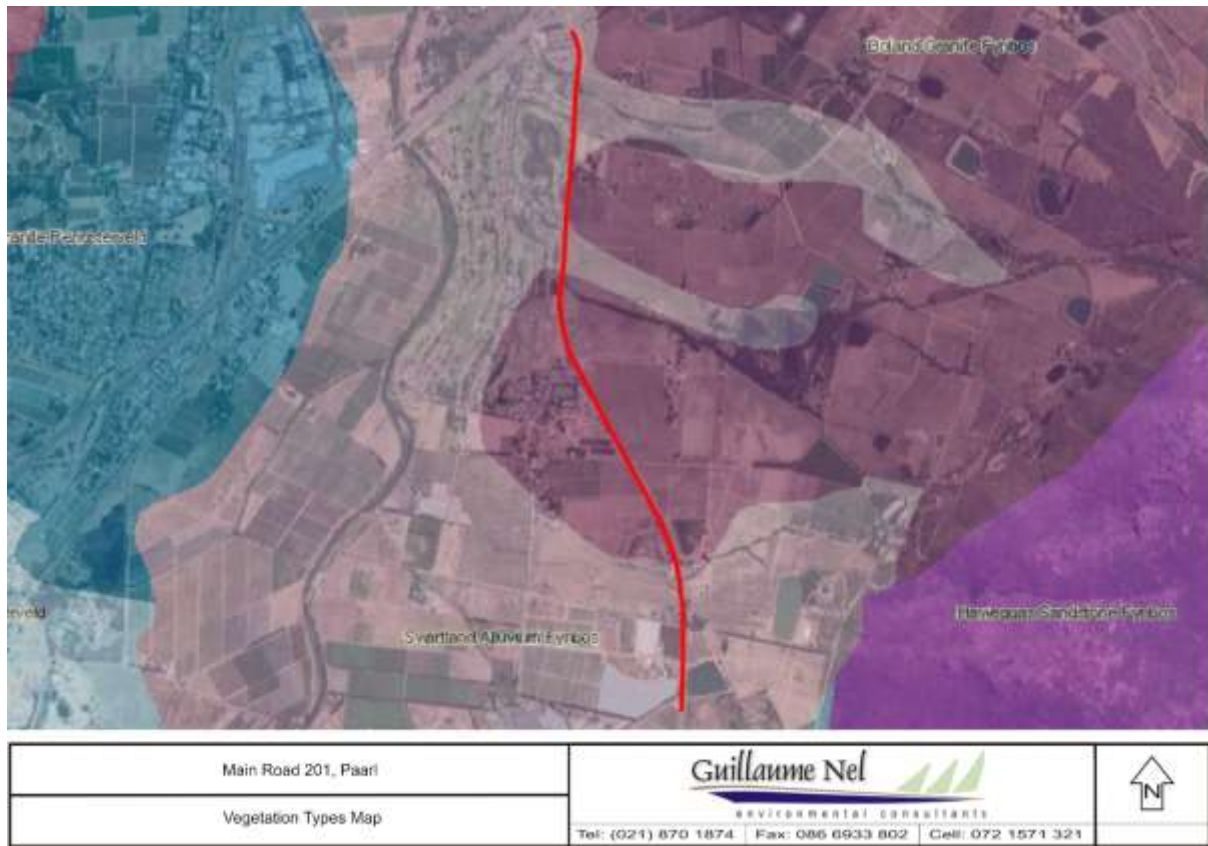


FIGURE 4 VEGETATION TYPES MAP (CAPE FARM MAPPER, 2019)

3. SITE INSPECTION

During the site inspection, it was clear that the properties adjacent to Main Road 201 is altered from its natural state. Numerous residential developments are present or is currently being constructed. During the site inspection it was clear that watercourses are present. Additionally, areas of natural vegetation and a number of Alien Invasive species were also witnessed in the road reserve.

Please refer to Figures 5 and 6 below for site photos of the property.



FIGURE 6 INDICATION OF WATERCOURSE TO BE IMPACTED ON BY THE PROPOSED DEVELOPMENT



FIGURE 5 EXISTING ALIEN INVASIVE VEGETATION ADJACENT TO MR201

4. DISCUSSION OF SITE SENSITIVITY

As previously mentioned, the proposed development site has been completely altered from its natural state following continuous road maintenance and agricultural practices. The findings of the site verification report will be discussed in this section of the report according to the four different themes, being Plant Species, Aquatic Biodiversity and Terrestrial Biodiversity and Animal Species.

4.1 Plant Species Theme

During the site inspection natural vegetation was witnessed within the proposed development footprint. As such, a Botanical Impact Assessment was conducted by Dr Dave McDonald.

4.2 Aquatic Biodiversity Theme

During the site inspection watercourses and wetlands were witnessed within the proposed development footprint. As such, a Freshwater Assessment was conducted by Scientific Aquatic Services (SAS).

4.3 Terrestrial Biodiversity Theme

As mentioned above, a Botanical Impact Assessment and Freshwater Assessment has been conducted to determine the potential impact of the proposed development on the receiving environment.

The mitigation measures proposed by the specialists have been included in the EMPr and RMMP reports. The implementation of the mitigation measures will form part of the conditions of approval for the proposed development.

4.4 Animal Species Theme

According to the Screening Tool Report the Animal Species Theme has a Medium Sensitivity. Due to the previous disturbances to the proposed development footprint; as well as MR201 being an existing roadway; it is not expected that the proposed development will have an impact on Animal Species. Therefore, no additional assessments are required for the animal species theme.

4.4 Overall Discussion

Overall, due consideration has been given to the potential impact of the proposed development on plant species, aquatic biodiversity, terrestrial biodiversity and animal species. It is GNEC's professional opinion that all factors regarding the abovementioned themes were taken into account in this site sensitivity verification report.

As mentioned, a Botanical Impact Assessment and Freshwater Assessment has already been conducted to determine the potential impacts of the proposed development on the receiving environment. In addition, it is not expected that the proposed development will have an impact on Animal Species and therefore no additional assessments will be required.

6. CONCLUSION OF SITE SENSITIVITY VERIFICATION REPORT

Guillaume Nel Environmental Consultants (GNEC) has been appointed by the Western Cape Government: Department of Transport and Public Works to facilitate the Environmental Impact Assessment (EIA) - Basic Assessment and Water Use Licence Application process for the proposed dualling of Main Road 201 from the N1 to Kliprug Road, Paarl.

A Screening Tool Report has been generated for the proposed development. According to the screening tool report the Animal Species Theme has a Medium sensitivity rating; while the Aquatic Theme has a Very High sensitivity rating; Plant Species has a High Sensitivity Rating and Terrestrial Biodiversity There has a Very High sensitivity rating. Therefore, this site sensitivity verification report was compiled to determine whether additional specialist studies are required for the proposed development.

As mentioned, a Botanical Impact Assessment and Freshwater Assessment has already been conducted to determine the potential impacts of the proposed development on the receiving environment. In addition, it is not expected that the proposed development will have an impact on Animal Species and therefore no additional assessments will be required.

Due consideration has been given to the potential impact of the proposed development on the receiving environment. It is GNEC's professional opinion that all factors regarding the environmental themes have been taken into account in this site sensitivity verification report. It is concluded that no additional specialist studies will be required for the proposed development.

4. REFERENCES

Cape Farm Mapper. 2019. <https://gis.elsenburg.com/apps/cfm/>

Department of Environmental Affairs. 2020. Screening Tool Report for the proposed dualling of Main Road 201.