

## **APPENDIX I: SCREENING TOOL**

**APPENDIX I1: SCREENING TOOL REPORT**

**APPENDIX I2: SITE SENSITIVITY VERIFICATION REPORT**

## **APPENDIX I1: SCREENING TOOL REPORT**

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION OR  
FOR A PART TWO AMENDMENT OF AN ENVIRONMENTAL AUTHORISATION  
AS REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE  
ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** TBC

**Project name:** IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 FROM BOTRIVIER AND HERMANUS

**Project title:** Basic Assessment Report

**Date screening report generated:** 19/05/2020 12:54:28

**Applicant:** Western Cape Government: Department of Transport and Public Works (Directorate:  
Road Design)

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# Proposed Project Location

## Orientation map 1: General location

**General Orientation: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 FROM BOTRIVIER AND HERMANUS**



## Map of proposed site and relevant area(s)



## Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	HERMANUS	243	0	34°24'58.12S	19°13'11.35E	Erven
2	HERMANUS	243	0	34°24'58.71S	19°13'11.26E	Erven
3	VERMONT	927	0	34°24'33.86S	19°9'15.93E	Erven
4	SANDBAAI (CALEDON)	1291	0	34°24'41.09S	19°11'19.77E	Erven
5	VERMONT	1935	0	34°24'27.2S	19°9'44.74E	Erven
6	VERMONT	1506	0	34°24'8.85S	19°9'21.62E	Erven
7	ONRUSTRIVIER	2004	0	34°24'26.15S	19°9'54.81E	Erven
8	ONRUSTRIVIER	3710	0	34°24'26.22S	19°10'13.59E	Erven
9	ONRUSTRIVIER	5569	0	34°24'37.81S	19°11'37.5E	Erven
10	HERMANUS	8381	0	34°24'48.19S	19°12'20.79E	Erven
11	ONRUSTRIVIER	5057	0	34°24'26.55S	19°11'29.68E	Erven
12	ONRUST RIVER	581	0	34°24'12.89S	19°10'16.63E	Farm
13	ONRUST RIVER	581	0	34°24'46.24S	19°12'9.92E	Farm
14	ONRUST RIVER	581	364	34°24'32.99S	19°11'10.12E	Farm Portion
15	ONRUST RIVER	581	349	34°24'46.38S	19°12'9.55E	Farm Portion
16	ONRUST RIVER	581	4	34°24'0.46S	19°11'2.22E	Farm Portion
17	ONRUST RIVER	581	0	34°24'53.01S	19°10'13.85E	Farm Portion
18	ONRUST RIVER	581	357	34°24'38.03S	19°11'37.51E	Farm Portion

Development footprint<sup>1</sup> vertices:

No development footprint(s) specified.

<sup>1</sup> “development footprint”, means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

## Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

## Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

## Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is: Infrastructure | Transport Services | Roads | Public | Roads - Public.

### Relevant development incentives, restrictions, exclusions or prohibitions

The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

No intersection with any development zones found.

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

**Project Location: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 FROM BOTRIVIER AND HERMANUS**



**Proposed Development Area Environmental Sensitivity**

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
-------	-----------------------	------------------	--------------------	-----------------



Agriculture Theme			X	
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme		X		
Paleontology Theme			X	
Plant Species Theme		X		
Defence Theme				X
Terrestrial Biodiversity Theme	X			

### Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

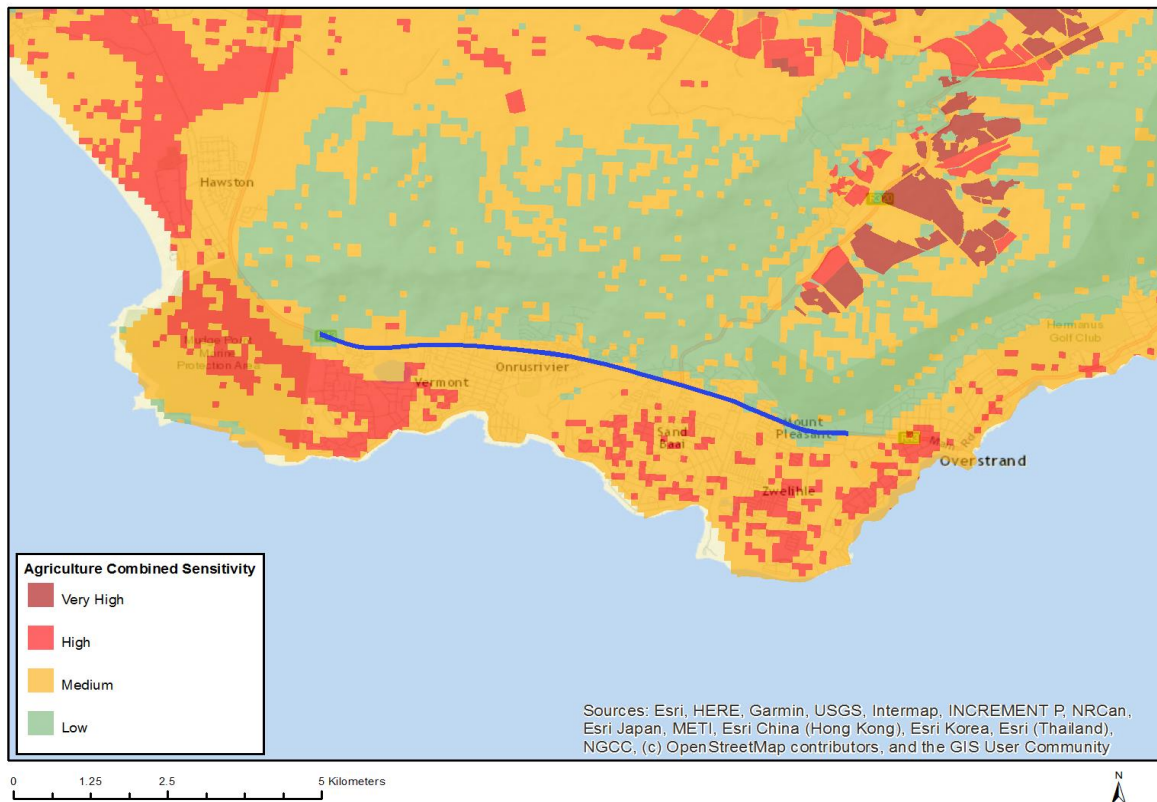
<b>N o</b>	<b>Specialist assessment</b>	<b>Assessment Protocol</b>
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Agriculture_Assessment_Protocols.pdf</a>
2	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
6	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf</a>

	ent	
7	Noise Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Noise_Impacts_Assessment_Protocols.pdf</a>
8	Traffic Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
9	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
10	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
11	Ambient Air Quality Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
12	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>
13	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf</a>

## Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

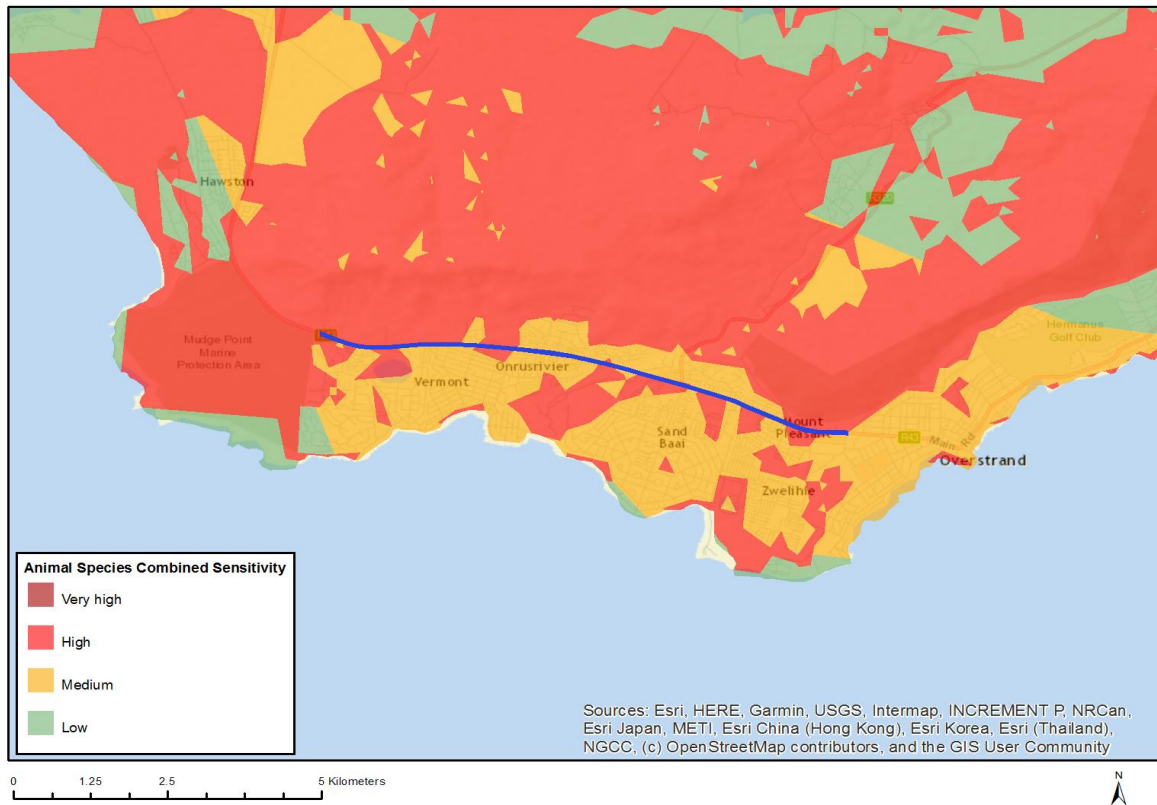


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

#### Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY

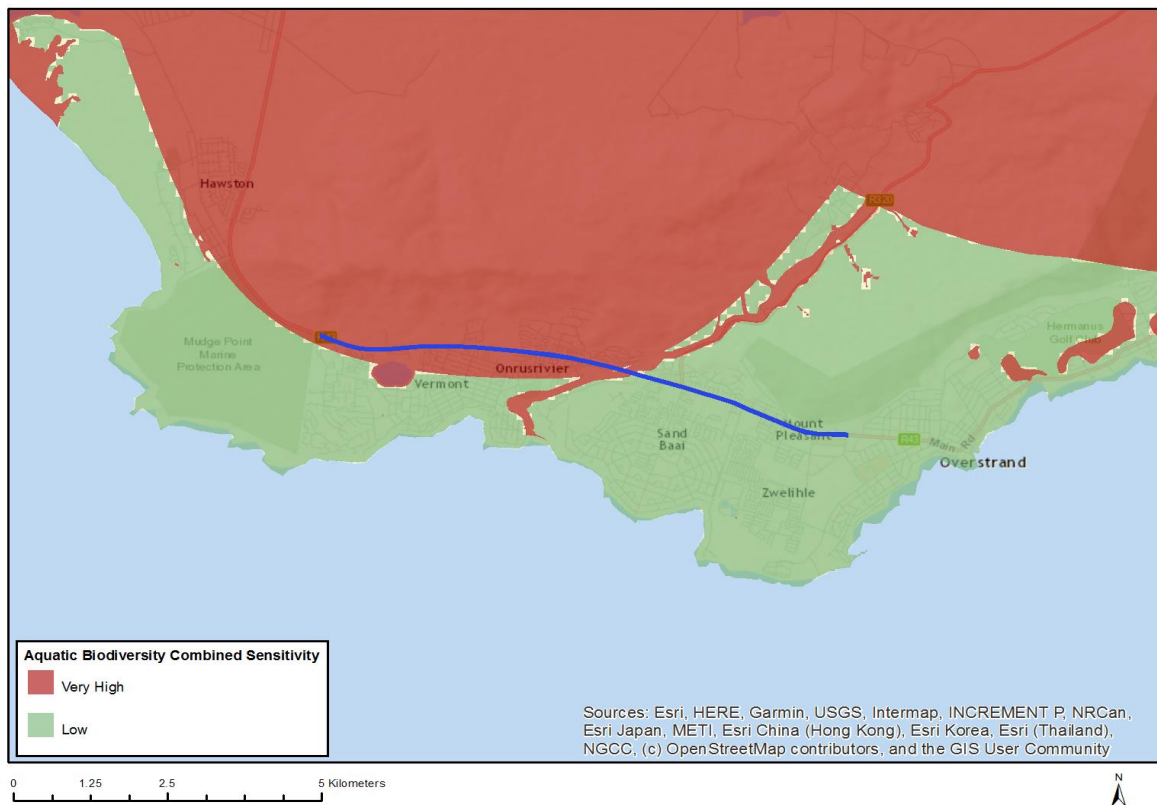


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Circus maurus
Medium	Sensitive species 15

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

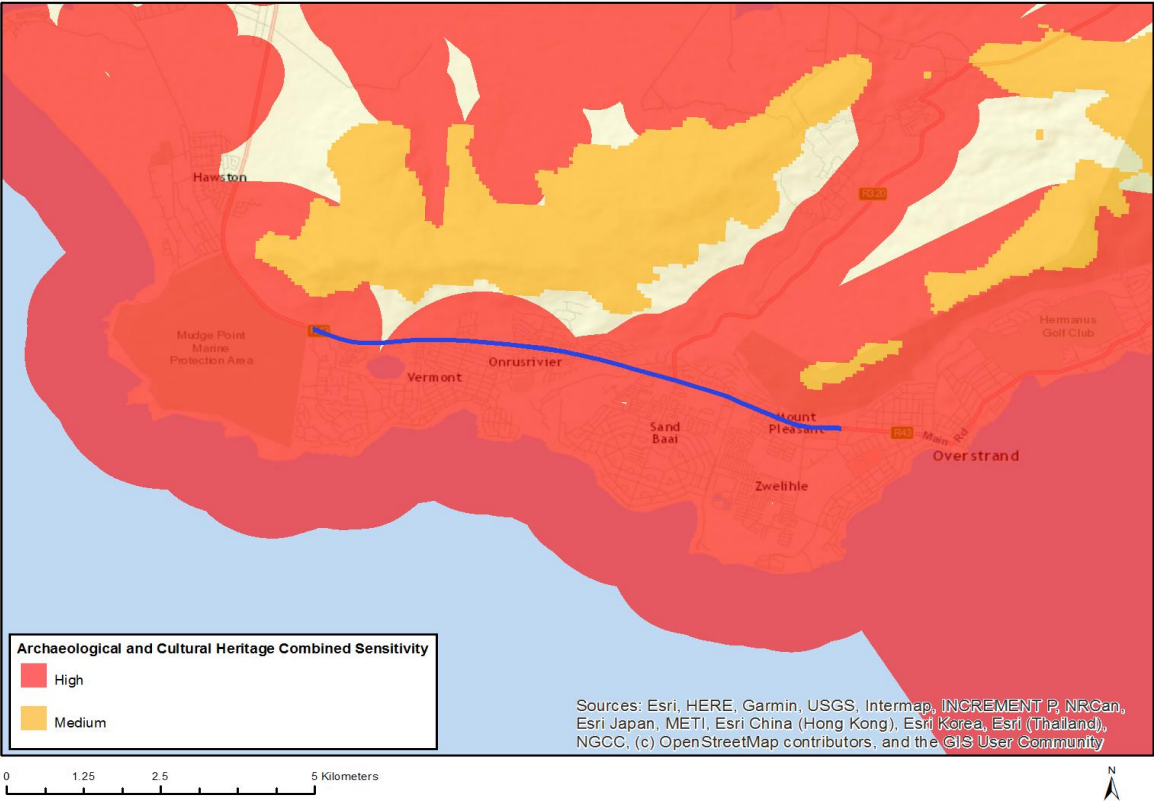


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity
Very High	Rivers
Very High	Strategic water source area
Very High	Wetlands and Estuaries

# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

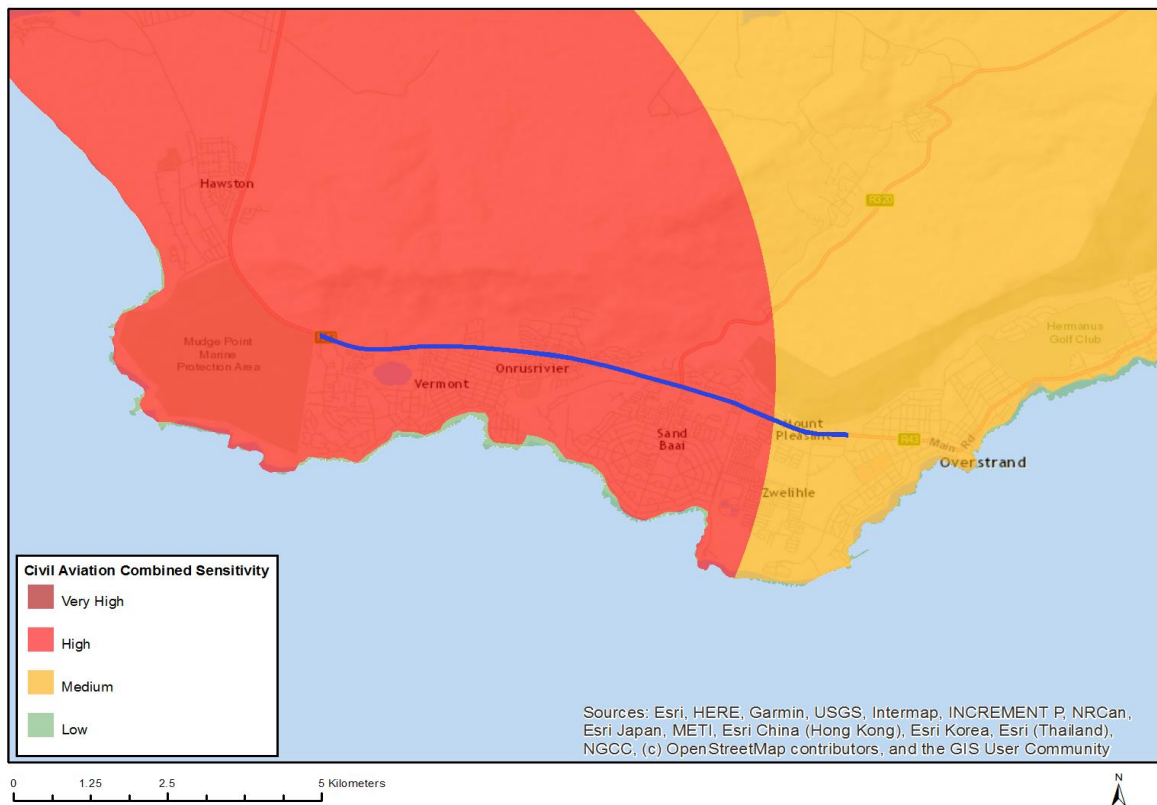


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within coastal belt
High	Important mountain pass
High	Within 500 m of an important river
High	Within 500 m of a heritage site
High	Within 1 km of a protected area

## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

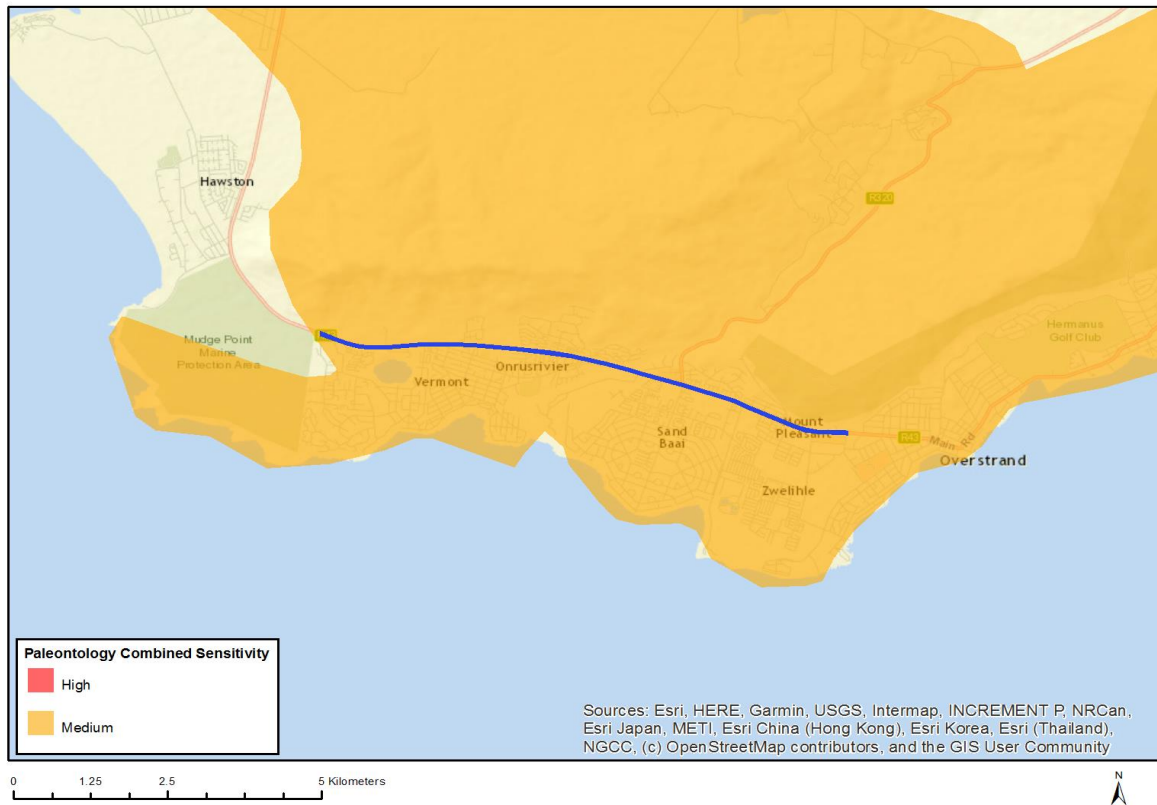


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



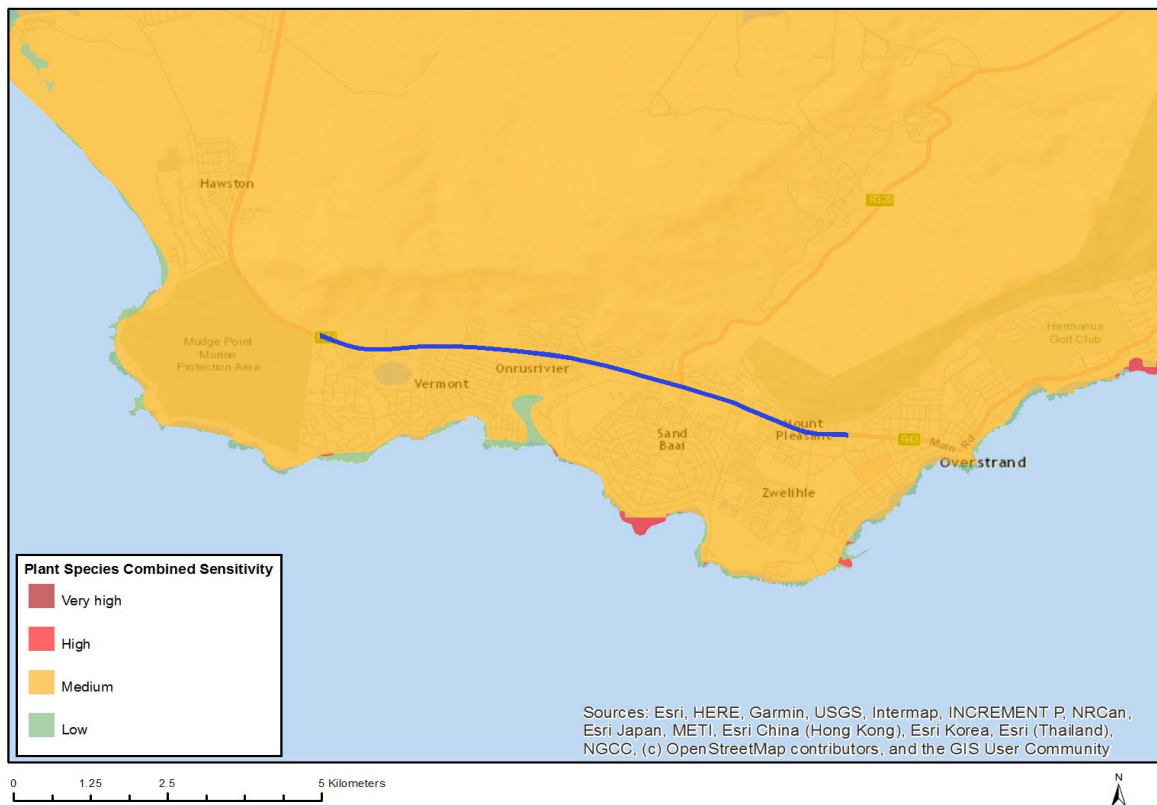
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Rock units with a medium paleontological sensitivity



## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	<i>Leucadendron coniferum</i>
High	<i>Leucadendron linifolium</i>
High	<i>Leucospermum prostratum</i>
High	<i>Protea longifolia</i>
High	<i>Serruria heterophylla</i>
Medium	<i>Manulea exigua</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Delosperma guthriei</i>
Medium	<i>Erepsia promontorii</i>
Medium	<i>Erepsia dunensis</i>
Medium	<i>Echiostachys ecklonianus</i>
Medium	Sensitive species 464
Medium	Sensitive species 438
Medium	Sensitive species 636
Medium	Sensitive species 640
Medium	Sensitive species 601
Medium	<i>Erica ecklonii</i>
Medium	<i>Erica hermani</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	<i>Erica melanacme</i>
Medium	<i>Erica patersonii</i>

Medium	<i>Erica propendens</i>
Medium	<i>Erica riparia</i>
Medium	Sensitive species 473
Medium	Sensitive species 259
Medium	<i>Isolepis venustula</i>
Medium	<i>Ficinia distans</i>
Medium	<i>Ficinia elatior</i>
Medium	<i>Ficinia pinguior</i>
Medium	<i>Thamnochortus dumosus</i>
Medium	<i>Thamnochortus pellucidus</i>
Medium	<i>Elegia fenestrata</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Elegia verreauxii</i>
Medium	<i>Restio paludosus</i>
Medium	Sensitive species 284
Medium	Sensitive species 294
Medium	Sensitive species 307
Medium	Sensitive species 287
Medium	<i>Amphithalea virgata</i>
Medium	<i>Acrolophia bolusii</i>
Medium	<i>Pterygodium bifidum</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Gnidia humilis</i>
Medium	<i>Lachnaea grandiflora</i>
Medium	<i>Zyrphelis corymbosa</i>
Medium	<i>Arctotis angustifolia</i>
Medium	<i>Pteronia tenuifolia</i>
Medium	<i>Cullumia squarrosa</i>
Medium	<i>Zygophyllum fuscatum</i>
Medium	<i>Cliffortia longifolia</i>
Medium	<i>Liparia angustifolia</i>
Medium	<i>Muraltia bolusii</i>
Medium	<i>Aspalathus excelsa</i>
Medium	<i>Aspalathus globulosa</i>
Medium	<i>Aspalathus oblongifolia</i>
Medium	Sensitive species 543
Medium	Sensitive species 548
Medium	<i>Otholobium thomii</i>
Medium	<i>Orthochilus litoralis</i>
Medium	<i>Colpoon speciosum</i>
Medium	<i>Berzelia rubra</i>
Medium	<i>Leucadendron coniferum</i>
Medium	<i>Leucadendron linifolium</i>
Medium	<i>Leucadendron modestum</i>
Medium	<i>Leucadendron platyspermum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Leucospermum patersonii</i>
Medium	<i>Leucospermum prostratum</i>
Medium	<i>Protea aspera</i>
Medium	<i>Protea scolymocephala</i>
Medium	<i>Protea longifolia</i>
Medium	<i>Protea angustata</i>
Medium	<i>Paranomus abrotanifolius</i>
Medium	<i>Paranomus bolusii</i>
Medium	<i>Mimetes hirtus</i>
Medium	<i>Diastella divaricata</i> subsp. <i>montana</i>
Medium	<i>Serruria heterophylla</i>
Medium	<i>Serruria inconspicua</i>
Medium	<i>Lampranthus stenus</i>
Medium	<i>Lampranthus tenuifolius</i>

Medium	Merciera azurea
Medium	Roella arenaria
Medium	Wahlenbergia polyantha

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

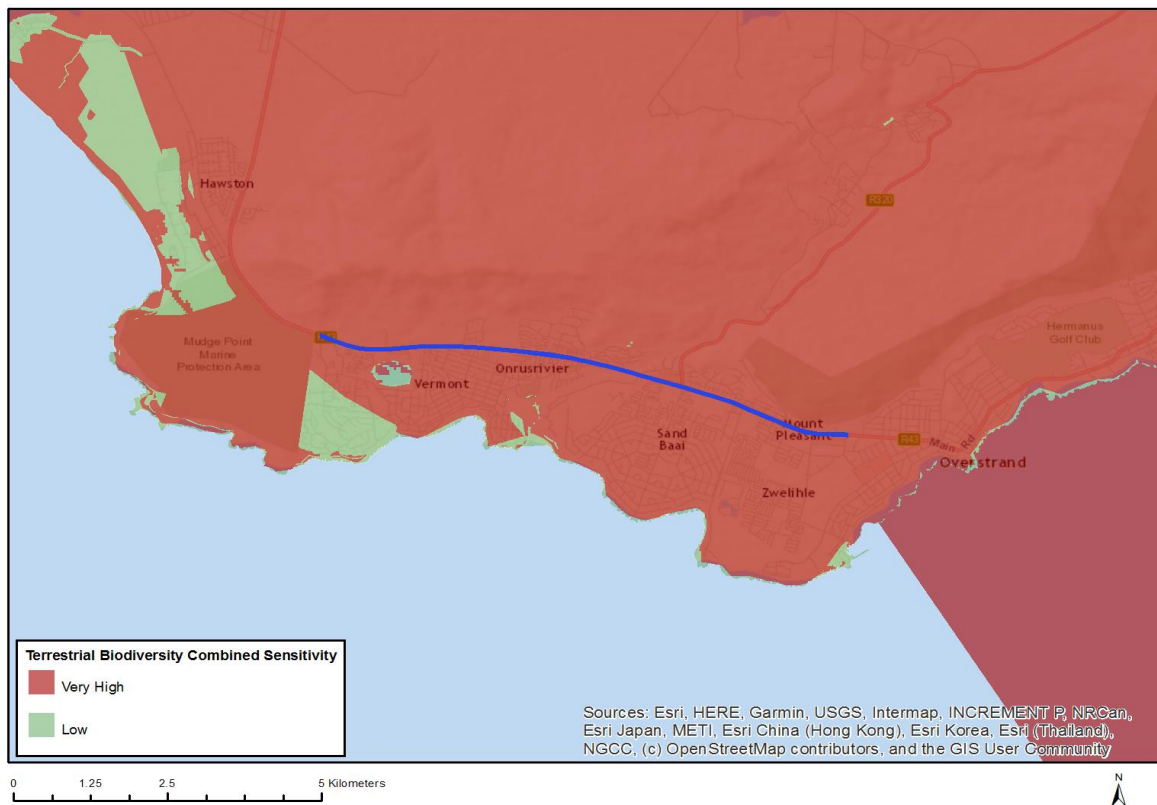


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity

## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Endangered ecosystem
Very High	Critically endangered ecosystem
Very High	Ecological Support Area 2

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS  
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE  
ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** TBC

**Project name:** IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS

**Project title:** Basic Assessment Report

**Date screening report generated:** 03/02/2021 18:45:02

**Applicant:** Western Cape Government: Department of Transport and Public Works (Directorate: Road Design)

**Compiler:** Rizqah Baker

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**Application Category:** Infrastructure|Transport Services|Roads|Public

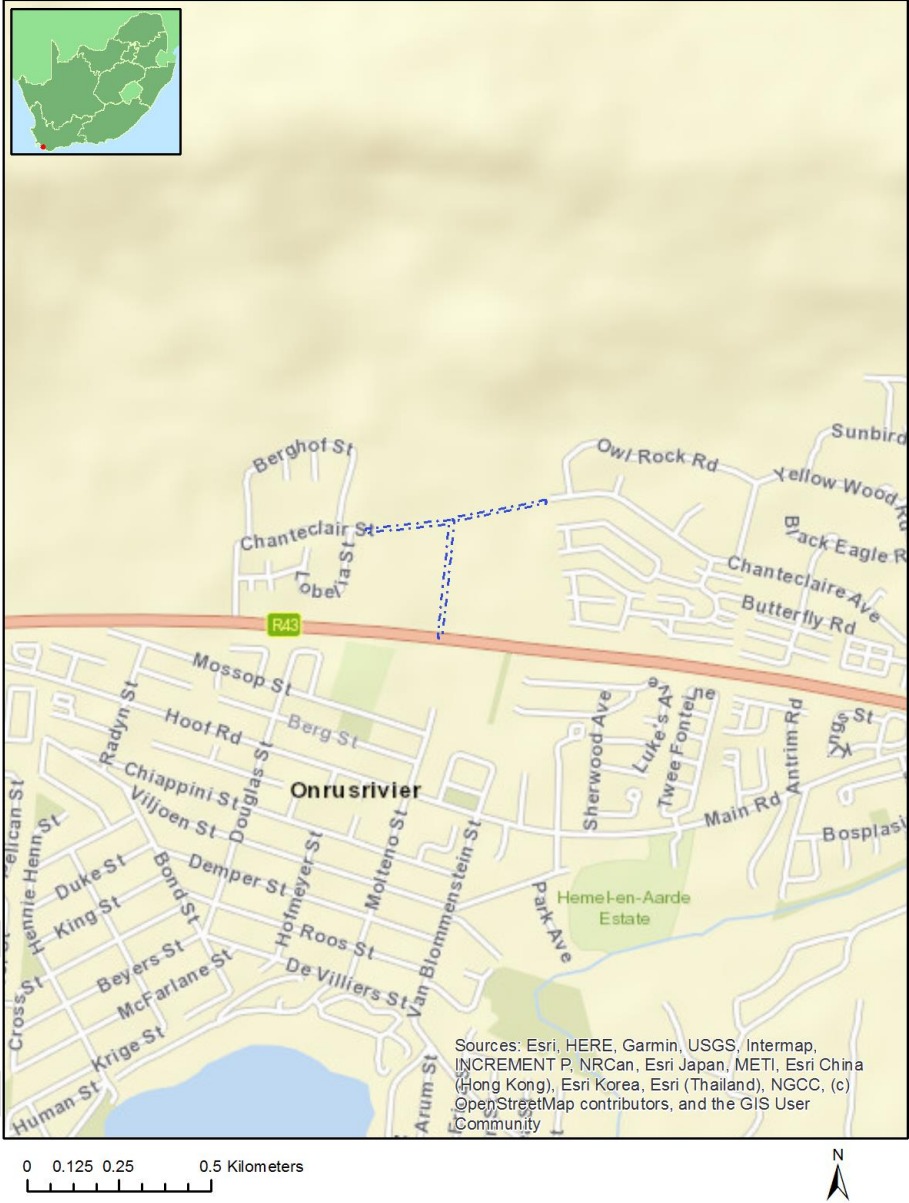
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# Proposed Project Location

## Orientation map 1: General location

**General Orientation: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS**



## Map of proposed site and relevant area(s)



## Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	ONRUSTRIVIER	4998	0	34°24'14.84S	19°10'18.72E	Erven
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Development footprint<sup>1</sup> vertices:

No development footprint(s) specified.

Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

<sup>1</sup> "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.



## Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

**Infrastructure | Transport Services | Roads | Public.**

### Relevant development incentives, restrictions, exclusions or prohibitions

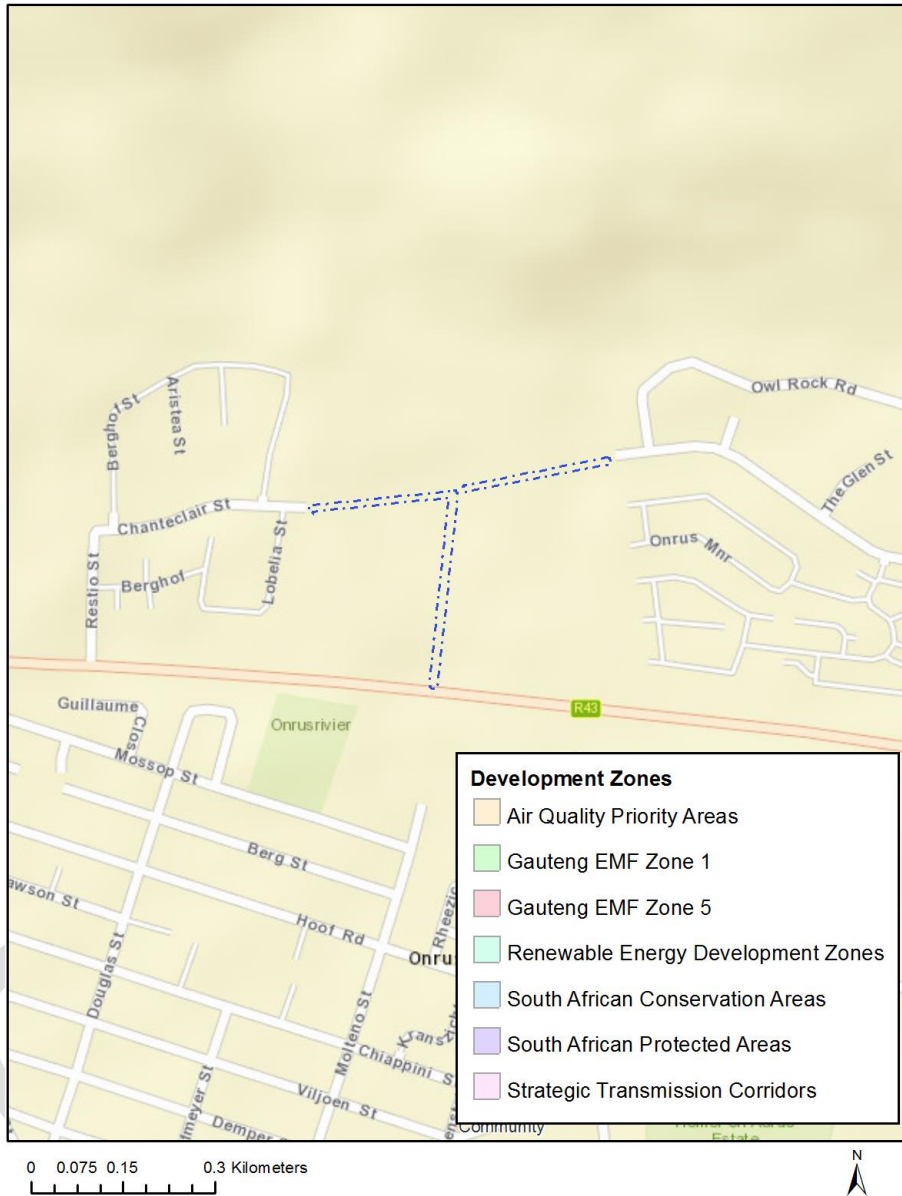
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

No intersection with any development zones found.

OFFICIAL

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

**Project Location: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS**



**Proposed Development Area Environmental Sensitivity**

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

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Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

### Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

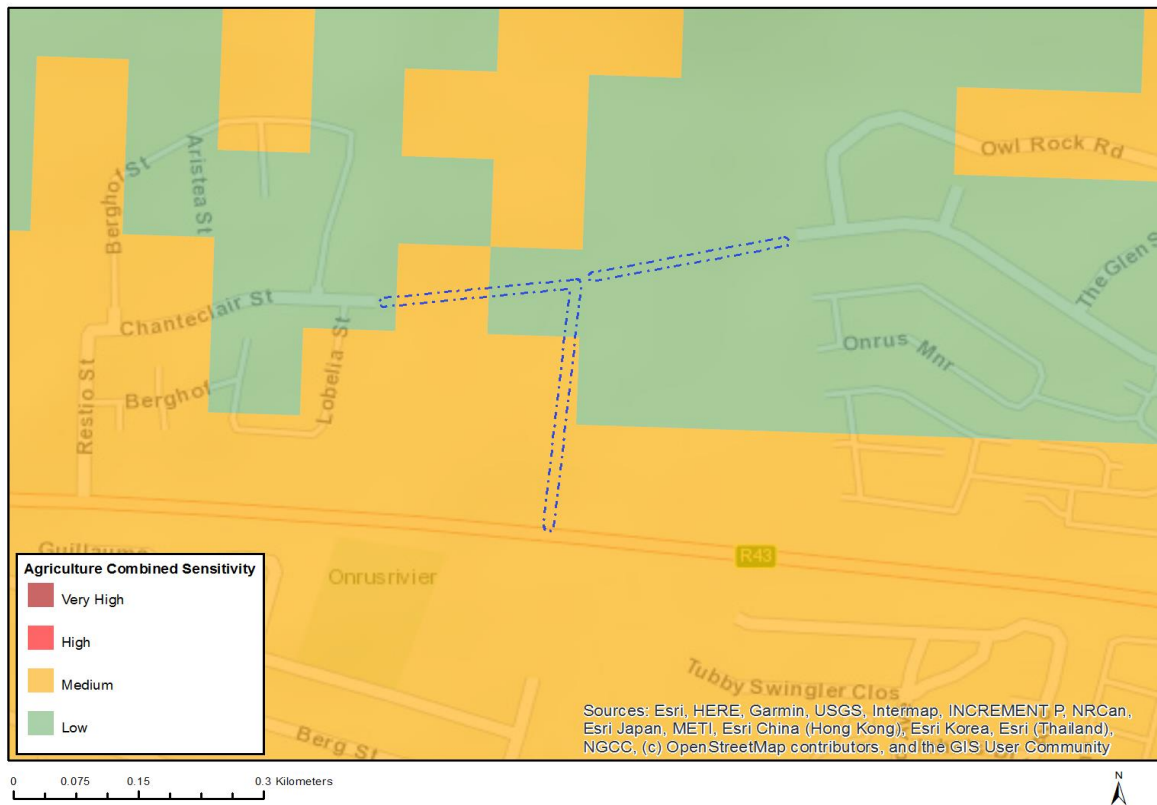
<b>N o</b>	<b>Special ist assess ment</b>	<b>Assessment Protocol</b>
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf</a>
2	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
6	Aquatic Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf</a>

7	Noise Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf</a>
8	Traffic Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
9	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
10	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
11	Ambient Air Quality Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
12	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf</a>
13	Animal Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf</a>

## Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY

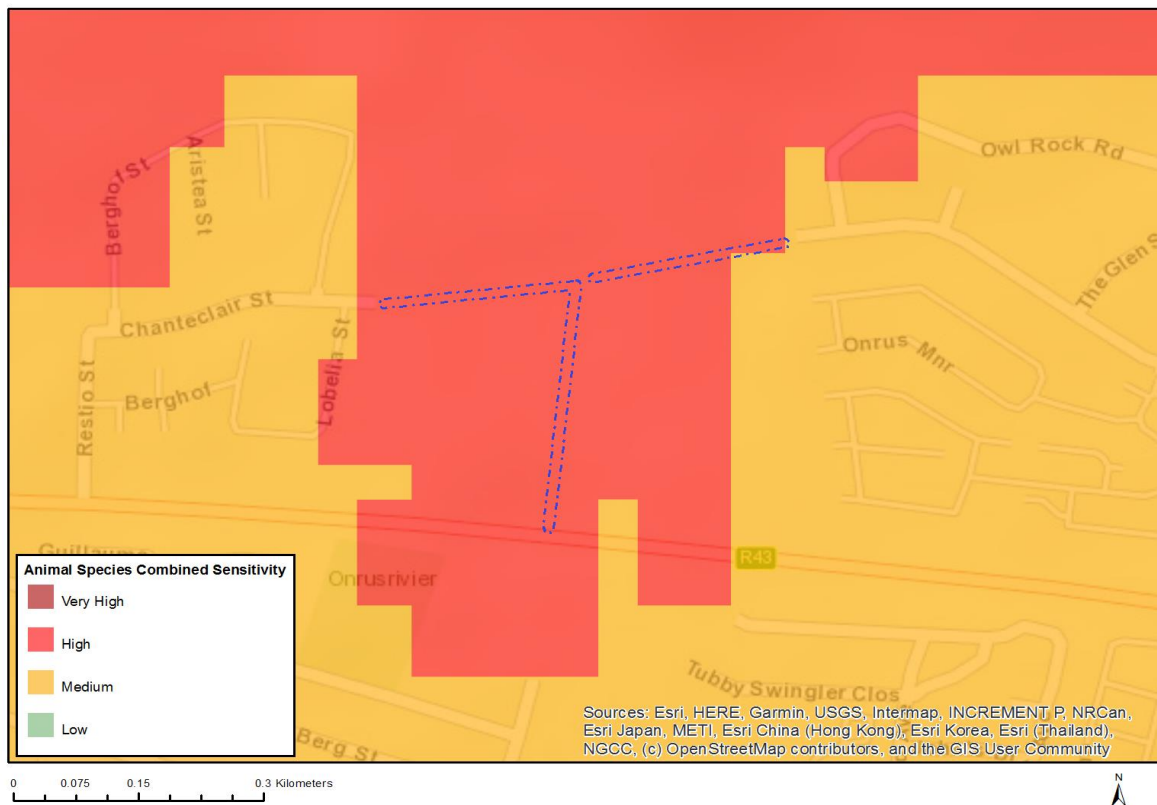


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

#### Sensitivity Features:

Sensitivity	Feature(s)
Low	Land capability;01. Very low/02. Very low/03. Low-Very low/04. Low-Very low/05. Low
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Aquila verreauxii
High	Aves-Neotis denhami
High	Aves-Circus maurus
Medium	Invertebrate-Aneuryphymus montanus
Medium	Invertebrate-Brinckiella aptera
Medium	Sensitive species 16
Medium	Aves-Circus ranivorus

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

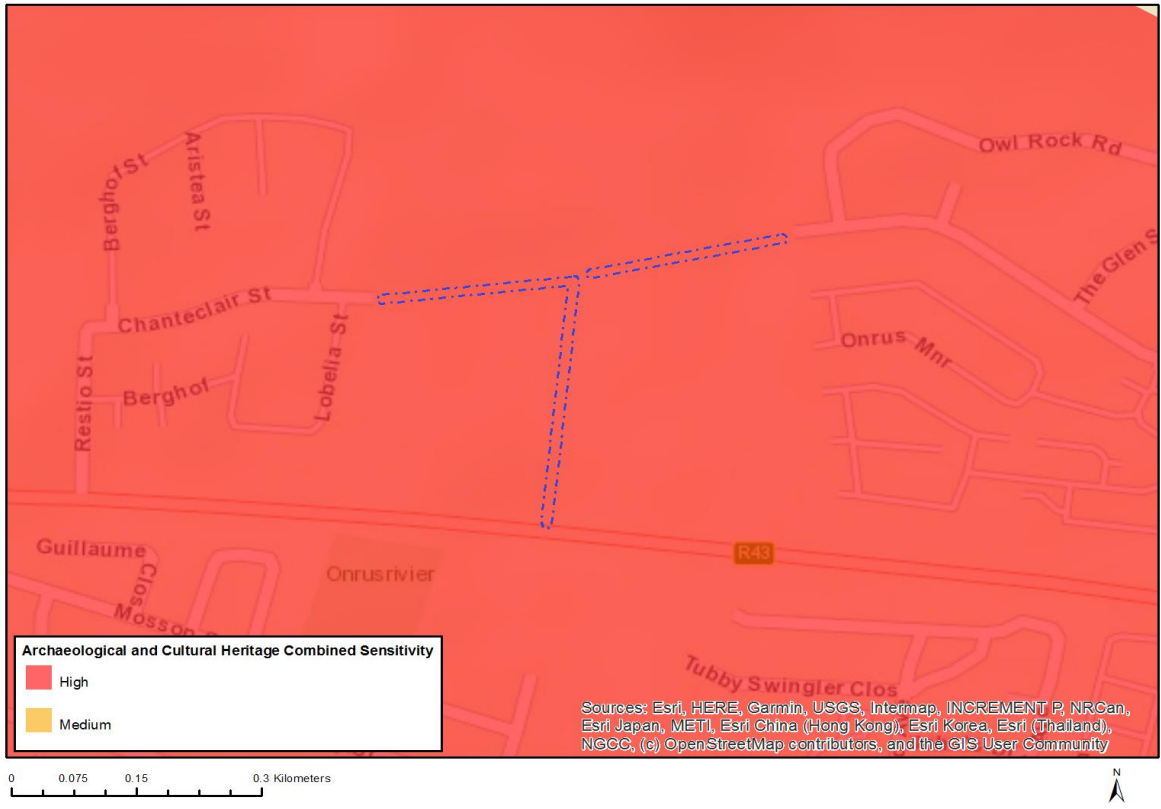


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Strategic water source area

# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

## Sensitivity Features:

Sensitivity	Feature(s)
High	Within 500 m of a heritage site



## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

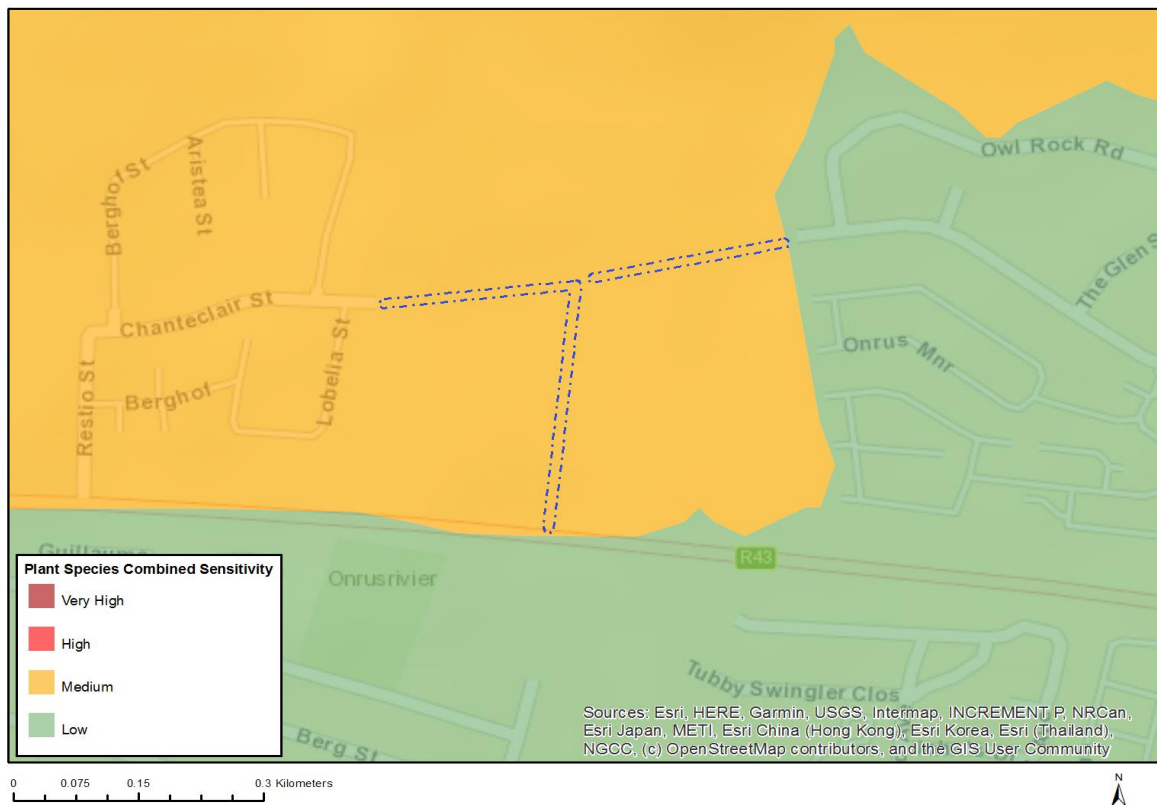


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [aiadatarequests@sanbi.org.za](mailto:aiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

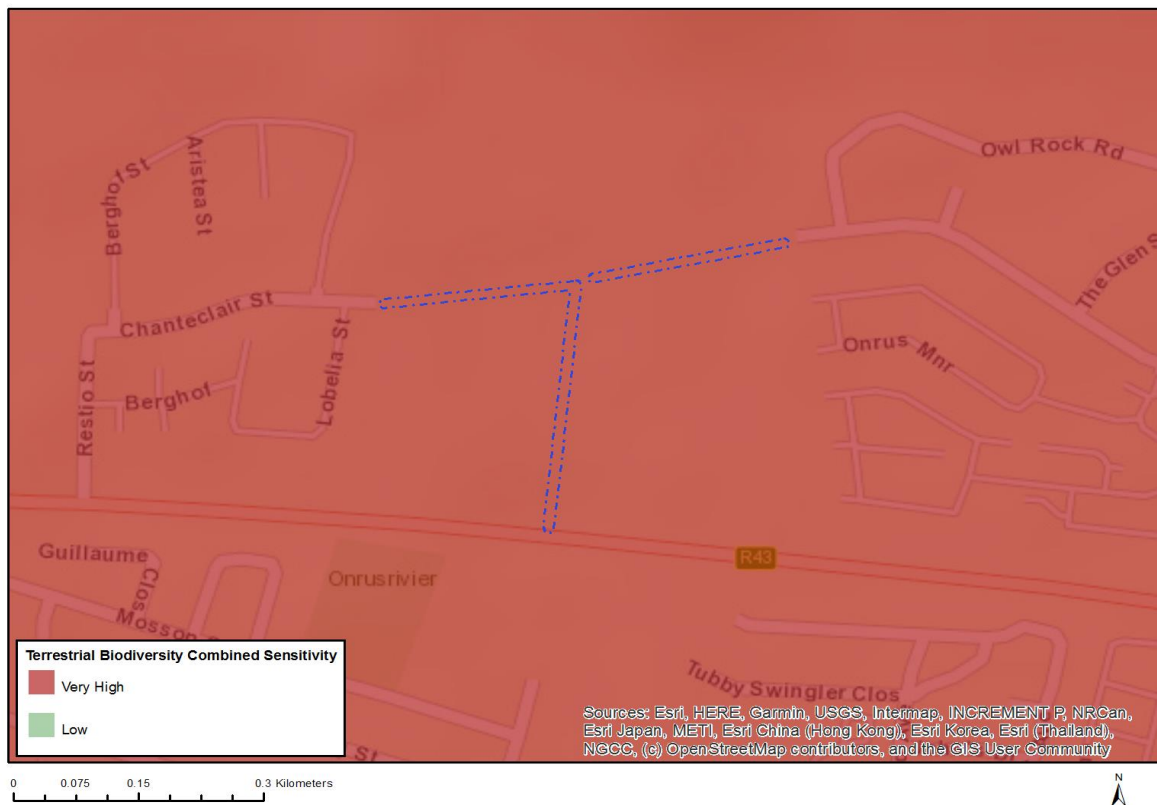
### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	Lampranthus leptaleon
Medium	Lampranthus spiniformis
Medium	Lampranthus stenus
Medium	Lampranthus tenuifolius
Medium	Delosperma guthriei
Medium	Erepsia promontorii
Medium	Amphithalea virgata
Medium	Liparia angustifolia
Medium	Aspalathus excelsa
Medium	Aspalathus globulosa
Medium	Aspalathus oblongifolia
Medium	Aspalathus psoraleoides
Medium	Otholobium thomii
Medium	Colpoon speciosum

Medium	<i>Audouinia capitata</i>
Medium	<i>Berzelia rubra</i>
Medium	<i>Leucadendron coniferum</i>
Medium	<i>Leucadendron linifolium</i>
Medium	<i>Leucadendron modestum</i>
Medium	<i>Leucadendron platyspermum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Leucospermum prostratum</i>
Medium	<i>Protea angustata</i>
Medium	<i>Protea longifolia</i>
Medium	<i>Paranomus abrotanifolius</i>
Medium	<i>Mimetes hirtus</i>
Medium	<i>Serruria flagellifolia</i>
Medium	<i>Serruria heterophylla</i>
Medium	<i>Serruria inconspicua</i>
Medium	<i>Serruria meisneriana</i>
Medium	<i>Merciera azurea</i>
Medium	<i>Merciera tenuifolia</i>
Medium	<i>Roella arenaria</i>
Medium	<i>Wahlenbergia polyantha</i>
Medium	<i>Apodytes geldenhuisii</i>
Medium	<i>Manulea exigua</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Echiostachys ecklonianus</i>
Medium	<i>Aristea zeyheri</i>
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Geissorhiza bryicola</i>
Medium	<i>Tritonia flabellifolia</i> var. <i>thomasiae</i>
Medium	<i>Ixia sarmentosa</i>
Medium	Sensitive species 232
Medium	Sensitive species 934
Medium	Sensitive species 1140
Medium	Sensitive species 1104
Medium	<i>Nivenia stokoei</i>
Medium	<i>Pauridia alba</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	<i>Erica floccifera</i>
Medium	<i>Erica patersonii</i>
Medium	<i>Erica propendens</i>
Medium	<i>Erica ribisaria</i>
Medium	<i>Erica riparia</i>
Medium	<i>Erica ecklonii</i>
Medium	<i>Erica hermani</i>
Medium	<i>Erica perspicua</i> subsp. <i>latifolia</i>
Medium	<i>Brachysiphon rupestris</i>
Medium	Sensitive species 756
Medium	Sensitive species 1250
Medium	Sensitive species 714
Medium	<i>Isolepis venustula</i>
Medium	<i>Ficinia distans</i>
Medium	<i>Ficinia elatior</i>
Medium	<i>Ficinia pinguior</i>
Medium	<i>Thamnochortus dumosus</i>
Medium	<i>Thamnochortus pellucidus</i>
Medium	<i>Elegia fenestrata</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Restio clandestinus</i>
Medium	<i>Restio anomalus</i>
Medium	<i>Restio papillosus</i>

Medium	Sensitive species 460
Medium	Sensitive species 1139
Medium	Acrolophia bolusii
Medium	Sensitive species 1192
Medium	Pterygodium cruciferum
Medium	Pterygodium bifidum
Medium	Evotella rubiginosa
Medium	Gnidia humilis
Medium	Gnidia ornata
Medium	Passerina paludosa
Medium	Metalasia plicata
Medium	Syncarpha zeyheri
Medium	Zyrphelis corymbosa
Medium	Thaminophyllum latifolium
Medium	Cotula eckloniana
Medium	Arctotis angustifolia
Medium	Pteronia tenuifolia
Medium	Cullumia squarrosa
Medium	Agathosma hookeri
Medium	Euchaetis schlechteri
Medium	Cliffortia ericifolia
Medium	Muraltia aspalatha
Medium	Muraltia bolusii
Medium	Sensitive species 719
Medium	Sensitive species 1151
Medium	Sensitive species 547
Medium	Phyllica virgata
Medium	Orthochilus litoralis
Medium	Skiatophytum skiatophytoides
Medium	Lampranthus debilis
Medium	Xiphotheca reflexa
Medium	Aspalathus lebeckioides
Medium	Protea aspera
Medium	Protea scolymocephala
Medium	Paranomus bolusii
Medium	Sensitive species 593
Medium	Sensitive species 800
Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	Elegia squamosa
Medium	Elegia verreauxii
Medium	Restio paludosus
Medium	Sensitive species 500
Medium	Sensitive species 53
Medium	Sensitive species 654
Medium	Pachites bodkinii
Medium	Lachnaea grandiflora

## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Ecological Support Area 1
Very High	Critical Biodiversity Area 1
Very High	Endangered ecosystem

**SCREENING REPORT FOR AN ENVIRONMENTAL AUTHORIZATION AS  
REQUIRED BY THE 2014 EIA REGULATIONS – PROPOSED SITE  
ENVIRONMENTAL SENSITIVITY**

**EIA Reference number:** TBC

**Project name:** IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS

**Project title:** Basic Assessment Report

**Date screening report generated:** 03/02/2021 19:02:59

**Applicant:** WCG: DTPW (Road Design)

**Compiler:** Rizqah Baker

**Compiler signature:**   
.....

**Application Category:** Infrastructure | Transport Services | Roads | Public



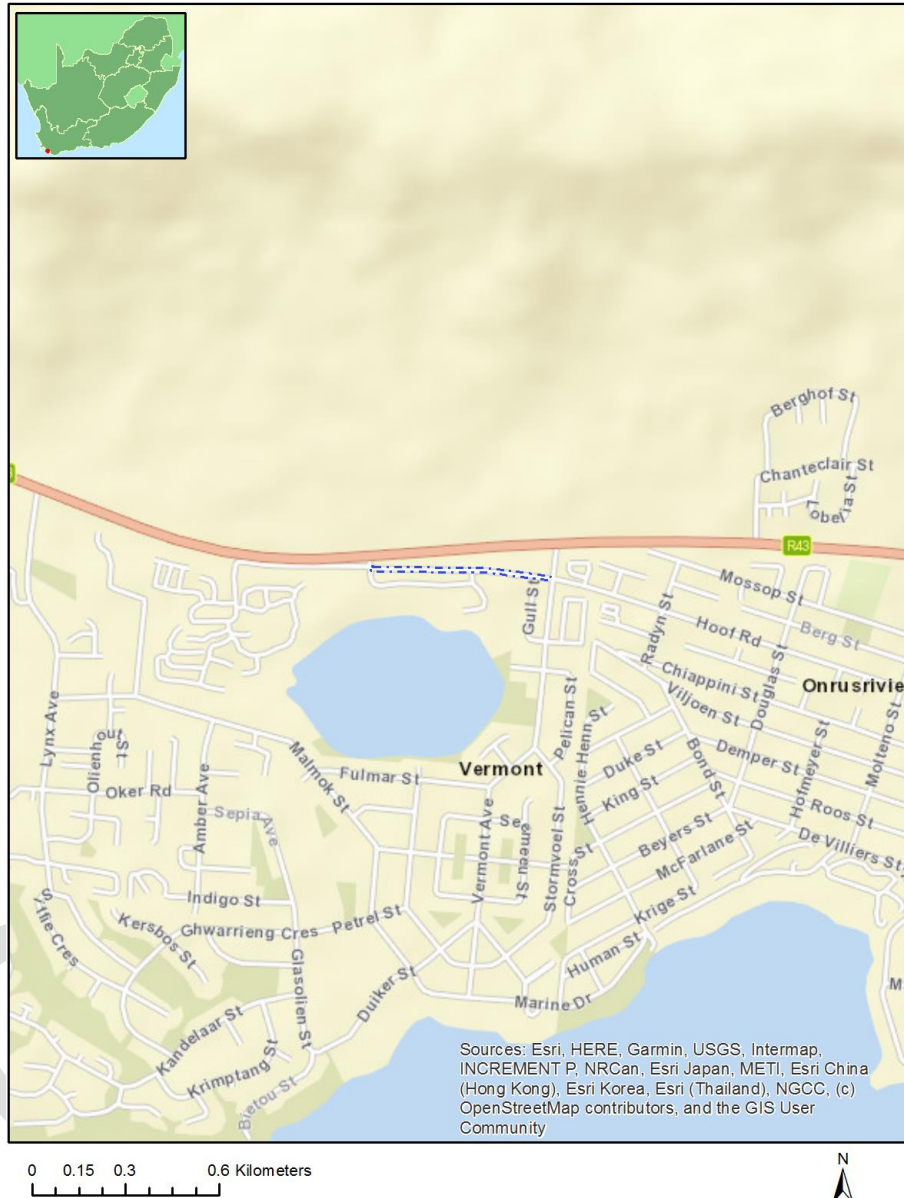
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- Map of proposed site and relevant area(s) ..... 4
  - Cadastral details of the proposed site ..... 4
  - Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area ..... 4
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- Environmental screening results and assessment outcomes ..... 5
  - Relevant development incentives, restrictions, exclusions or prohibitions ..... 5
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  - MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY ..... 16
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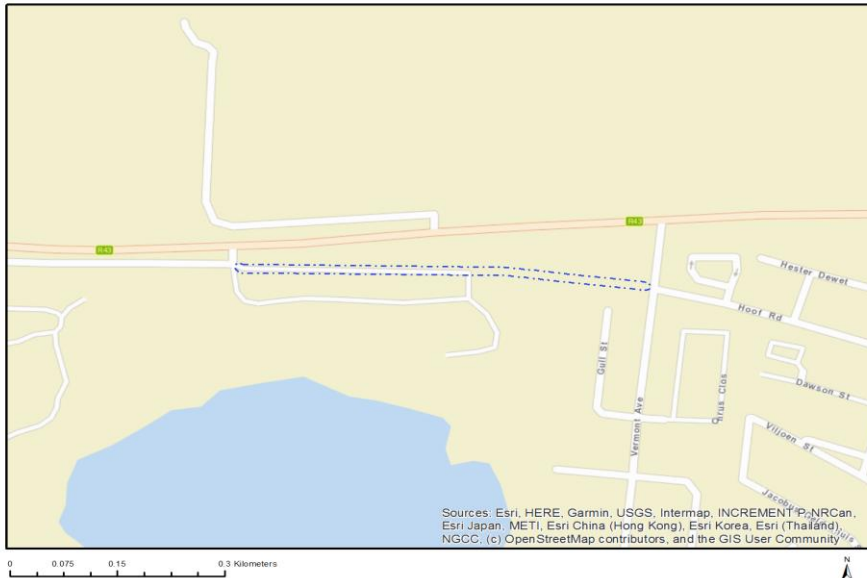
# Proposed Project Location

## Orientation map 1: General location

### General Orientation: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS



## Map of proposed site and relevant area(s)



## Cadastral details of the proposed site

Property details:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
1	VERMONT	939	0	34°24'32.65S	19°9'30.66E	Erven
2	VERMONT	2389	0	34°24'32.99S	19°9'33.6E	Erven
3	VERMONT	939	0	34°24'32.44S	19°9'40.21E	Erven
4	VERMONT	2388	0	34°24'33.87S	19°9'27.81E	Erven
5	VERMONT	939	0	34°24'28.86S	19°9'47.16E	Erven

Development footprint<sup>1</sup> vertices:

No development footprint(s) specified.

## Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area

No nearby wind or solar developments found.

## Environmental Management Frameworks relevant to the application

No intersections with EMF areas found.

<sup>1</sup> "development footprint", means the area within the site on which the development will take place and includes all ancillary developments for example roads, power lines, boundary walls, paving etc. which require vegetation clearance or which will be disturbed and for which the application has been submitted.

## Environmental screening results and assessment outcomes

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development site as well as the most environmental sensitive features on the site based on the site sensitivity screening results for the application classification that was selected. The application classification selected for this report is:

**Infrastructure | Transport Services | Roads | Public.**

### Relevant development incentives, restrictions, exclusions or prohibitions

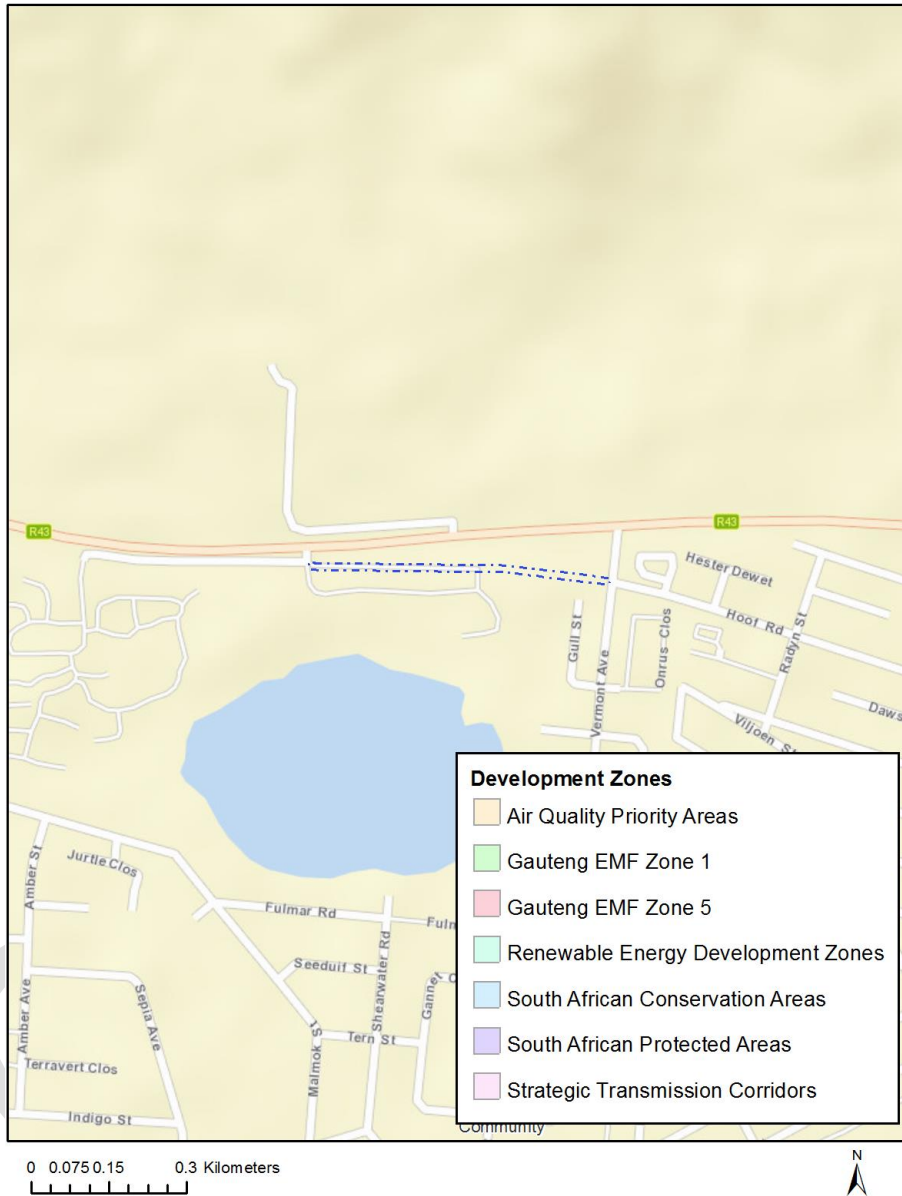
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

No intersection with any development zones found.

OFFICIAL

Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones

**Project Location: IMPROVEMENT OF TRUNK ROAD 28 SECTION 1 BETWEEN BOTRIVIER AND HERMANUS**



**Proposed Development Area Environmental Sensitivity**

The following summary of the development site environmental sensitivities is identified. Only the highest environmental sensitivity is indicated. The footprint environmental sensitivities for the proposed development footprint as identified, are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
-------	-----------------------	------------------	--------------------	-----------------

Agriculture Theme			X	
Animal Species Theme		X		
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme				X
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

### Specialist assessments identified

Based on the selected classification, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

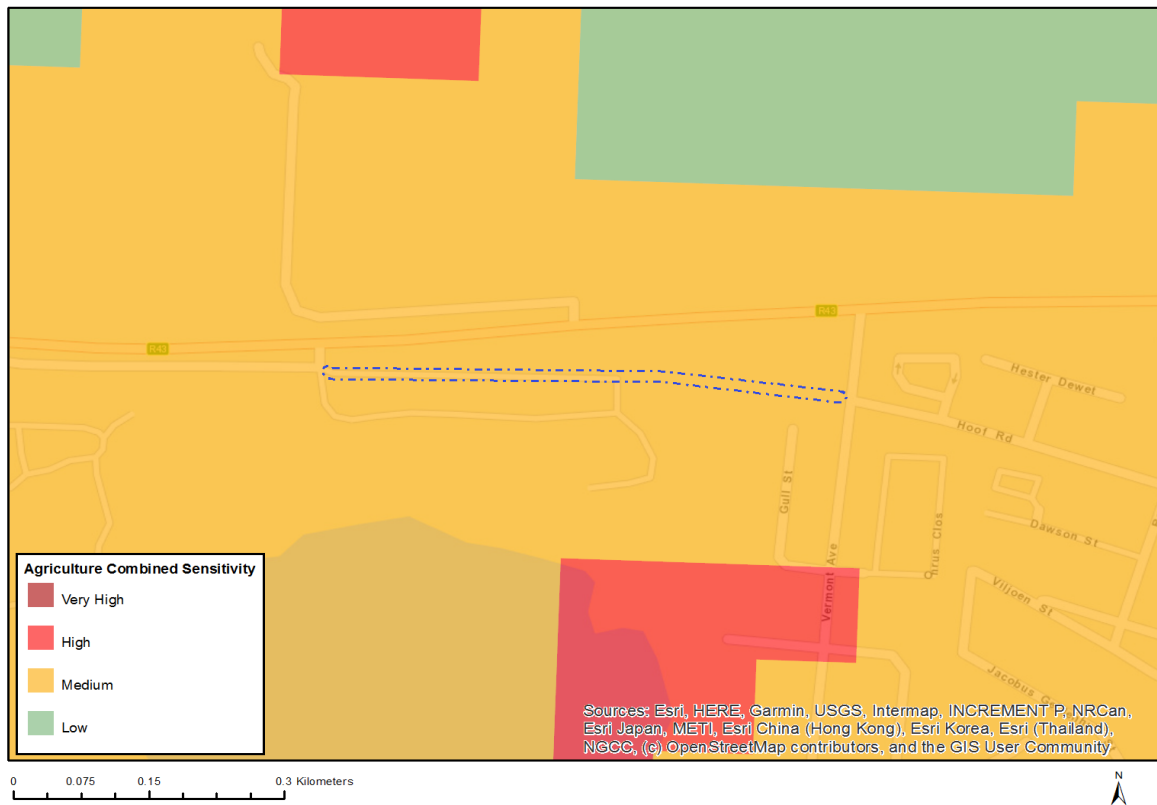
N o	Specialist assessment	Assessment Protocol
1	Agricultural Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf</a>
2	Landscape/Visual Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
3	Archaeological and Cultural Heritage Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
4	Palaeontology Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
5	Terrestrial Biodiversity Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf</a>
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7	Noise Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf</a>
8	Traffic Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
9	Geotechnical Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
10	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
11	Ambient Air Quality Impact Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
12	Plant Species Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf</a>
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## Results of the environmental sensitivity of the proposed area.

The following section represents the results of the screening for environmental sensitivity of the proposed site for relevant environmental themes associated with the project classification. It is the duty of the EAP to ensure that the environmental themes provided by the screening tool are comprehensive and complete for the project. Refer to the disclaimer.

### MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY



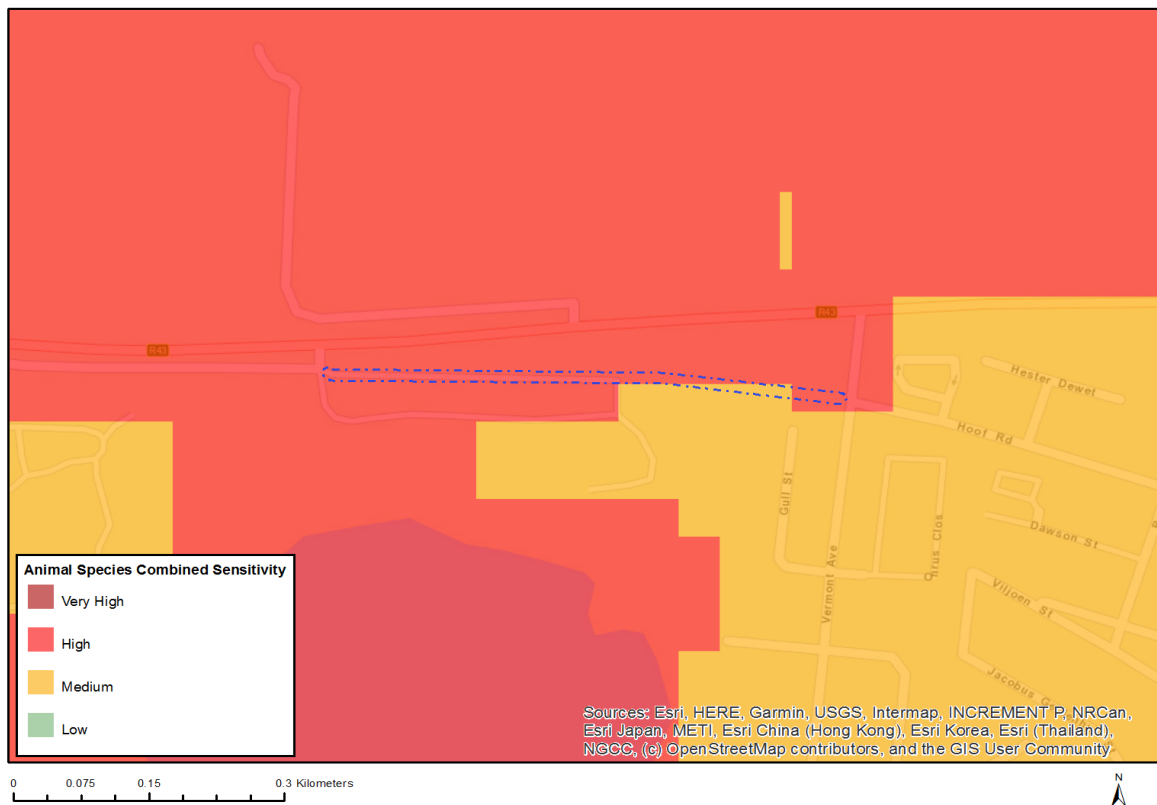
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

#### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate



## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



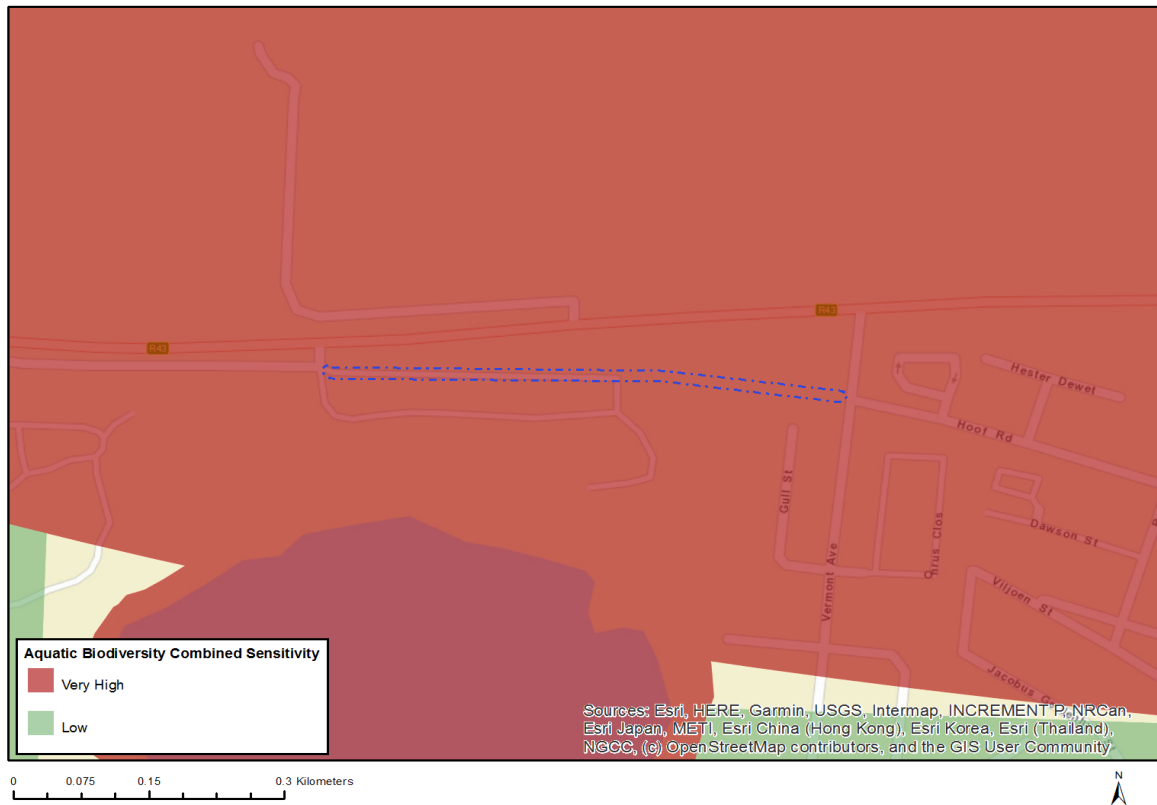
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Neotis denhami
High	Aves-Circus ranivorus
High	Aves-Turnix hottentottus
High	Aves-Circus maurus
Medium	Invertebrate-Aneuryphymus montanus
Medium	Sensitive species 16

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY

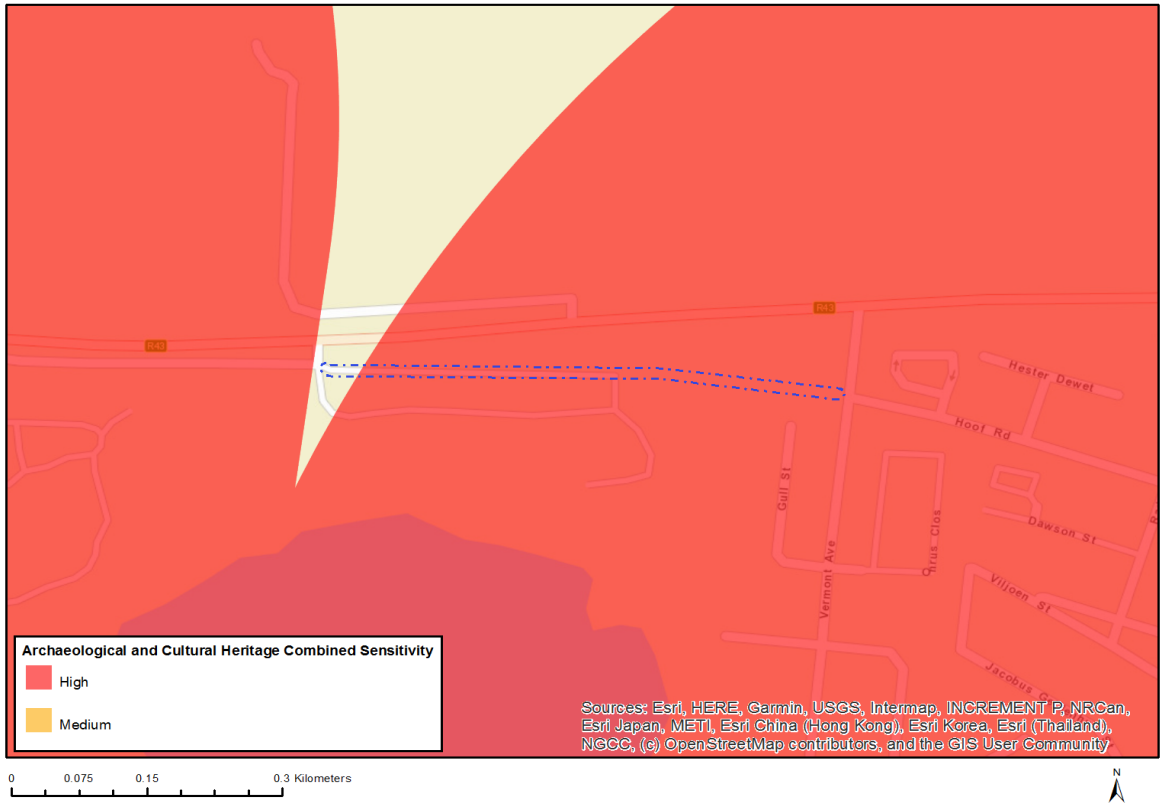


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Strategic water source area

# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY

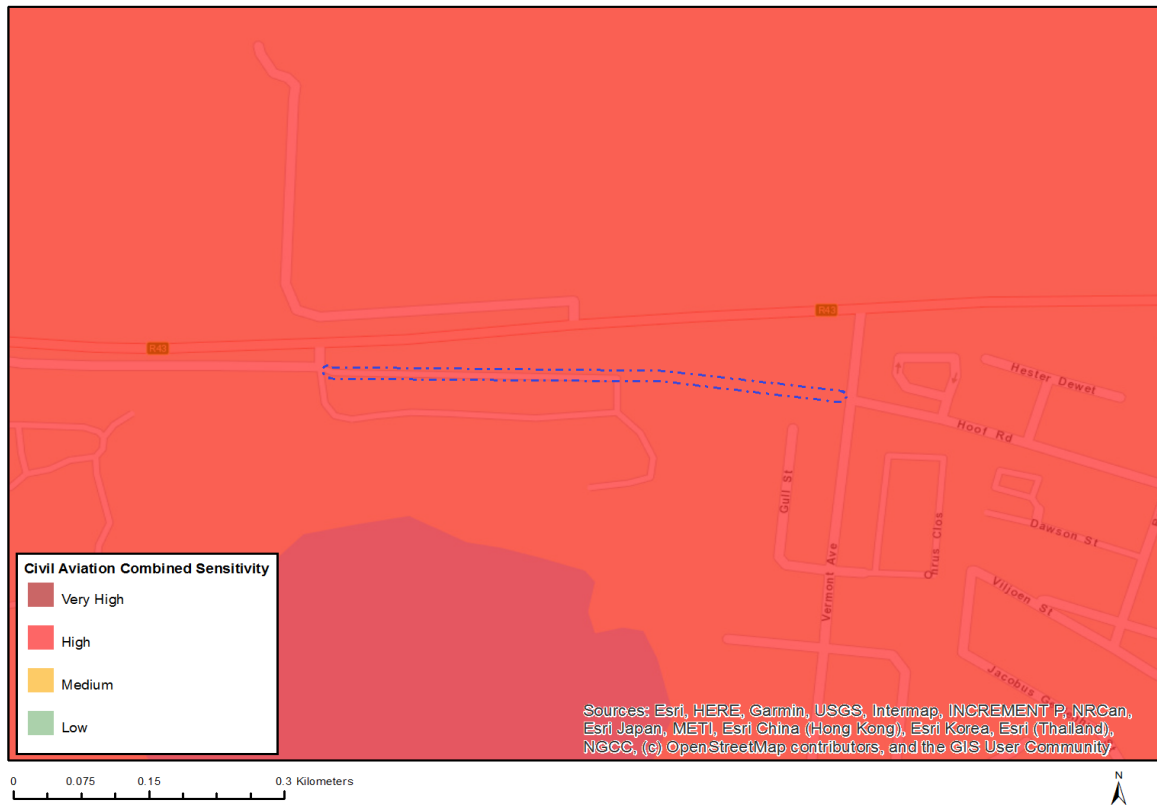


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

## Sensitivity Features:

Sensitivity	Feature(s)
High	Within 500 m of a heritage site

## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

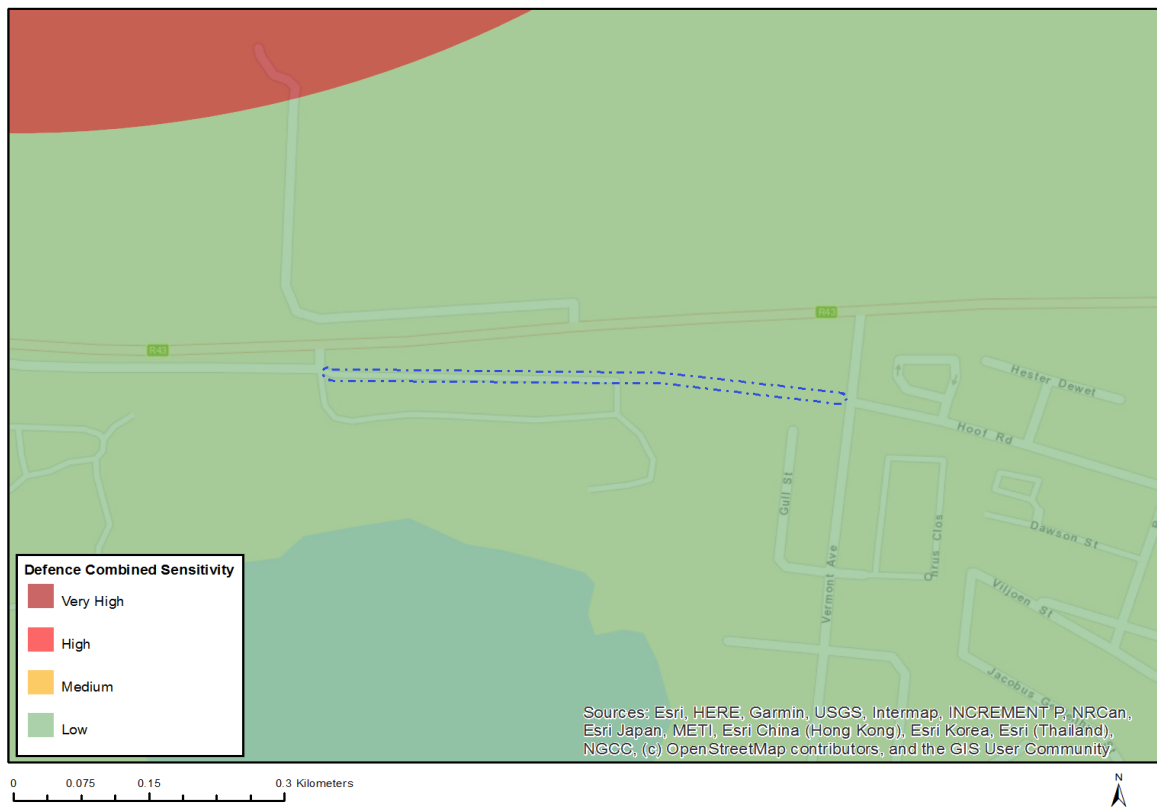


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 8 km of other civil aviation aerodrome

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

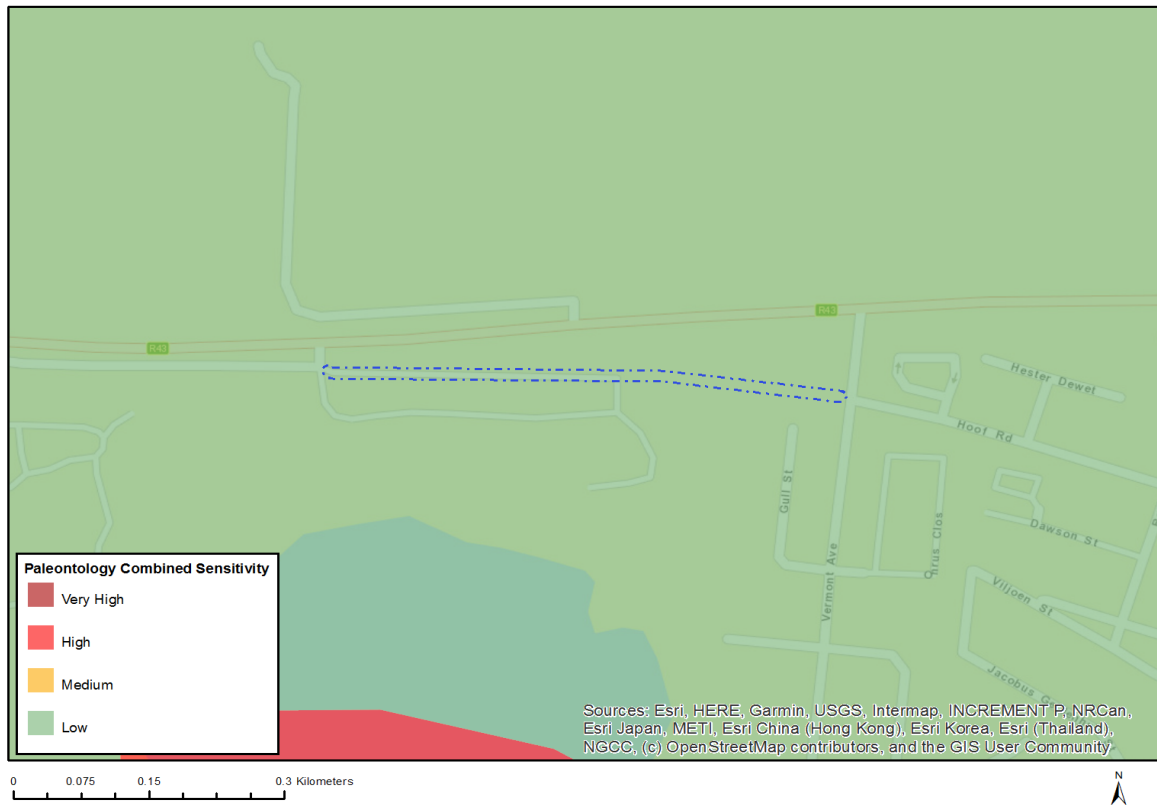


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY

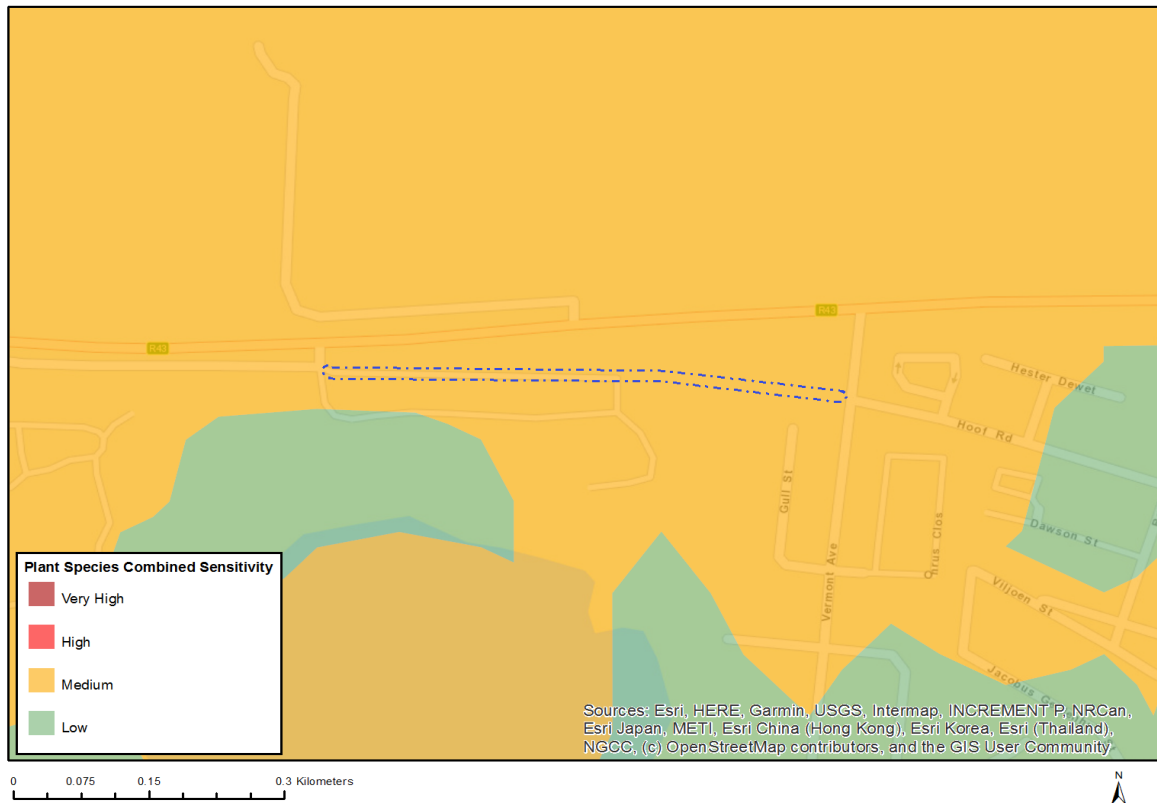


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity

## MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY



Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) listing all sensitive species with their unique identifiers for which information is required. The name has been withheld as the species may be prone to illegal harvesting and must be protected. SANBI will release the actual species name after the details of the EAP or specialist have been documented.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

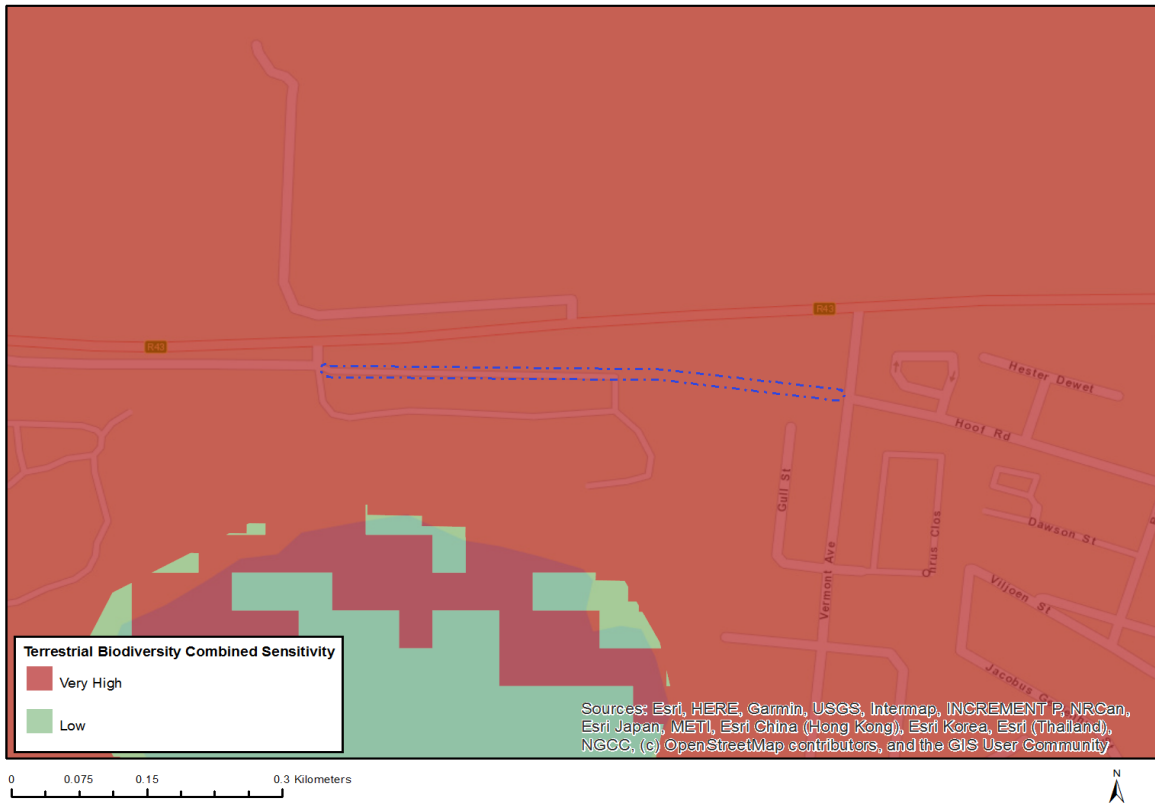
### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Lampranthus leptaleon
Medium	Lampranthus spiniformis
Medium	Lampranthus stenus
Medium	Lampranthus tenuifolius
Medium	Delosperma guthriei
Medium	Erepsia promontorii
Medium	Liparia angustifolia
Medium	Aspalathus excelsa
Medium	Aspalathus globulosa
Medium	Aspalathus oblongifolia
Medium	Colpoon speciosum
Medium	Leucadendron coniferum
Medium	Leucadendron linifolium
Medium	Leucadendron modestum
Medium	Leucospermum hypophyllocarpodendron subsp. hypophyllocarpodendron

Medium	<i>Leucospermum prostratum</i>
Medium	<i>Protea angustata</i>
Medium	<i>Mimetes hirtus</i>
Medium	<i>Wahlenbergia polyantha</i>
Medium	<i>Manulea exigua</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Tritonia flabellifolia</i> var. <i>thomasiae</i>
Medium	<i>Ixia sarmentosa</i>
Medium	Sensitive species 232
Medium	Sensitive species 1140
Medium	Sensitive species 1104
Medium	<i>Nivenia stokoei</i>
Medium	<i>Pauridia alba</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	<i>Erica patersonii</i>
Medium	<i>Erica propendens</i>
Medium	<i>Erica riparia</i>
Medium	Sensitive species 8
Medium	Sensitive species 1250
Medium	Sensitive species 714
Medium	<i>Isolepis venustula</i>
Medium	<i>Ficinia elatior</i>
Medium	<i>Ficinia pinguior</i>
Medium	<i>Thamnochortus pellucidus</i>
Medium	<i>Elegia fenestrata</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Restio papillosus</i>
Medium	Sensitive species 1139
Medium	<i>Acrolophia bolusii</i>
Medium	Sensitive species 1192
Medium	<i>Pterygodium cruciferum</i>
Medium	<i>Gnidia humilis</i>
Medium	<i>Gnidia ornata</i>
Medium	<i>Passerina paludosa</i>
Medium	<i>Cotula eckloniana</i>
Medium	<i>Arctotis angustifolia</i>
Medium	<i>Pteronia tenuifolia</i>
Medium	<i>Cullumia squarrosa</i>
Medium	<i>Agathosma hookeri</i>
Medium	<i>Cliffortia ericifolia</i>
Medium	<i>Muraltia bolusii</i>
Medium	Sensitive species 719
Medium	Sensitive species 1151
Medium	Sensitive species 547
Medium	<i>Orthochilus litoralis</i>
Medium	<i>Skiatophytum skiatophytoides</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Protea scolymocephala</i>
Medium	Sensitive species 593
Medium	Sensitive species 800
Medium	Sensitive species 335
Medium	Sensitive species 599
Medium	<i>Elegia verreauxii</i>
Medium	<i>Restio paludosus</i>
Medium	Sensitive species 500
Medium	Sensitive species 53
Medium	<i>Lachnaea grandiflora</i>



## MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY



Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
Very High	Endangered ecosystem

**APPENDIX I2: SITE SENSITIVITY VERIFICATION REPORT**

# SITE SENSITIVITY VERIFICATION REPORT FOR THE PROPOSED UPGRADE OF TRUNK ROAD 28, SECTION 1 – LYNX ROAD TO MIMOSA STREET, HERMANUS

Prepared for: EFG Engineers (Pty) Ltd on behalf of the  
Western Cape Government: Department of Transport and  
Public Works (Road Design)

DEA&DP Reference: 16/3/3/6/7/1/E2/15/1308/19

SLR Project No.: 720.05043.00005

Report No.: 1

Revision No.: 0

March 2021



## DOCUMENT INFORMATION

Title	Site Sensitivity Verification Report for the Proposed Upgrade of Trunk Road 28, Section 1 – Lynx Road to Mimosa Street, Hermanus
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0	March 2021	Issued for DEA&DP consideration	E. Costandius

## BASIS OF REPORT

This document has been prepared by an SLR Group company with reasonable skill, care and diligence, and taking account of the manpower, timescales and resources devoted to it by agreement with **EFG Engineers (Pty) Ltd on Behalf of the Western Cape Government: Department of Transport and Public Works (Road Design)** (the Client) as part or all of the services it has been appointed by the Client to carry out. It is subject to the terms and conditions of that appointment.

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## ACRONYMS AND ABBREVIATIONS

Acronym / Abbreviation	Definition
BAR	Basic Assessment Report
CBA	Critical Biodiversity Area
DTPW	Western Cape Government: Department of Transport and Public Works (Road Design)
EA	Environmental Authorisation
EFG	EFG Engineers (Pty) Ltd
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
ESA	Ecological Support Area
HWC	Heritage Western Cape
NEMA	National Environmental Management Act, 1998 (No. 107 of 1998)
NID	Notice of Intent to Develop
SLR	SLR Consulting (South Africa) (Pty) Ltd
SSVR	Site Sensitivity verification Report
WCBSP	Western Cape Biodiversity Spatial Plan

## 1. INTRODUCTION

The Western Cape Government (WCG): Department of Transport and Public Works (Directorate: Road Design) (DTPW) is proposing to upgrade Trunk Road 28, Section 1( a section of the R43) between Botrivier and Hermanus. The R43 provides a direct link between the towns of Botrivier and Hermanus, starting at the R43 turnoff from the N2 in Botrivier and ending in Main Street in Hermanus.

The focus area of the proposed project is the section of road that starts  $\pm$  600 m from the Lynx Road Intersection (km 23.00) at Vermont and ends at the Mimosa Street / Mountain Drive Intersection (km 29.46) in Hermanus (see Figure 1). This section of road passes through the residential suburbs of Vermont and Onrus before it crosses the Onrus River, passes Sandbaai and then through Mount Pleasant, where it terminates at the Mimosa Street / Mountain Drive Intersection in Hermanus. The road section consists of a single carriageway, except for an approximate 2.5 km section of road between the Onrus Bridge and the Mimosa Street / Mountain Drive Intersection which is a dual carriageway.

The proposed project entails the following:

- Dualling of the existing single carriageway road (between km 23.00 and km 27.14) to an Urban Class E (ii) cross-section (see Figure 2), with each carriageway consisting of two 3.7 m lanes, a 3.1 m outside shoulder and a 2.0 m sidewalk. There would also be a 5.0 m paved median between the two carriageways;
- The provision of bus stops at major intersections and junctions;
- The provision of appropriate stormwater channels along the kerbed sections and the widening of the road reserve width by 15 m to a minimum width of 45 m between km 23.00 and km 27.14 (would vary with topography);
- The provision of dedicated turning lanes at main accesses, as appropriate;
- The relocation of various services and shifting of an existing 10 m services servitude to the north adjacent to the new road reserve; and
- The dualling of the existing road over the Onrus River by constructing a new bridge next to the existing Onrus Bridge.

The widening of the road is proposed to only be undertaken towards the northern side of the existing R43.

The proposed project also entails works on various culverts along the road and the relocation and provision of new access roads to Amana / Paradise Park, Berghof Estate and Kidbrooke Place, as described below:

- The existing access road to Amana / Paradise Park from the R43 would be closed (km 23.60). An alternative access road to Amana is proposed at the intersection of Onrus Main Road and Vermont Avenue. With the closure of the existing Amana / Paradise Park access from the R43, the alternative access to Paradise Park would be via the existing Malmok Street.
- The existing access road (Lobelia Street) to Berghof Estates from the R43 (km 24.18) would be closed. A new access would be created at approximately km 24.59 and a new local access road would be provided via Erf RE/581.
- The existing access road to Kidbrooke Place (km 25.82) would be closed and relocated northwards to tie in with an existing unnamed road within the estate.

The proposed works also entail a pavement reseal on the road section between km 27.14 (Sandbaai Main Road) and km 29.46 (Mimosa Street / Mountain Drive).

The duration of the construction phase would be approximately 24 months.

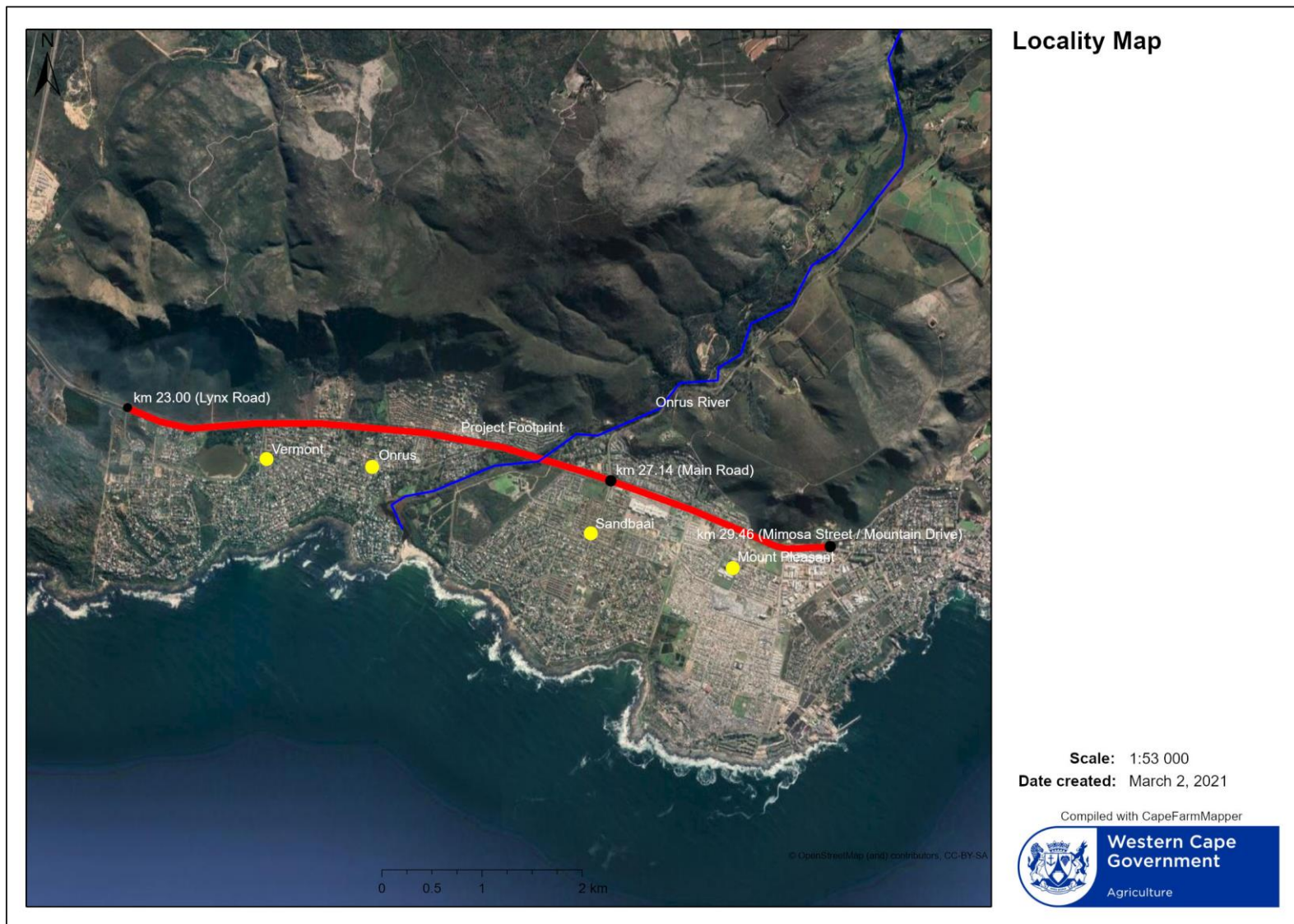


Figure 1: Locality Map (Source: Cape Farm Mapper; 2021)



## 2. PURPOSE OF THE REPORT

SLR Consulting (South Africa) (Pty) Ltd (SLR) has been appointed by EFG Engineers (Pty) Ltd (EFG) to undertake the required Environmental Authorisation (EA) application process in terms of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended) promulgated under the National Environmental Management Act, 1998 (No. 107 of 1998; NEMA), for the proposed project.

A Screening Tool Report was generated as part of the EA application process. According to the Screening Tool Report, the following specialist assessments were identified and recommended to be undertaken as part of the environmental process:

- Agricultural Impact Assessment;
- Landscape / Visual Assessment;
- Archaeological and Cultural Impact Assessment;
- Palaeontology Impact Assessment;
- Noise Impact Assessment;
- Traffic Impact Assessment;
- Geotechnical Assessment;
- Socioeconomic Assessment;
- Ambient Air Quality Impact Assessment; and
- Animal Species Assessment.

In accordance with the Procedures for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes in terms of Sections 24(5)(a) and (h) and 44 of NEMA, this Site Sensitivity Verification Report (SSVR) has essentially been compiled to provide a rationale for the specialist studies undertaken as part of the environmental process.

## 3. DESKTOP ANALYSIS

The project area is located within the G40G quaternary catchment. The main aquatic feature within this catchment is the Onrus River. A number of smaller watercourses drain the hillslopes along the section of the road to be upgraded, but most of these watercourses are no longer visible within the lower reaches, downstream of the road, due to residential development. Additionally, none of the watercourses crossed by the road contain any significant aquatic habitat.

The vegetation of South Africa, including that of the fynbos biome, was mapped by Mucina, Rutherford and Powrie (2005) (VEGMAP) and subsequently by SANBI (2012, 2018). According to this classification and mapping, the R43 traverses a zone of Hangklip Sand Fynbos (Endangered) and a minor zone of Overberg Sandstone (Critically Endangered). In terms of the Western Cape Biodiversity Spatial Plan (WCBSPP), portions of the affected watercourses have been mapped as aquatic Ecological Support Areas (ESAs), while the Onrus River is mapped as an aquatic Critical Biodiversity Area (CBA). However, this is only associated with the wetland habitats along the river upstream and downstream of the road, but not within the actual road reserve, while the portions of the watercourses mapped as ESAs lie to the west of the proposed works.

Where the R43 crosses the Onrus River, the river is confined to a narrow channel where there is a sudden transition from a wider more braided river channel with a wetland, to a single channelled watercourse with a dense riparian area that comprises of alien woodland habitat. The Onrus River is also mapped as a Fish Support Area in terms of the Freshwater Ecosystem Protected Areas map (SANBI).

Archaeological resources in the form of Later Stone Age shell middens and associated artefactual material have been found in the broader region. However, no archaeological material of any type was identified in the proposed area of disturbance. The Onrust Cemetery lies to the south of the R43. The cemetery is graded as a IIIA heritage resource in terms of the Overstrand Heritage Survey. A wall separates the cemetery from the R43. The section of the R43 between Hawston and the Hemel-en-Aarde turnoff is considered to be a scenic route of secondary importance. No other places, buildings, structures and equipment of historical and cultural significance are located within the proposed project area of disturbance.

This section of road passes through the residential suburbs of Vermont and Onrus before it crosses the Onrus River, passes Sandbaai and then through Mount Pleasant, where it terminates at the Mimosa Street / Mountain Drive Intersection in Hermanus.

## 4. SITE ASSESSMENT

Site assessments were undertaken by the Freshwater Specialist in September 2019, and by the Botanical Specialist in January and December 2020. Invasive alien plants such as *Acacia saligna*, *Leptospermum laevigatum*, *Hypericum revolutum* and *Pennisetum clandestinum* are located within the road reserve. No undisturbed remnants of Hangklip Sand Fynbos (Endangered) or Overberg Sandstone Fynbos (Critically Endangered) are located within the road reserve. A secondary vegetation community, which contains a mix of indigenous species that does not fall within the definition of the above-mentioned fynbos classification, has developed within the road reserve as a result of road construction and periodic maintenance. Notably, *Thamnochortus insignis* is one such species that has proliferated within the road reserve yet is not native to the area. It is believed that the use of the reed as thatching material by local residents has led to the distribution.

The proposed new access road between Lobelia Street and Chanteclair Avenue would transverse a transformed area. Immediately adjacent to Berghof, there exists remnant fynbos that has been heavily degraded by trees having grown and subsequently being felled. Towards the east, the area is mostly vegetated with exotic species such as *Eucalyptus conferruminata*, *Pinus halepensis*, *Hakea drupacea* and *Acacia* spp.

## 5. RATIONALE FOR REQUIRED SPECIALIST STUDIES

### 5.1 AGRICULTURAL IMPACT ASSESSMENT

An agricultural impact assessment is not deemed necessary as the proposed upgrade of the R43 and the associated new access roads are proposed to be undertaken within a widened declared provincial road reserve and is not considered to impact on any agricultural activities.

### 5.2 LANDSCAPE/VISUAL IMPACT ASSESSMENT

A landscape / visual impact assessment is not deemed necessary as the proposed project entails the upgrade of an existing road.

### 5.3 ARCHAEOLOGICAL AND CULTURAL HERITAGE IMPACT ASSESSMENT

A Notice of Intent to Development (NID) has been submitted to Heritage Western Cape (HWC). An Archaeological and Cultural Heritage Impact Assessment was not deemed necessary by HWC (see Appendix E of the draft BAR).

### 5.4 PALAEOLOGY IMPACT ASSESSMENT

Refer to response above. The NID included information on palaeontology. A palaeontology impact assessment was not deemed necessary by HWC (see Appendix E of the draft BAR).

### 5.5 NOISE IMPACT ASSESSMENT

A noise impact assessment is not deemed necessary as the proposed project will entail the redevelopment of noise berms which would be demolished as part of the proposed project. The provision of additional noise berms would also be considered, as appropriate.

### 5.6 TRAFFIC IMPACT ASSESSMENT

A traffic assessment was undertaken by the engineering team to inform the preliminary design of the project, with no further stand-alone assessment deemed necessary. Extracts of the traffic assessment taken from the project engineer's Concept and Viability Report are attached as Appendix G5 of the draft BAR.

### 5.7 GEOTECHNICAL ASSESSMENT

A geotechnical assessment was undertaken by the engineering team to inform the design of structures along the proposed road upgrade section. No additional input is deemed necessary. Extracts of the geotechnical assessment taken from the project engineer's Concept and Viability Report are attached as Appendix G4 of the draft BAR.

### 5.8 SOCIOECONOMIC ASSESSMENT

A specialist socioeconomic assessment is not deemed necessary due to the limited extent and short duration of the proposed project. Potential socio-economic impacts have been addressed in the draft BAR, as appropriate.

### 5.9 AMBIENT AIR QUALITY IMPACT ASSESSMENT

An ambient air quality impact assessment is not deemed necessary as the proposed project will produce minimal dust and vehicle emissions that will be released into the atmosphere. Air quality / dust nuisances during construction would be managed through the effective implementation of the relevant provisions of the EMPr (see Appendix H of the draft BAR).

### 5.10 ANIMAL SPECIES ASSESSMENT

An animal species assessment is not deemed necessary as the proposed project is essentially to be undertaken within a widened road reserve and is not considered to impact on any animal species. Furthermore, no animal species were observed on site. Potential impacts would be managed according to the provisions of the EMPr (see Appendix H of the draft BAR).

## 6. CONCLUSION

The DTPW is proposing to upgrade a section of the R43 between Botrivier and Hermanus. SLR has been appointed by EFG to undertake the required EA Application process in terms of the EIA Regulations, 2014 (as amended) promulgated under NEMA.

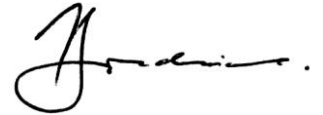
A Screening Tool Report was generated for the proposed project. According to the Screening Tool Report, various specialist studies were identified and recommended to be undertaken as part of the environmental process. As set out above, none of the specialist studies recommended by the Screening Tool Report were deemed necessary to be undertaken as part of the environmental process. Traffic and geotechnical assessments were undertaken by the engineering team.



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