

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

**EIA Reference number:** Pending

**Project name:** IRT Phase 2A Trunk Route Section E1

**Project title:** IRT Phase 2A Trunk Route Section E1

**Date screening report generated:** 17/06/2021 16:53:58

**Applicant:** City of Cape Town: Transport Directorate represented by Mr. Antonio Vieira

**Compiler:** Chand Environmental Consultants

**Compiler signature:**

.....

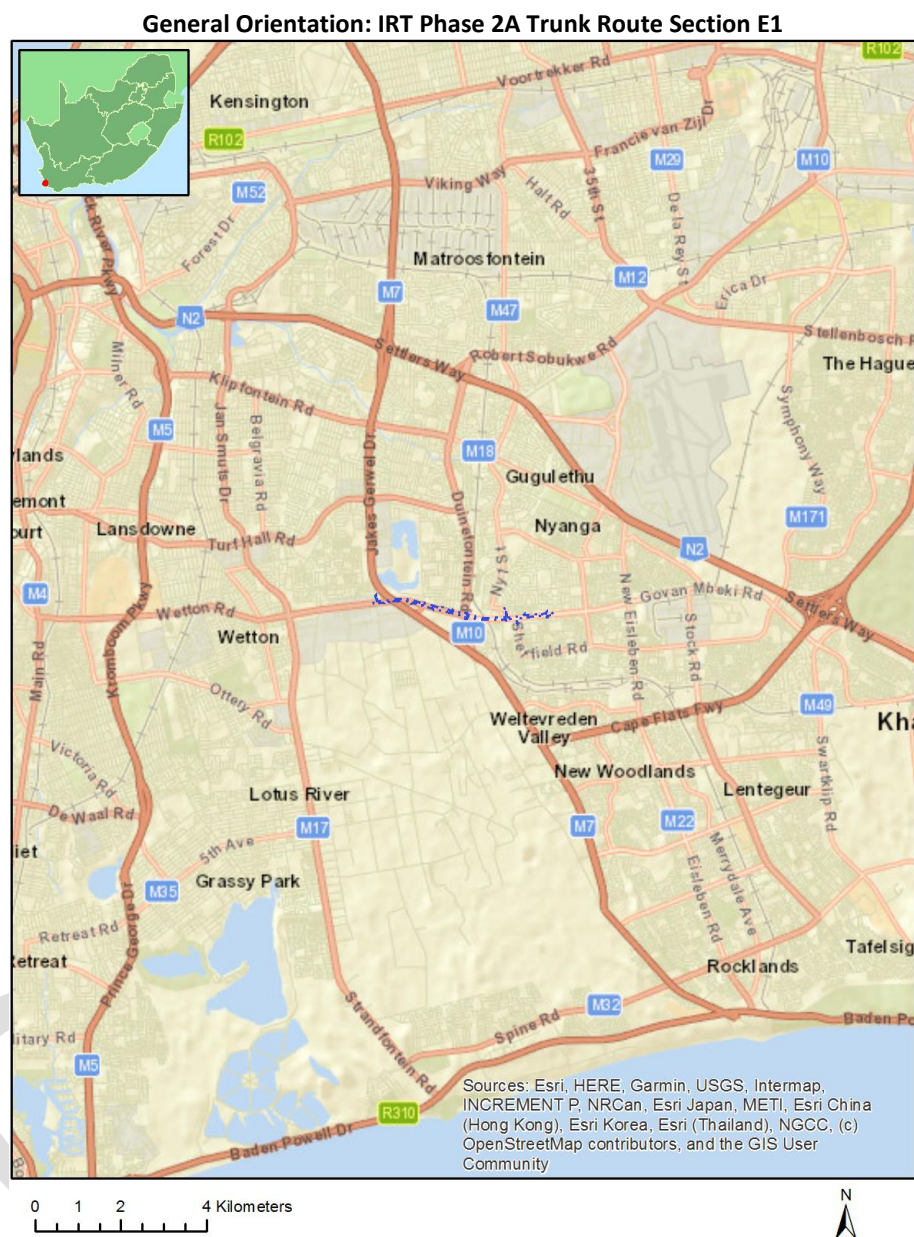
**Application Category:** Infrastructure | Transport Services | Roads | Public

## Table of Contents

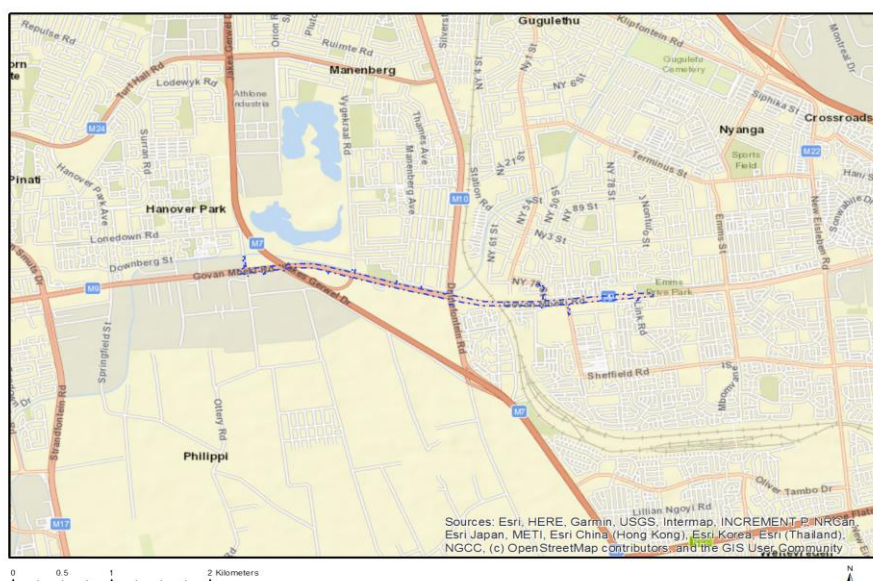
Proposed Project Location .....	3
Orientation map 1: General location .....	3
Map of proposed site and relevant area(s) .....	4
Cadastral details of the proposed site .....	4
Wind and Solar developments with an approved Environmental Authorisation or applications under consideration within 30 km of the proposed area .....	6
Environmental Management Frameworks relevant to the application .....	6
Environmental screening results and assessment outcomes .....	6
Relevant development incentives, restrictions, exclusions or prohibitions .....	6
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones .....	7
Proposed Development Area Environmental Sensitivity .....	7
Specialist assessments identified .....	8
Results of the environmental sensitivity of the proposed area .....	10
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY .....	10
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY .....	11
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY .....	12
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY .....	13
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY .....	14
MAP OF RELATIVE DEFENCE THEME SENSITIVITY .....	15
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY .....	16
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY .....	17
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY .....	20

# Proposed Project Location

## Orientation map 1: General location



## 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	PHILIPPI	40	0	34°0'8.02S	18°34'37.84E	Erven
2	SHERWOOD PARK	48	0	34°0'5.22S	18°33'23.25E	Erven
3	SHERWOOD PARK	48	0	34°0'4.67S	18°33'20.47E	Erven
4	SHERWOOD PARK	48	0	34°0'4.13S	18°33'17.7E	Erven
5	GUGULETHU	6	0	34°0'7.92S	18°33'37.64E	Erven
6	PHILIPPI	40	0	34°0'9.2S	18°34'36.17E	Erven
7	SHERWOOD PARK	47	0	34°0'4.19S	18°33'22.16E	Erven
8	SHERWOOD PARK	335	0	34°0'5.53S	18°33'24.72E	Erven
9	PHILIPPI	3108	0	34°0'15.12S	18°34'5.1E	Erven
10	SHERWOOD PARK	329	0	34°0'4.06S	18°33'16.91E	Erven
11	PHILIPPI	469	0	34°0'10.81S	18°34'9.62E	Erven
12	SHERWOOD PARK	479	0	34°0'5.97S	18°33'24.57E	Erven
13	PHILIPPI	3109	0	34°0'10.64S	18°34'7.57E	Erven
14	SHERWOOD PARK	479	0	34°0'6.4S	18°33'26.55E	Erven
15	SHERWOOD PARK	48	0	34°0'5.75S	18°33'26.01E	Erven
16	SHERWOOD PARK	340	0	34°0'5.75S	18°33'27.5E	Erven
17	SHERWOOD PARK	331	0	34°0'4.45S	18°33'19.7E	Erven
18	SHERWOOD	330	0	34°0'4.3S	18°33'18.48E	Erven

	PARK					
19	SHERWOOD PARK	333	0	34°0'4.94S	18°33'21.86E	Erven
20	PHILIPPI	3366	0	34°0'23.07S	18°34'41.91E	Erven
21	GUGULETU	8448	0	34°0'4.94S	18°34'13.42E	Erven
22	GUGULETU	8622	0	33°59'56.13S	18°34'17.27E	Erven
23	GUGULETU	10465	0	34°0'7.14S	18°34'2.76E	Erven
24	GUGULETU	10732	0	34°0'5.6S	18°34'12E	Erven
25	GUGULETU	10466	0	34°0'5.36S	18°34'23.4E	Erven
26	NYANGA (CAPE)	11785	0	34°0'5.03S	18°34'28.2E	Erven
27	GUGULETU	8622	0	34°0'5.52S	18°34'0.59E	Erven
28	PHILIPPI	21400	0	34°0'15.53S	18°34'5.77E	Erven
29	GUGULETU	15428	0	34°0'6.99S	18°34'14.24E	Erven
30	GUGULETU	15510	0	34°0'6.95S	18°34'1.4E	Erven
31	CAPE TOWN	40308	0	34°0'0.27S	18°32'53.74E	Erven
32	CAPE TOWN	40310	0	33°59'57.71S	18°32'49.88E	Erven
33	PHILIPPI	113400	0	34°0'11.45S	18°33'53.28E	Erven
34	CAPE TOWN	113927	0	34°0'4.08S	18°33'14.7E	Erven
35	CAPE TOWN	40289	0	33°59'54.96S	18°32'17.27E	Erven
36	CAPE TOWN	40313	0	33°59'56.57S	18°32'37.3E	Erven
37	CAPE TOWN	40819	0	34°0'1.13S	18°32'50.89E	Erven
38	CAPE TOWN	40308	0	34°0'0.38S	18°32'46.22E	Erven
39	CAPE TOWN	40372	0	33°59'58.49S	18°32'48.09E	Erven
40	CAPE TOWN	159595	0	34°0'1.4S	18°32'26.72E	Erven
41	CAPE TOWN	113568	0	33°59'58.92S	18°34'35.37E	Erven
42	CAPE TOWN	159596	0	34°0'1.65S	18°32'32.08E	Erven
43	PHILIPPI	20184	0	34°0'10.7S	18°34'10.23E	Erven
44	CAPE TOWN	40369	0	33°59'58.83S	18°32'21.68E	Erven
45	CAPE TOWN	104701	0	33°59'59.92S	18°33'6.37E	Erven
46	CAPE TOWN	114787	0	33°59'57.32S	18°32'17.4E	Erven
47	CAPE TOWN	174235	0	33°59'58.23S	18°33'1.52E	Erven
48	PHILIPPI	21401	0	34°0'11.77S	18°34'5.12E	Erven
49	CAPE TOWN	179193	0	34°0'0.12S	18°32'46.13E	Erven
50	CAPE TOWN	179194	0	33°59'59.37S	18°32'43.61E	Erven
51	CAPE TOWN	113926	0	34°0'3.52S	18°33'14.97E	Erven
52	CAPE TOWN	179046	0	34°0'1.98S	18°33'5.02E	Erven
53	CAPE TOWN	168904	0	34°0'2.72S	18°32'37.52E	Erven
54	CAPE TOWN	176382	0	34°0'1.72S	18°32'34.54E	Erven
55	CAPE TOWN	40368	0	33°59'59.62S	18°32'17.19E	Erven
56	CAPE TOWN	177954	0	34°0'1.35S	18°33'6.02E	Erven
57	CAPE TOWN	179193	0	34°0'0.93S	18°32'47.71E	Erven
58	GUGULETU	10731	0	34°0'4.68S	18°34'19.67E	Erven
59	CAPE TOWN	40301	0	33°59'59.7S	18°32'24.33E	Erven
60	CAPE TOWN	174068	0	33°59'58.56S	18°33'1.47E	Erven
61		616	0	34°0'4.13S	18°32'15.8E	Farm
62		562	0	34°0'1.48S	18°33'2.35E	Farm
63		615	0	34°0'6.83S	18°32'24.09E	Farm
64		604	0	34°0'23.3S	18°33'49.98E	Farm
65	SWEET HOME	609	0	34°0'29.43S	18°33'14.95E	Farm
66	SWEET HOME	609	28	34°0'9.13S	18°33'20.32E	Farm Portion
67		604	35	34°0'9.34S	18°34'6.84E	Farm Portion
68	SWEET HOME	609	31	34°0'6.48S	18°33'22.67E	Farm Portion
69		616	0	34°0'4.13S	18°32'15.8E	Farm Portion
70		562	1	34°0'1.72S	18°33'6.07E	Farm Portion
71	SWEET HOME	609	29	34°0'4.66S	18°33'13.42E	Farm Portion
72		562	2	34°0'2.11S	18°33'5E	Farm Portion
73	SWEET HOME	609	61	34°0'7.59S	18°33'27.08E	Farm Portion
74	SWEET HOME	609	5	34°0'9.78S	18°33'26.01E	Farm Portion
75		604	34	34°0'9.78S	18°34'4.69E	Farm Portion
76	SWEET HOME	609	50	34°0'8.89S	18°33'29.79E	Farm Portion



77	SWEET HOME	609	13	34°0'10.18S	18°33'10.12E	Farm Portion
78	CAPE TOWN	179226	0	34°0'0.04S	18°32'52.92E	Public Place

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.

## 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

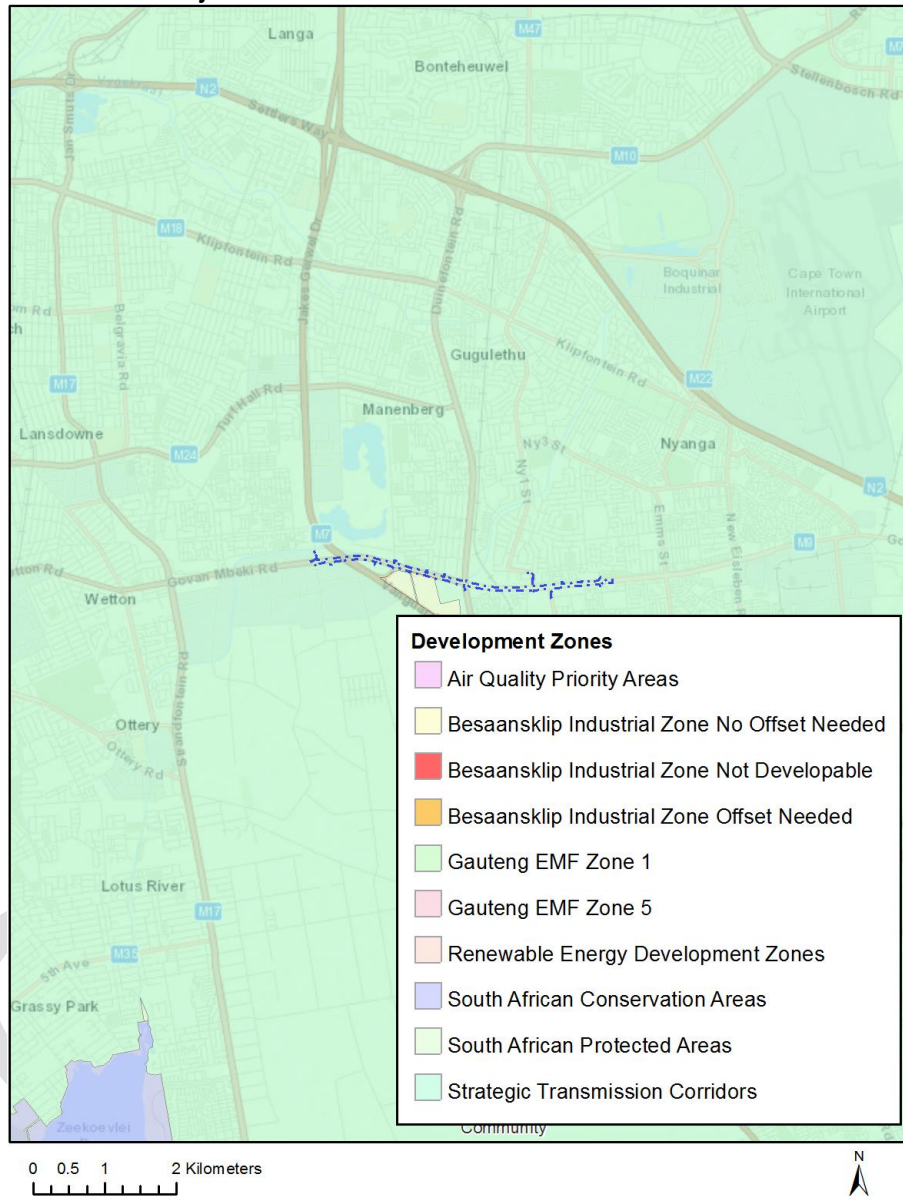
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Central corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GN11316February2018.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GN11316February2018.pdf</a>
South African Protected	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD_OR_2020_Q4_Metadata.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD_OR_2020_Q4_Metadata.pdf</a>

<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.

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

**Project Location: IRT Phase 2A Trunk Route Section E1**



### 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	High	Medium	Low
-------	-----------	------	--------	-----

	sensitivity	sensitivity	sensitivity	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	Special ist assess ment	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>
6	Aquatic Biodiversity Impact	<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>

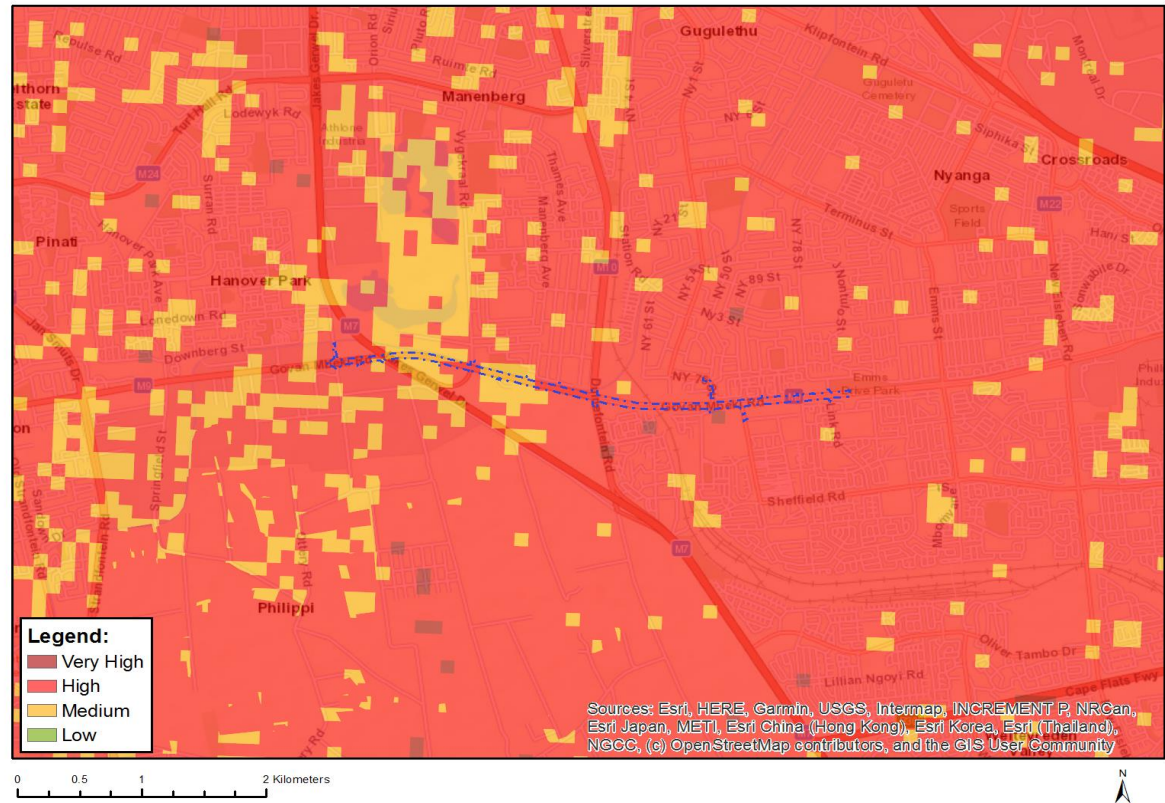


	Assessm ent	
7	Noise Impact Assessm ent	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf</a>
8	Traffic Impact Assessm ent	<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	Geotech nical Assessm ent	<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>
1 0	Socio- Economi c Assessm ent	<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>
1 1	Ambient Air Quality Impact Assessm ent	<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>
1 2	Plant Species Assessm ent	<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>
1 3	Animal Species Assessm ent	<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

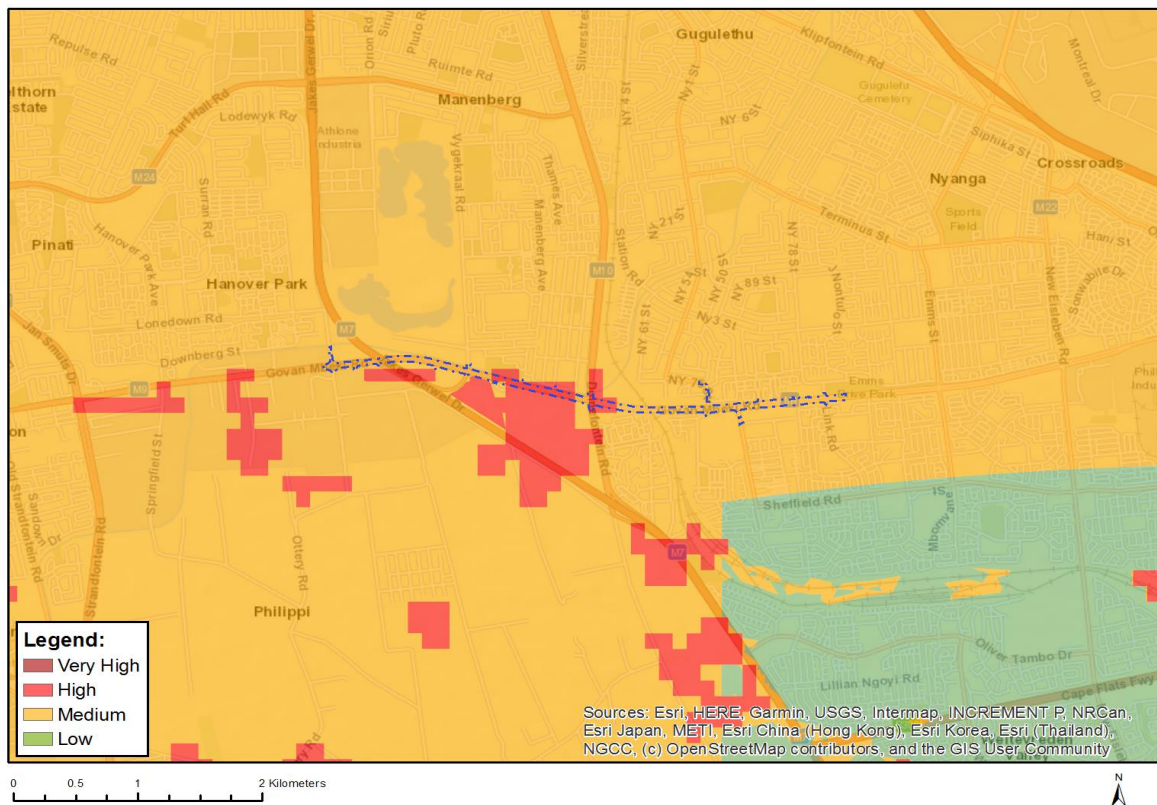


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



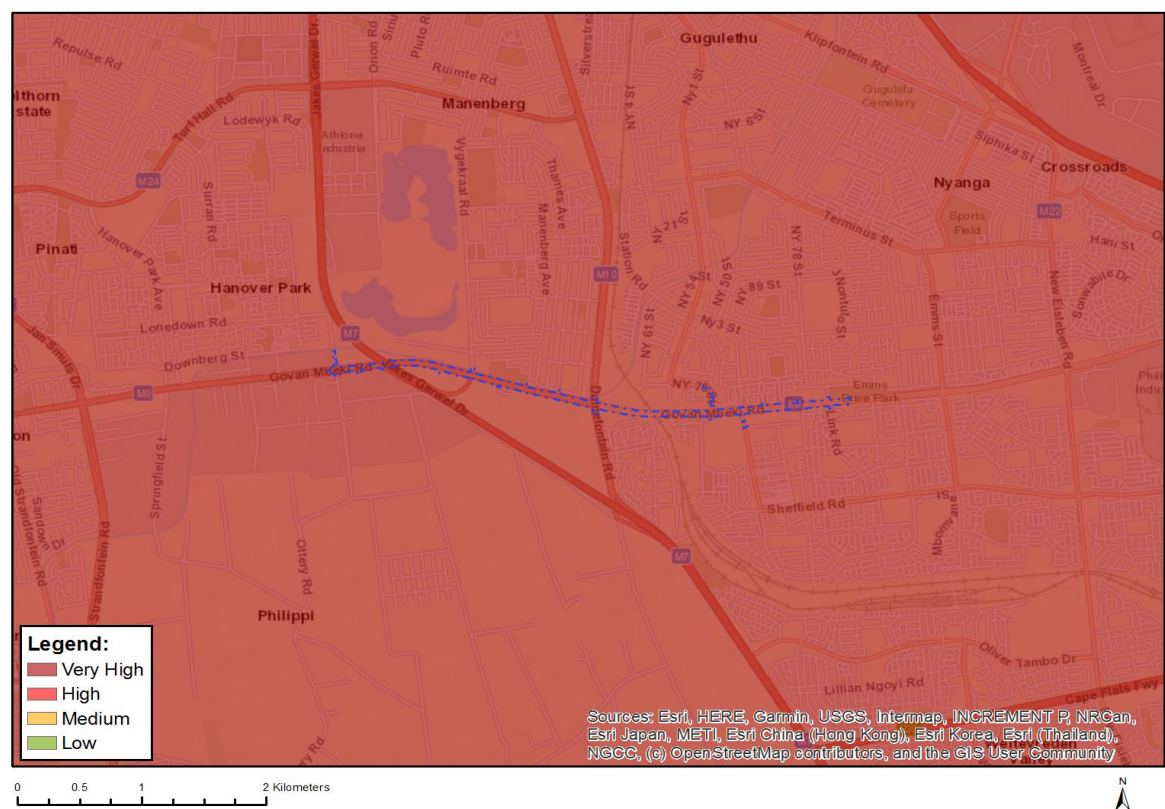
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) 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-Circus ranivorus
High	Aves-Circus maurus
Medium	Insecta-Kedestes lenis lenis
Medium	Invertebrate-Conocephalus peringueyi
Medium	Aves-Circus maurus
Medium	Aves-Circus ranivorus
Medium	Amphibia-Sclerophrys pantherina
Medium	Amphibia-Microbatrachella capensis

MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



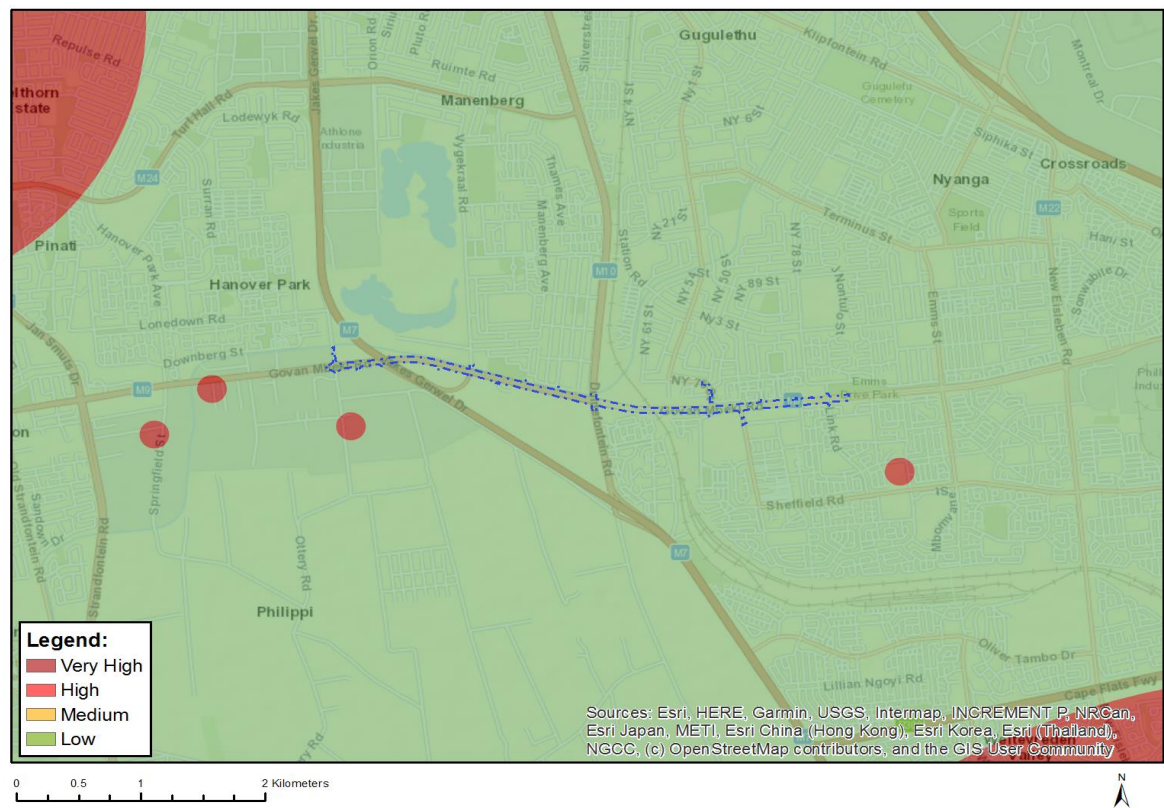
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

Sensitivity Features:

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



# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



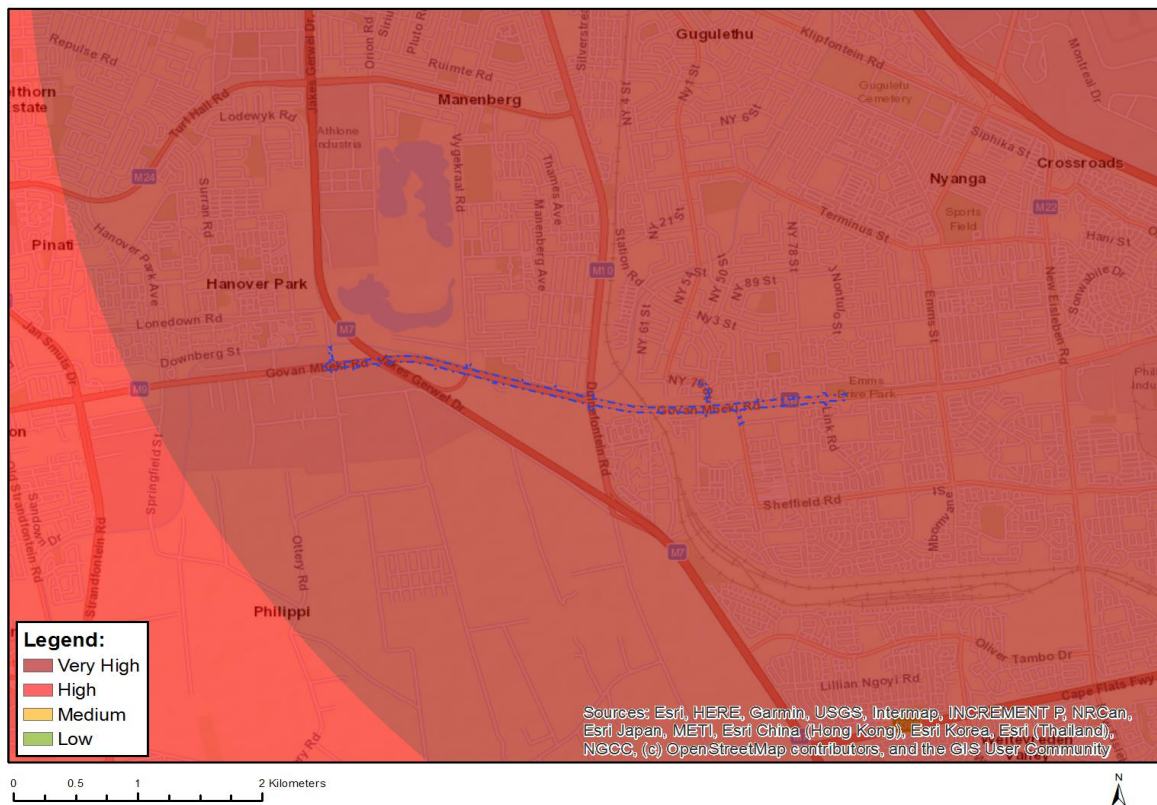
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

## Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity



## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

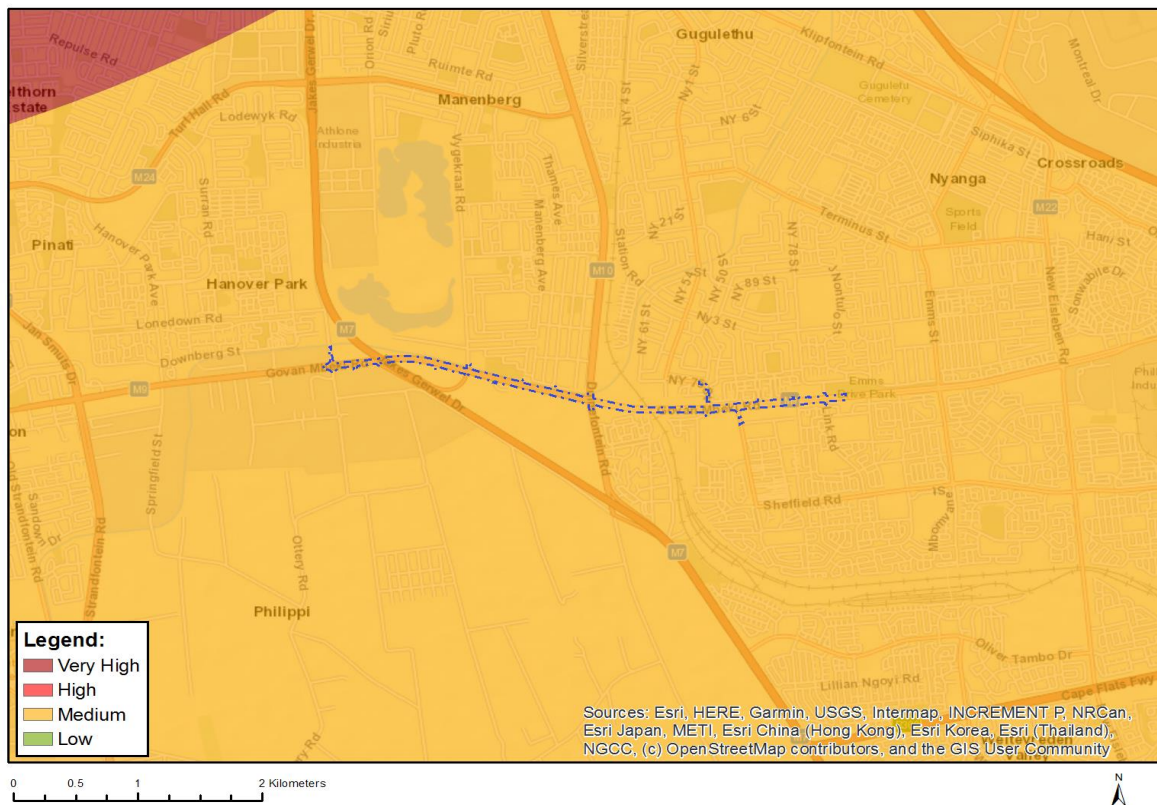


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 15 km of a civil aviation radar
Medium	Within 5 km of an air traffic control or navigation site
Very High	Within 8 km of a major civil aviation aerodrome

## MAP OF RELATIVE DEFENCE THEME SENSITIVITY

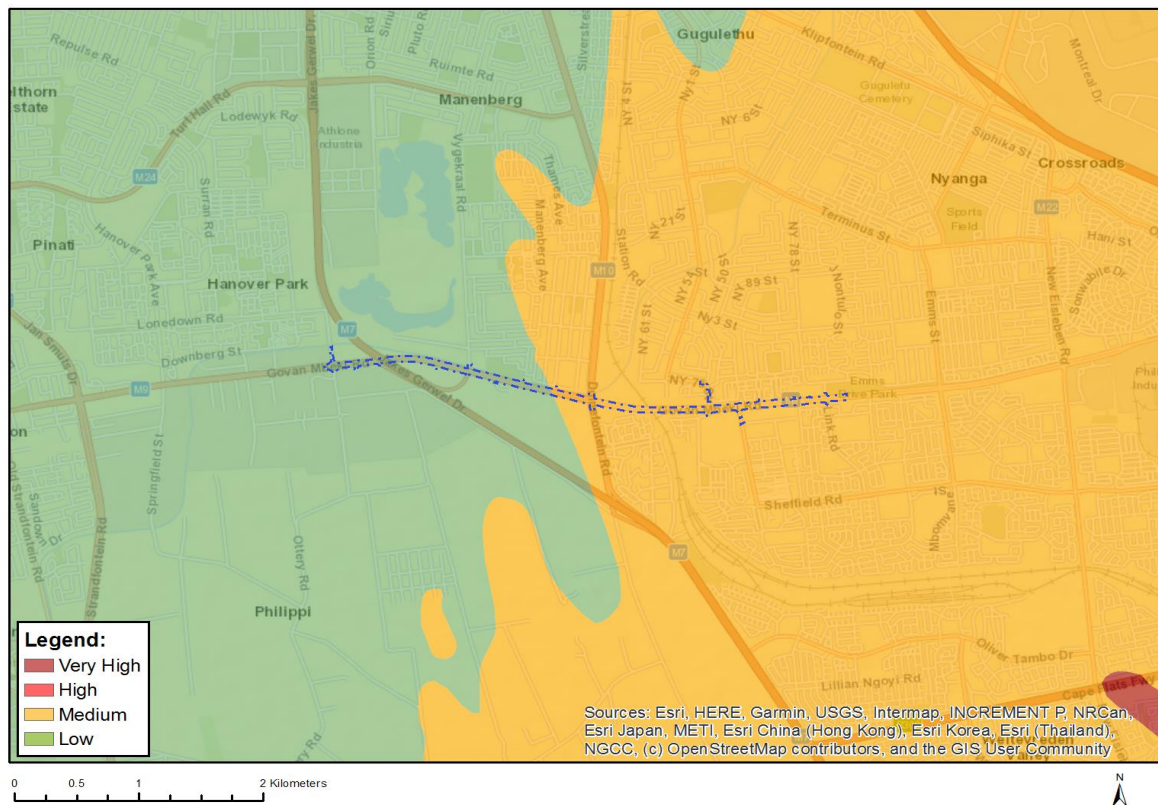


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Medium	Military and Defence Site

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



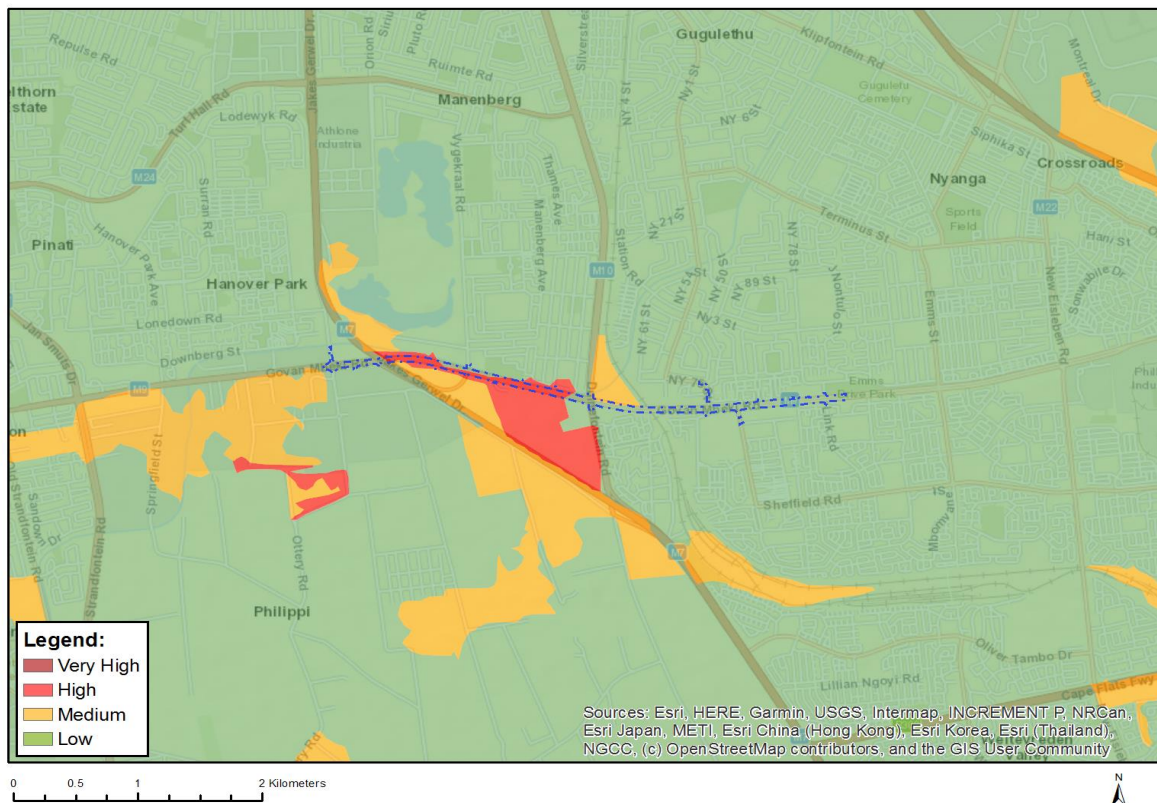
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity
Medium	Features with a Medium 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)
High	Isoetes capensis
High	Restio sabulosus
Low	Low Sensitivity
Medium	Lampranthus filicaulis
Medium	Lampranthus leptaleon
Medium	Lampranthus scaber
Medium	Lampranthus spiniformis
Medium	Lampranthus stenopetalus
Medium	Lampranthus stenus
Medium	Lampranthus tenuifolius
Medium	Antimima aristulata
Medium	Erepsia dunensis
Medium	Cleretum clavatum
Medium	Ruschia geminiflora
Medium	Lessertia argentea

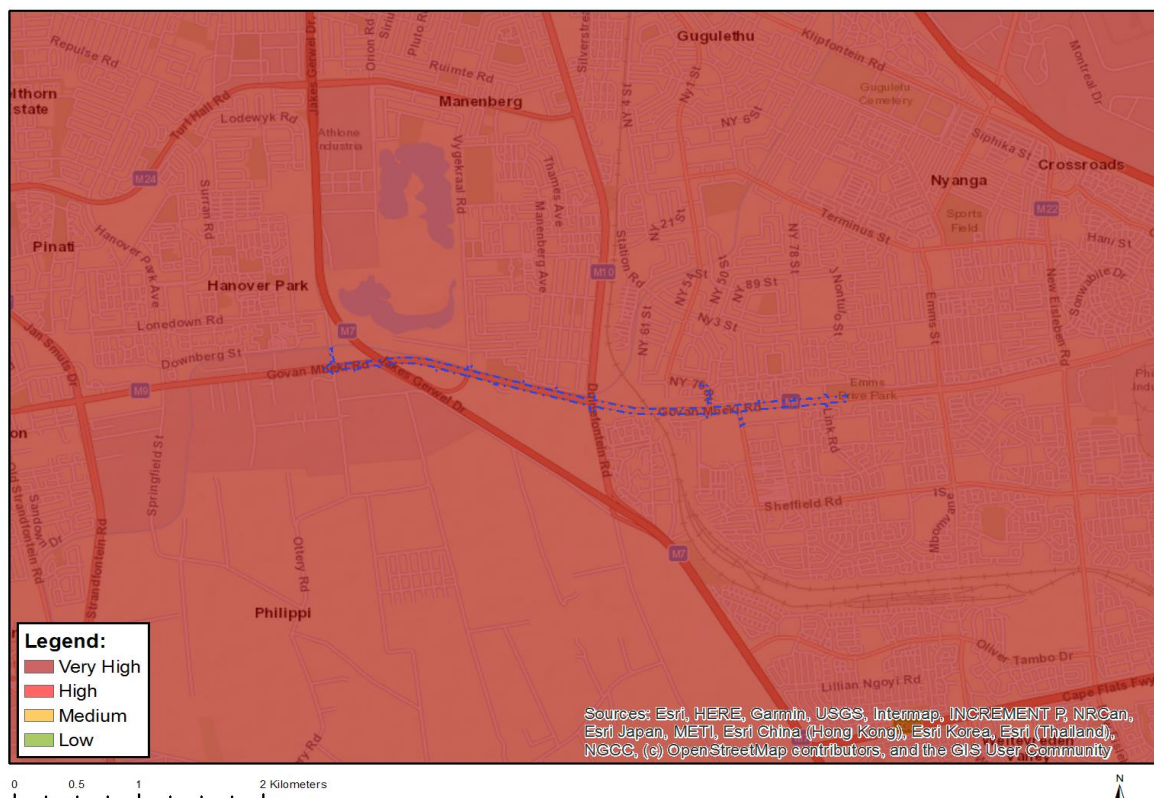
Medium	<i>Psoralea glaucina</i>
Medium	<i>Liparia splendens</i> subsp. <i>splendens</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Aspalathus globulosa</i>
Medium	<i>Aspalathus lotoides</i> subsp. <i>lotoides</i>
Medium	<i>Aspalathus retroflexa</i> subsp. <i>bicolor</i>
Medium	<i>Rafnia angulata</i> subsp. <i>humilis</i>
Medium	<i>Lebeckia plukenetiana</i>
Medium	<i>Podalyria argentea</i>
Medium	<i>Podalyria sericea</i>
Medium	<i>Thesium ecklonianum</i>
Medium	<i>Leucadendron cinereum</i>
Medium	<i>Leucadendron coniferum</i>
Medium	<i>Leucadendron floridum</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucadendron levisanus</i>
Medium	<i>Leucadendron linifolium</i>
Medium	<i>Leucadendron macowanii</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>canaliculatum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Protea burchellii</i>
Medium	<i>Diastella proteoides</i>
Medium	<i>Serruria aemula</i>
Medium	<i>Serruria glomerata</i>
Medium	<i>Serruria trilopha</i>
Medium	<i>Microdon capitatus</i>
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Anthospermum ericifolium</i>
Medium	Sensitive species 533
Medium	Sensitive species 878
Medium	<i>Geissorhiza bonaspei</i>
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Geissorhiza humilis</i>
Medium	<i>Ixia monadelpha</i>
Medium	Sensitive species 881
Medium	Sensitive species 683
Medium	Sensitive species 830
Medium	<i>Pauridia alba</i>
Medium	<i>Pauridia canaliculata</i>
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Pseudalthenia aschersoniana</i>
Medium	<i>Oxalis natans</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	<i>Stylapterus fruticosus</i>
Medium	<i>Hermannia procumbens</i> subsp. <i>procumbens</i>
Medium	<i>Sebaea rara</i>
Medium	Sensitive species 493
Medium	<i>Tetragonia caesia</i>
Medium	<i>Adenogramma rigida</i>
Medium	<i>Wachendorfia brachyandra</i>
Medium	<i>Hessea cinnamomea</i>
Medium	Sensitive species 497
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 133
Medium	<i>Isolepis inconspicua</i>
Medium	<i>Isolepis venustula</i>
Medium	<i>Trianoptiles solitaria</i>
Medium	<i>Ficinia elatior</i>



Medium	<i>Ficinia pinguior</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio micans</i>
Medium	<i>Restio sabulosus</i>
Medium	<i>Restio impolitus</i>
Medium	<i>Restio papillosus</i>
Medium	<i>Restio pratensis</i>
Medium	<i>Cynanchum zeyheri</i>
Medium	Sensitive species 985
Medium	Sensitive species 120
Medium	Sensitive species 1139
Medium	<i>Acrolophia bolusii</i>
Medium	<i>Pterygodium cruciferum</i>
Medium	<i>Pterygodium microglossum</i>
Medium	<i>Heliophila promontorii</i>
Medium	<i>Gnidia spicata</i>
Medium	<i>Passerina paludosa</i>
Medium	<i>Lachnaea uniflora</i>
Medium	<i>Poecilolepis maritima</i>
Medium	<i>Steirodiscus tagetes</i>
Medium	<i>Senecio foeniculoides</i>
Medium	<i>Cotula eckloniana</i>
Medium	<i>Arctotis angustifolia</i>
Medium	<i>Arctotheca forbesiana</i>
Medium	<i>Cullumia squarrosa</i>
Medium	<i>Oncosiphon africanum</i>
Medium	<i>Diosma dichotoma</i>
Medium	<i>Agathosma corymbosa</i>
Medium	<i>Agathosma glabrata</i>
Medium	<i>Adenandra villosa</i> subsp. <i>biseriata</i>
Medium	<i>Macrostylis villosa</i> subsp. <i>villosa</i>
Medium	<i>Cliffortia ericifolia</i>
Medium	<i>Cliffortia hirta</i>
Medium	<i>Cliffortia longifolia</i>
Medium	<i>Limonium depauperatum</i>
Medium	<i>Muraltia brevicornu</i>
Medium	<i>Muraltia macropetala</i>
Medium	<i>Muraltia mitior</i>
Medium	Sensitive species 214
Medium	Sensitive species 158
Medium	Sensitive species 1265
Medium	<i>Wurmbea hiemalis</i>
Medium	<i>Wurmbea inusta</i>
Medium	<i>Phylica dioica</i>
Medium	<i>Phylica harveyi</i>
Medium	<i>Phylica plumosa</i> var. <i>squarrosa</i>
Medium	<i>Kewa trachysperma</i>
Medium	<i>Skiatophytum skiatophytoides</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Lampranthus glaucus</i>
Medium	<i>Argyrolobium velutinum</i>
Medium	<i>Xiphothea reflexa</i>
Medium	<i>Psoralea alata</i>
Medium	<i>Aspalathus lebeckioides</i>
Medium	<i>Aspalathus tylodes</i>
Medium	<i>Leucospermum rodolentum</i>
Medium	<i>Protea scolymocephala</i>
Medium	Sensitive species 599
Medium	<i>Elegia verreauxii</i>

Medium	Restio paludosus
Medium	Restio rigoratus
Medium	Sensitive species 53
Medium	Sensitive species 654
Medium	Lachnaea capitata
Medium	Lachnaea grandiflora
Medium	Cotula pusilla
Medium	Sensitive species 1225

## 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 2
Very High	Critically endangered ecosystem
Very High	Endangered ecosystem
Very High	South African Protected Areas

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

**EIA Reference number:** Pending

**Project name:** IRT Phase 2A Trunk Route Section E1

**Project title:** IRT Phase 2A Trunk Route Section E1

**Date screening report generated:** 17/06/2021 17:11:06

**Applicant:** City of Cape Town: Transport Directorate represented by Mr. Antonio Vieira

**Compiler:** Chand Environmental Consultants

**Compiler signature:**

.....

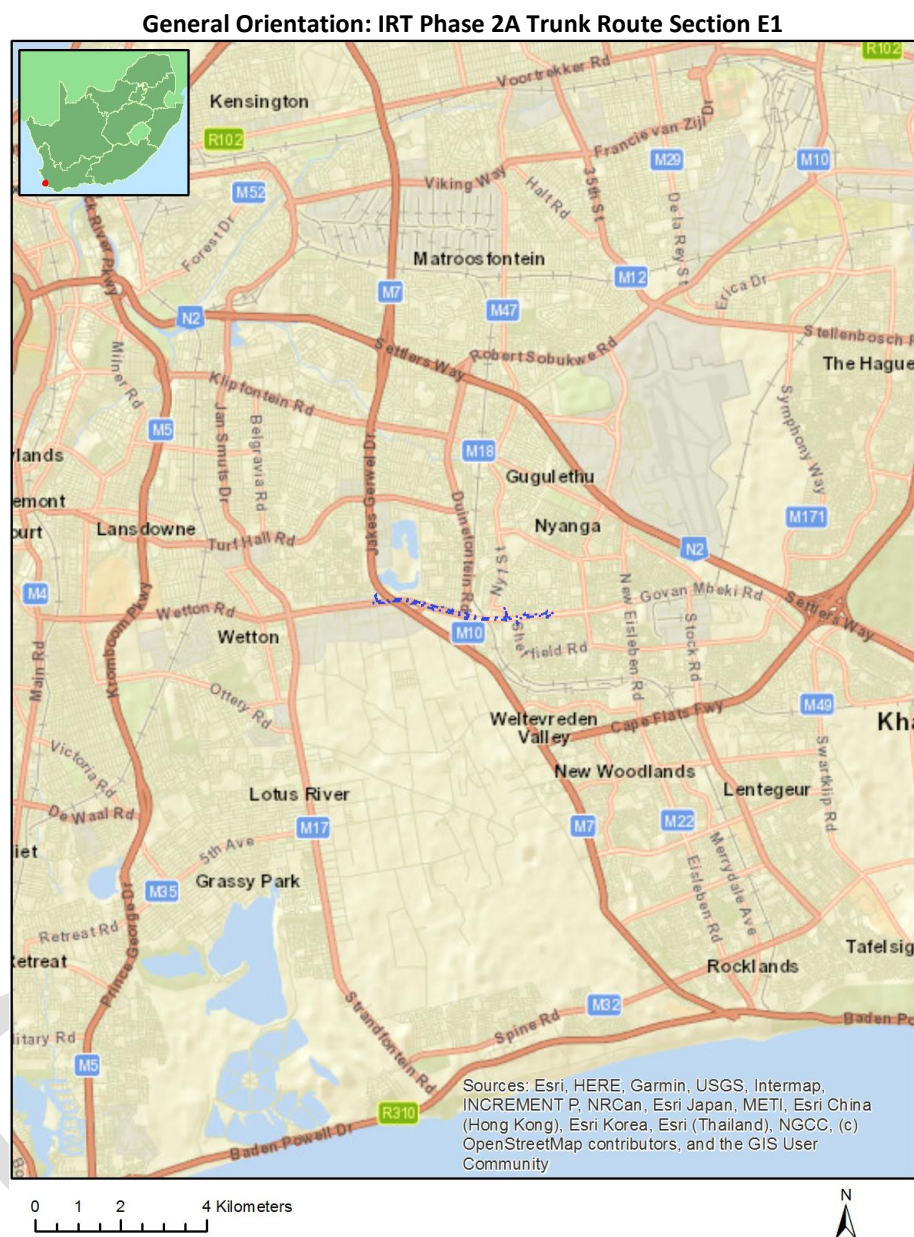
**Application Category:** Any activities within or close to a watercourse

## Table of Contents

Proposed Project Location .....	3
Orientation map 1: General location .....	3
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 .....	6
Environmental Management Frameworks relevant to the application .....	6
Environmental screening results and assessment outcomes .....	6
Relevant development incentives, restrictions, exclusions or prohibitions .....	6
Map indicating proposed development footprint within applicable development incentive, restriction, exclusion or prohibition zones .....	7
Proposed Development Area Environmental Sensitivity .....	7
Specialist assessments identified .....	8
Results of the environmental sensitivity of the proposed area .....	10
MAP OF RELATIVE AGRICULTURE THEME SENSITIVITY .....	10
MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY .....	11
MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY .....	12
MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY .....	13
MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY .....	14
MAP OF RELATIVE DEFENCE THEME SENSITIVITY .....	15
MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY .....	16
MAP OF RELATIVE PLANT SPECIES THEME SENSITIVITY .....	17
MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY .....	20

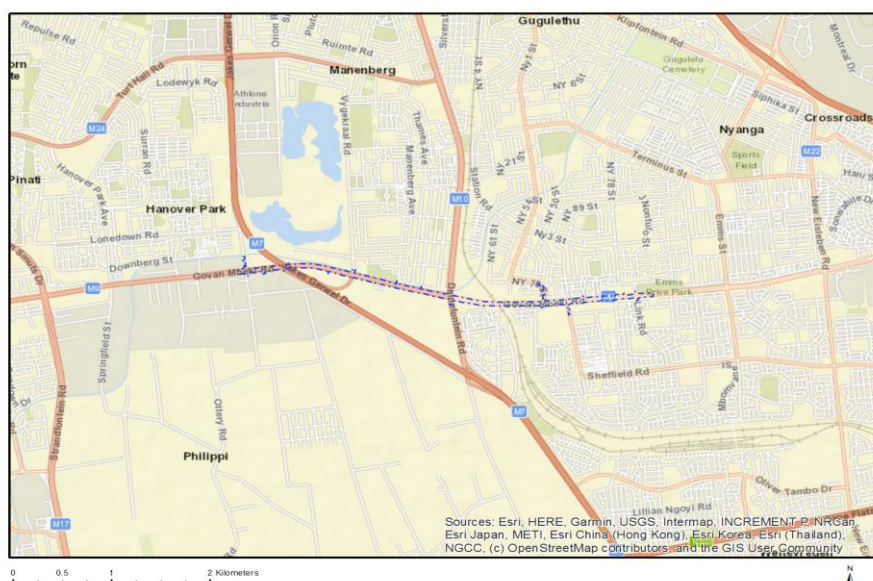
# Proposed Project Location

## Orientation map 1: General location





## 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	GUGULETU	6	0	34°0'7.92S	18°33'37.64E	Erven
2	PHILIPPI	40	0	34°0'9.2S	18°34'36.17E	Erven
3	SHERWOOD PARK	47	0	34°0'4.19S	18°33'22.16E	Erven
4	SHERWOOD PARK	48	0	34°0'4.13S	18°33'17.7E	Erven
5	SHERWOOD PARK	48	0	34°0'5.22S	18°33'23.25E	Erven
6	SHERWOOD PARK	48	0	34°0'4.67S	18°33'20.47E	Erven
7	SHERWOOD PARK	329	0	34°0'4.06S	18°33'16.91E	Erven
8	PHILIPPI	469	0	34°0'10.81S	18°34'9.62E	Erven
9	SHERWOOD PARK	479	0	34°0'5.97S	18°33'24.57E	Erven
10	PHILIPPI	3109	0	34°0'10.64S	18°34'7.57E	Erven
11	SHERWOOD PARK	48	0	34°0'5.75S	18°33'26.01E	Erven
12	SHERWOOD PARK	340	0	34°0'5.75S	18°33'27.5E	Erven
13	PHILIPPI	40	0	34°0'8.02S	18°34'37.84E	Erven
14	SHERWOOD PARK	331	0	34°0'4.45S	18°33'19.7E	Erven
15	SHERWOOD PARK	335	0	34°0'5.53S	18°33'24.72E	Erven
16	PHILIPPI	3108	0	34°0'15.12S	18°34'5.1E	Erven
17	SHERWOOD PARK	330	0	34°0'4.3S	18°33'18.48E	Erven
18	SHERWOOD	333	0	34°0'4.94S	18°33'21.86E	Erven

	PARK					
19	PHILIPPI	3366	0	34°0'23.07S	18°34'41.91E	Erven
20	SHERWOOD PARK	479	0	34°0'6.4S	18°33'26.55E	Erven
21	GUGULETU	8622	0	34°0'5.52S	18°34'0.59E	Erven
22	GUGULETU	10465	0	34°0'7.14S	18°34'2.76E	Erven
23	GUGULETU	10732	0	34°0'5.6S	18°34'12E	Erven
24	PHILIPPI	21400	0	34°0'15.53S	18°34'5.77E	Erven
25	CAPE TOWN	40308	0	34°0'0.27S	18°32'53.74E	Erven
26	CAPE TOWN	40310	0	33°59'57.71S	18°32'49.88E	Erven
27	PHILIPPI	113400	0	34°0'11.45S	18°33'53.28E	Erven
28	CAPE TOWN	113927	0	34°0'4.08S	18°33'14.7E	Erven
29	CAPE TOWN	159595	0	34°0'1.4S	18°32'26.72E	Erven
30	NYANGA (CAPE)	11785	0	34°0'5.03S	18°34'28.2E	Erven
31	GUGULETU	10731	0	34°0'4.68S	18°34'19.67E	Erven
32	CAPE TOWN	179193	0	34°0'0.12S	18°32'46.13E	Erven
33	CAPE TOWN	179194	0	33°59'59.37S	18°32'43.61E	Erven
34	PHILIPPI	20184	0	34°0'10.7S	18°34'10.23E	Erven
35	CAPE TOWN	40369	0	33°59'58.83S	18°32'21.68E	Erven
36	PHILIPPI	21401	0	34°0'11.77S	18°34'5.12E	Erven
37	CAPE TOWN	40289	0	33°59'54.96S	18°32'17.27E	Erven
38	CAPE TOWN	40313	0	33°59'56.57S	18°32'37.3E	Erven
39	CAPE TOWN	40819	0	34°0'1.13S	18°32'50.89E	Erven
40	CAPE TOWN	40368	0	33°59'59.62S	18°32'17.19E	Erven
41	GUGULETU	15428	0	34°0'6.99S	18°34'14.24E	Erven
42	GUGULETU	15510	0	34°0'6.95S	18°34'1.4E	Erven
43	CAPE TOWN	177954	0	34°0'1.35S	18°33'6.02E	Erven
44	CAPE TOWN	179193	0	34°0'0.93S	18°32'47.71E	Erven
45	CAPE TOWN	104701	0	33°59'59.92S	18°33'6.37E	Erven
46	CAPE TOWN	114787	0	33°59'57.32S	18°32'17.4E	Erven
47	CAPE TOWN	174235	0	33°59'58.23S	18°33'1.52E	Erven
48	CAPE TOWN	40308	0	34°0'0.38S	18°32'46.22E	Erven
49	CAPE TOWN	40372	0	33°59'58.49S	18°32'48.09E	Erven
50	CAPE TOWN	113568	0	33°59'58.92S	18°34'35.37E	Erven
51	CAPE TOWN	40301	0	33°59'59.7S	18°32'24.33E	Erven
52	CAPE TOWN	113926	0	34°0'3.52S	18°33'14.97E	Erven
53	CAPE TOWN	174068	0	33°59'58.56S	18°33'1.47E	Erven
54	CAPE TOWN	179046	0	34°0'1.98S	18°33'5.02E	Erven
55	GUGULETU	8448	0	34°0'4.94S	18°34'13.42E	Erven
56	GUGULETU	8622	0	33°59'56.13S	18°34'17.27E	Erven
57	GUGULETU	10466	0	34°0'5.36S	18°34'23.4E	Erven
58	CAPE TOWN	159596	0	34°0'1.65S	18°32'32.08E	Erven
59	CAPE TOWN	168904	0	34°0'2.72S	18°32'37.52E	Erven
60	CAPE TOWN	176382	0	34°0'1.72S	18°32'34.54E	Erven
61		616	0	34°0'4.13S	18°32'15.8E	Farm
62		562	0	34°0'1.48S	18°33'2.35E	Farm
63		615	0	34°0'6.83S	18°32'24.09E	Farm
64		604	0	34°0'23.3S	18°33'49.98E	Farm
65	SWEET HOME	609	0	34°0'29.43S	18°33'14.95E	Farm
66		604	34	34°0'9.78S	18°34'4.69E	Farm Portion
67	SWEET HOME	609	50	34°0'8.89S	18°33'29.79E	Farm Portion
68		562	1	34°0'1.72S	18°33'6.07E	Farm Portion
69	SWEET HOME	609	29	34°0'4.66S	18°33'13.42E	Farm Portion
70		604	35	34°0'9.34S	18°34'6.84E	Farm Portion
71	SWEET HOME	609	31	34°0'6.48S	18°33'22.67E	Farm Portion
72		616	0	34°0'4.13S	18°32'15.8E	Farm Portion
73	SWEET HOME	609	61	34°0'7.59S	18°33'27.08E	Farm Portion
74	SWEET HOME	609	5	34°0'9.78S	18°33'26.01E	Farm Portion
75	SWEET HOME	609	13	34°0'10.18S	18°33'10.12E	Farm Portion
76	SWEET HOME	609	28	34°0'9.13S	18°33'20.32E	Farm Portion

77		562	2	34°0'2.11S	18°33'5E	Farm Portion
78	CAPE TOWN	179226	0	34°0'0.04S	18°32'52.92E	Public Place

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.

## 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:

**Any activities within or close to a watercourse.**

## Relevant development incentives, restrictions, exclusions or prohibitions

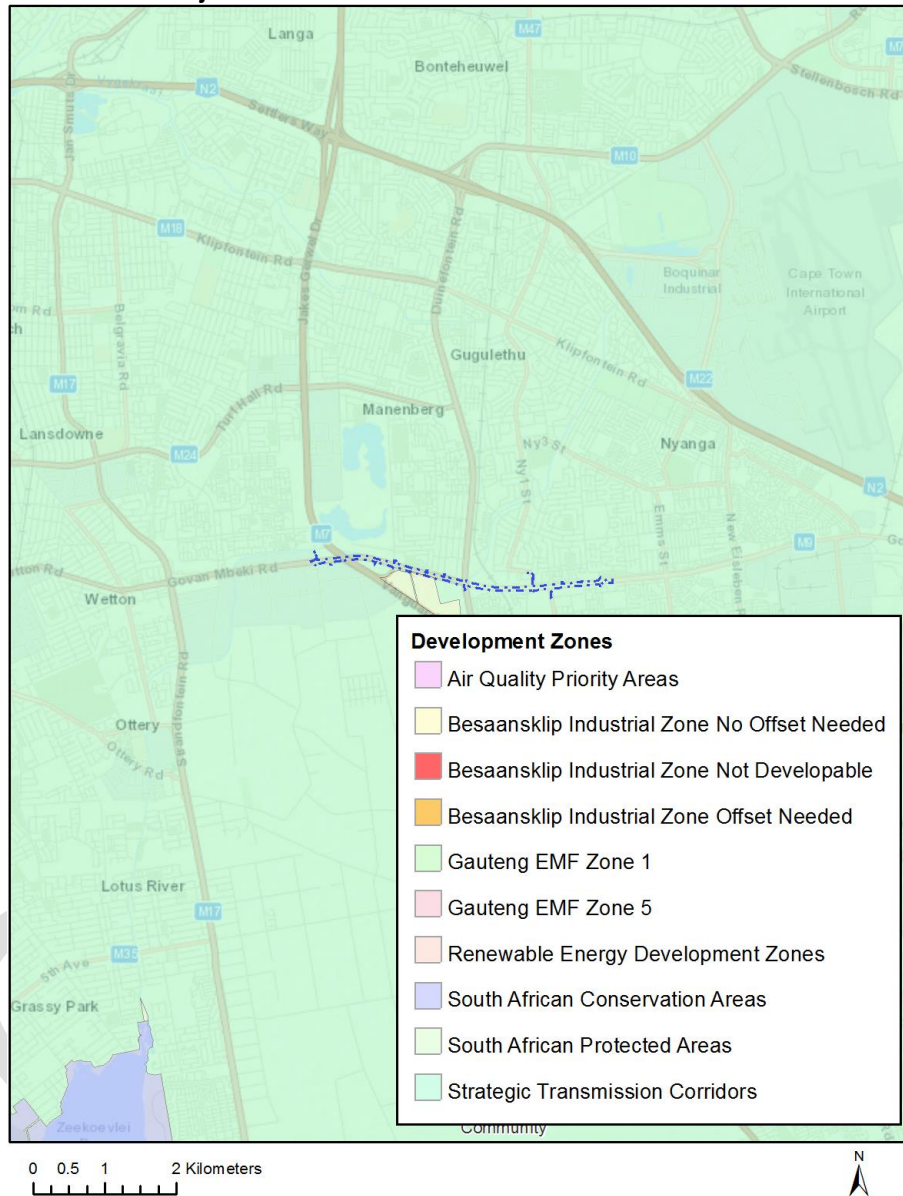
The following development incentives, restrictions, exclusions or prohibitions and their implications that apply to this site are indicated below.

Incentive, restriction or prohibition	Implication
Strategic Transmission Corridor-Central corridor	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GN11316February2018.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/GN11316February2018.pdf</a>
South African Protected	<a href="https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD_OR_2020_Q4_Metadata.pdf">https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/SAPAD_OR_2020_Q4_Metadata.pdf</a>

<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.

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

**Project Location: IRT Phase 2A Trunk Route Section E1**



### 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	High	Medium	Low
-------	-----------	------	--------	-----

	sensitivity	sensitivity	sensitivity	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	Special ist assess ment	Assessment Protocol
1	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>
2	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>
3	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>
4	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>
5	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>
6	Hydrology 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>

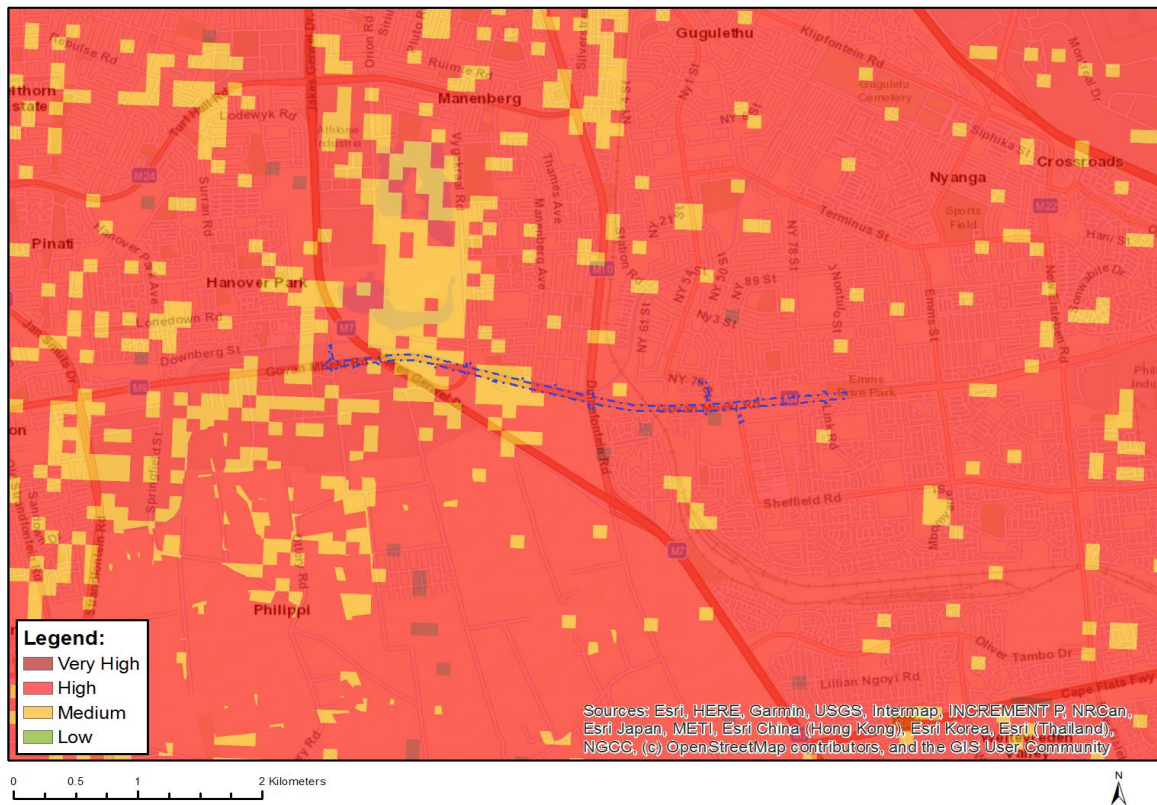


	ent	
7	Socio-Economic Assessment	<a href="https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf">https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf</a>
8	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>
9	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

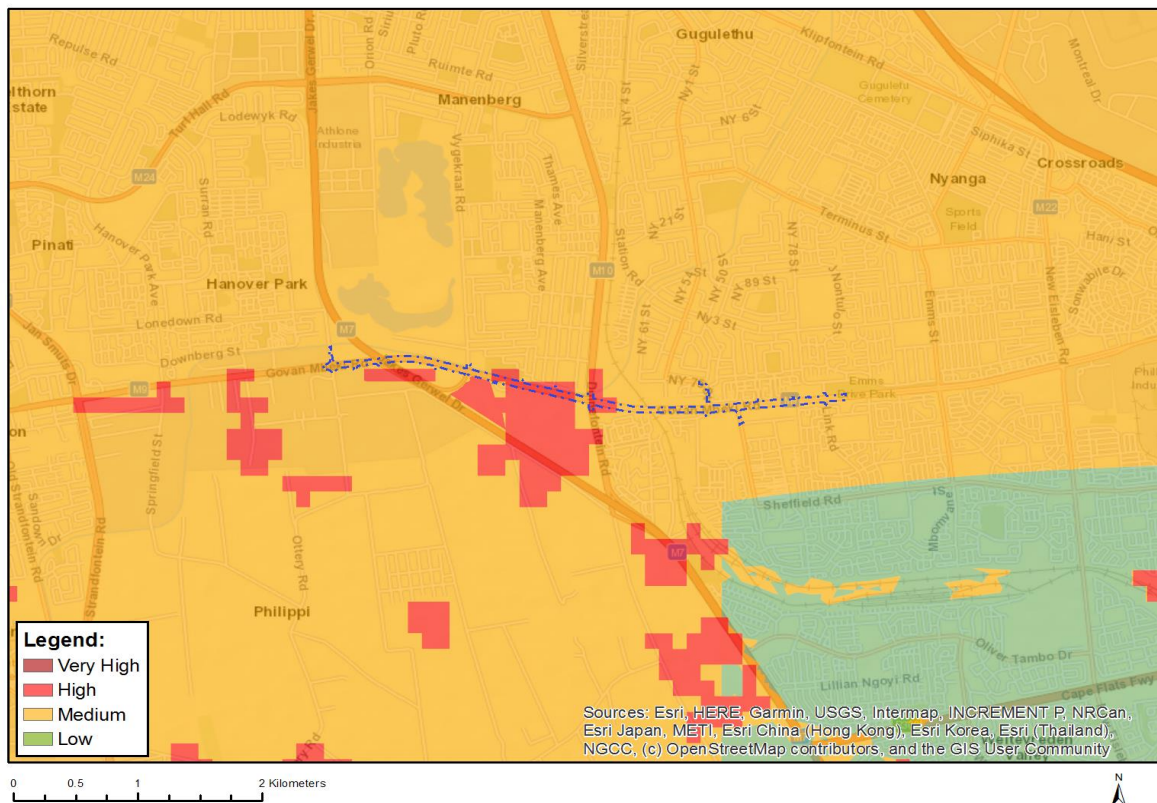


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

#### Sensitivity Features:

Sensitivity	Feature(s)
High	Land capability;09. Moderate-High/10. Moderate-High
Medium	Land capability;06. Low-Moderate/07. Low-Moderate/08. Moderate
Very High	Land capability;11. High/12. High-Very high/13. High-Very high/14. Very high/15. Very high

## MAP OF RELATIVE ANIMAL SPECIES THEME SENSITIVITY



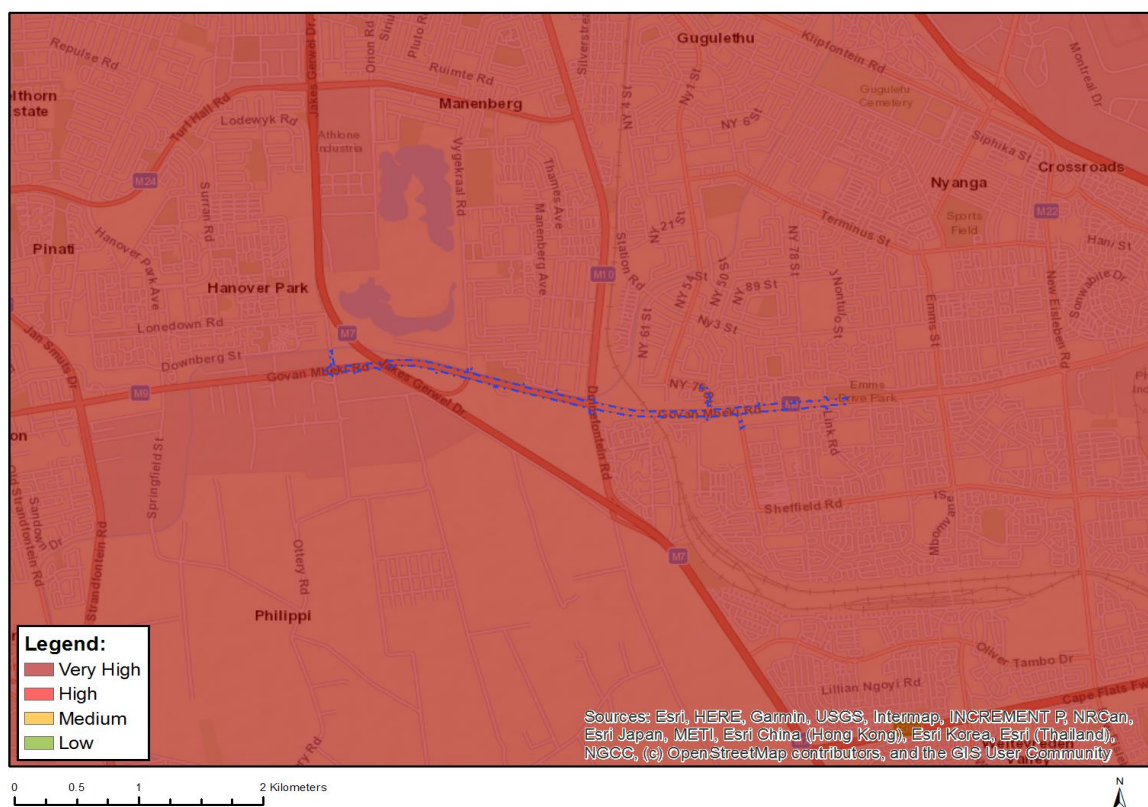
Where only a sensitive plant unique number or sensitive animal unique number is provided in the screening report and an assessment is required, the environmental assessment practitioner (EAP) or specialist is required to email SANBI at [eiadatarequests@sanbi.org.za](mailto:eiadatarequests@sanbi.org.za) 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-Circus ranivorus
High	Aves-Circus maurus
Medium	Insecta-Kedestes lenis lenis
Medium	Invertebrate-Conocephalus peringueyi
Medium	Aves-Circus maurus
Medium	Aves-Circus ranivorus
Medium	Amphibia-Sclerophrys pantherina
Medium	Amphibia-Microbatrachella capensis

## MAP OF RELATIVE AQUATIC BIODIVERSITY THEME SENSITIVITY



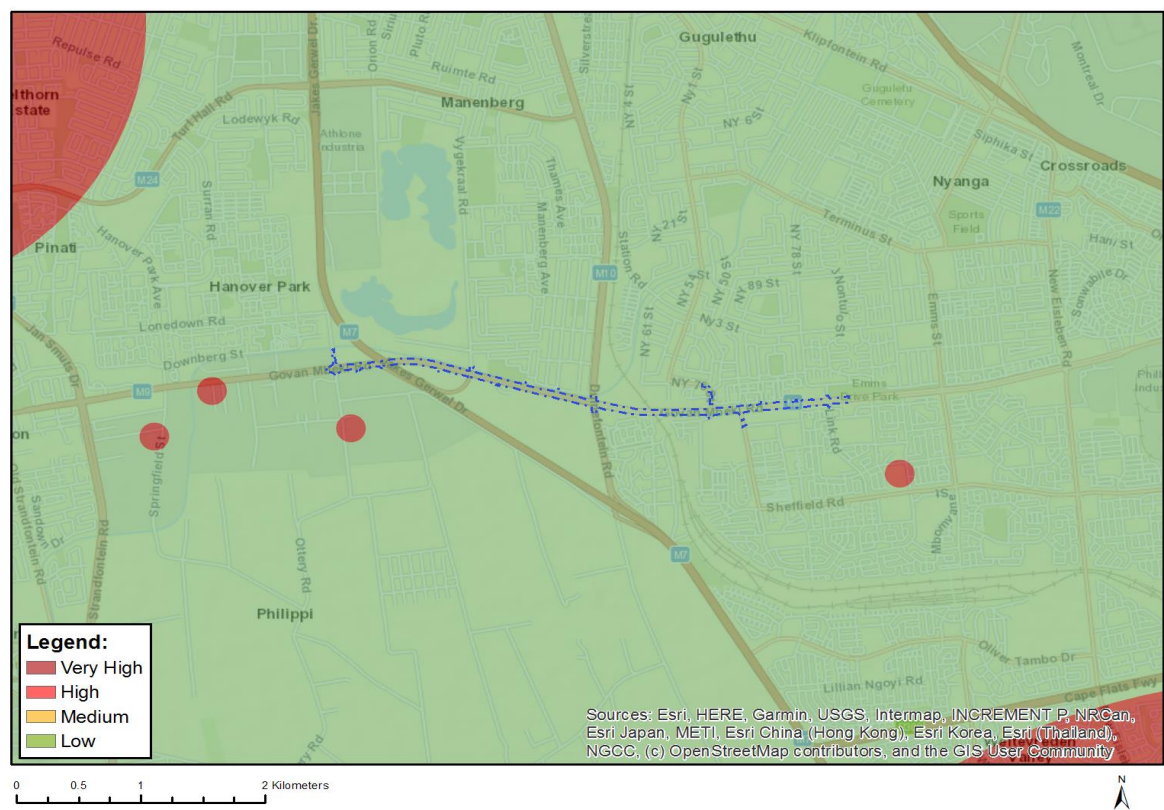
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

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



# MAP OF RELATIVE ARCHAEOLOGICAL AND CULTURAL HERITAGE THEME SENSITIVITY



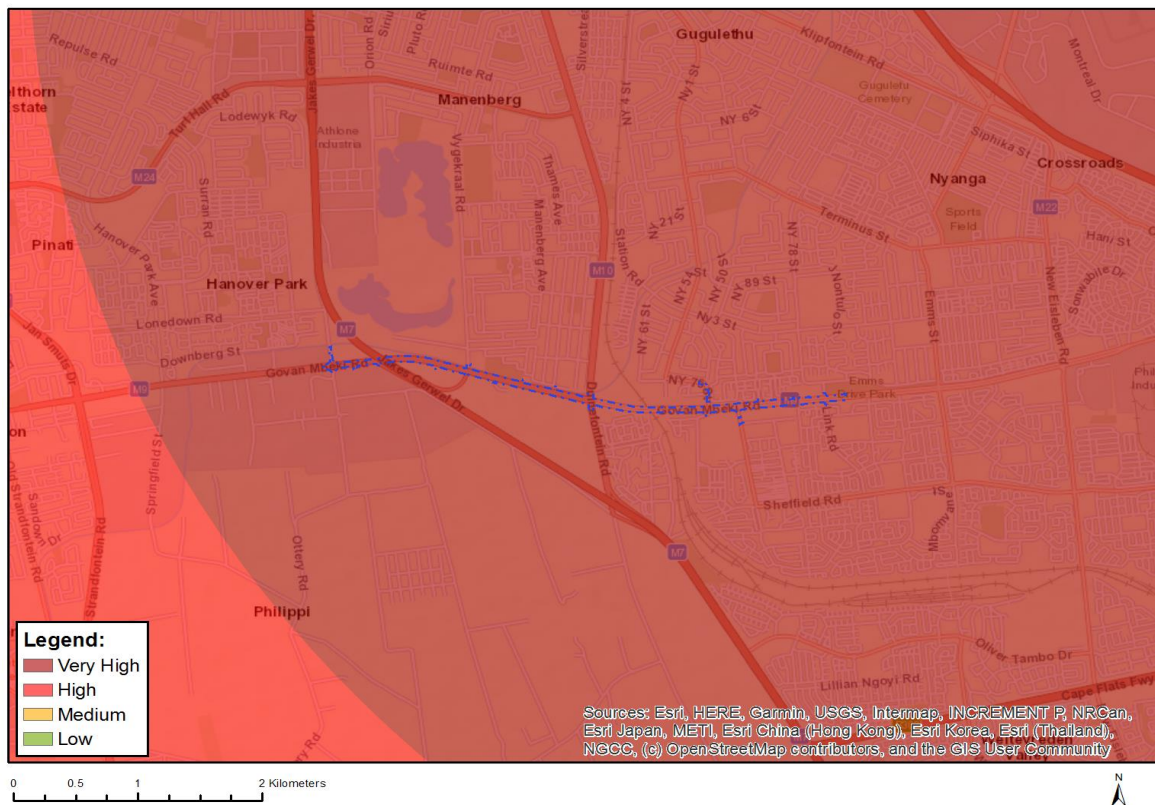
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
			X

## Sensitivity Features:

Sensitivity	Feature(s)
Low	Low sensitivity



## MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

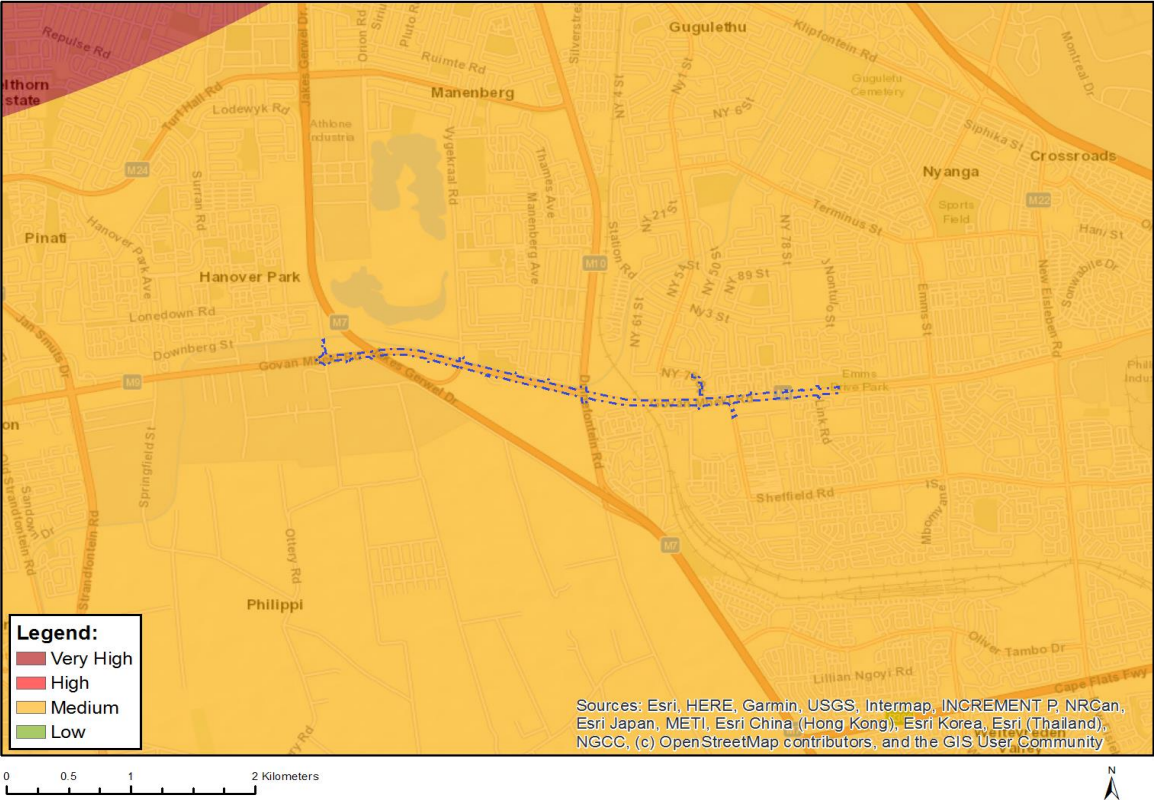


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

### Sensitivity Features:

Sensitivity	Feature(s)
High	Within 15 km of a civil aviation radar
Medium	Within 5 km of an air traffic control or navigation site
Very High	Within 8 km of a major civil aviation aerodrome

MAP OF RELATIVE DEFENCE THEME SENSITIVITY

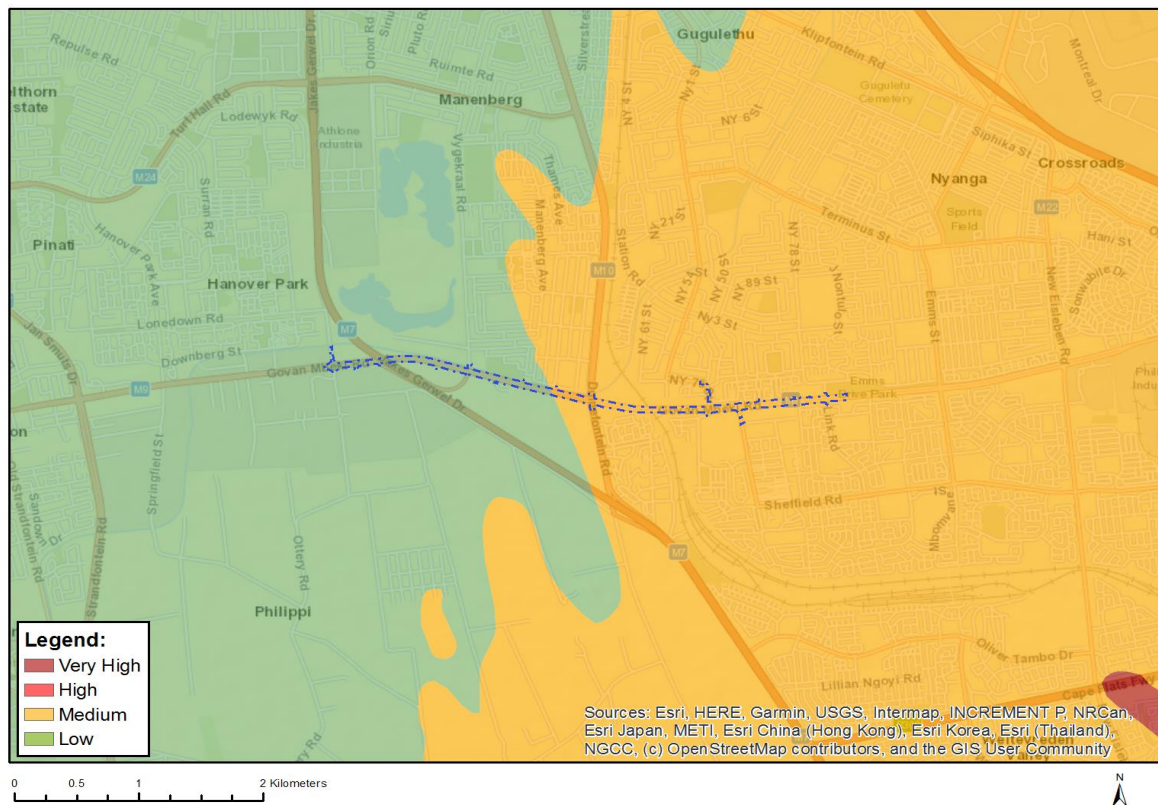


Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features:

Sensitivity	Feature(s)
Medium	Military and Defence Site

## MAP OF RELATIVE PALEONTOLOGY THEME SENSITIVITY



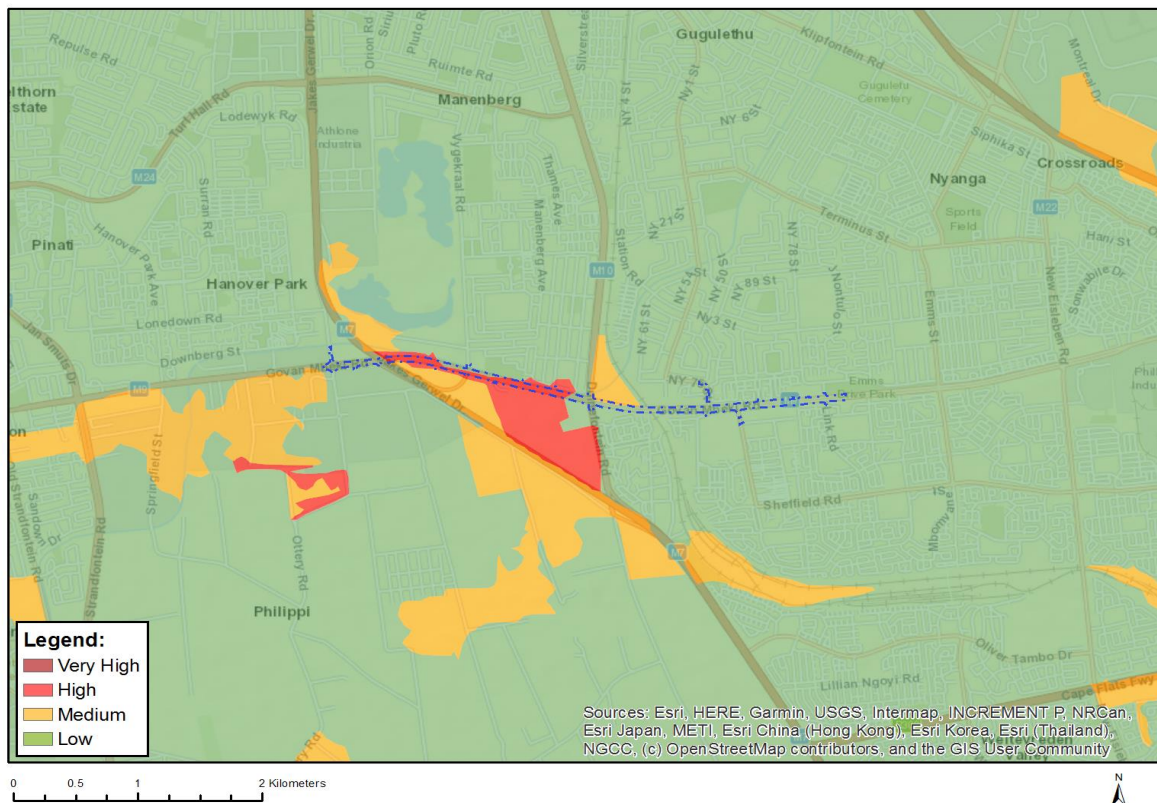
Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

### Sensitivity Features:

Sensitivity	Feature(s)
Low	Features with a Low paleontological sensitivity
Medium	Features with a Medium 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)
High	Isoetes capensis
High	Restio sabulosus
Low	Low Sensitivity
Medium	Lampranthus filicaulis
Medium	Lampranthus leptaleon
Medium	Lampranthus scaber
Medium	Lampranthus spiniformis
Medium	Lampranthus stenopetalus
Medium	Lampranthus stenus
Medium	Lampranthus tenuifolius
Medium	Antimima aristulata
Medium	Erepsia dunensis
Medium	Cleretum clavatum
Medium	Ruschia geminiflora
Medium	Lessertia argentea

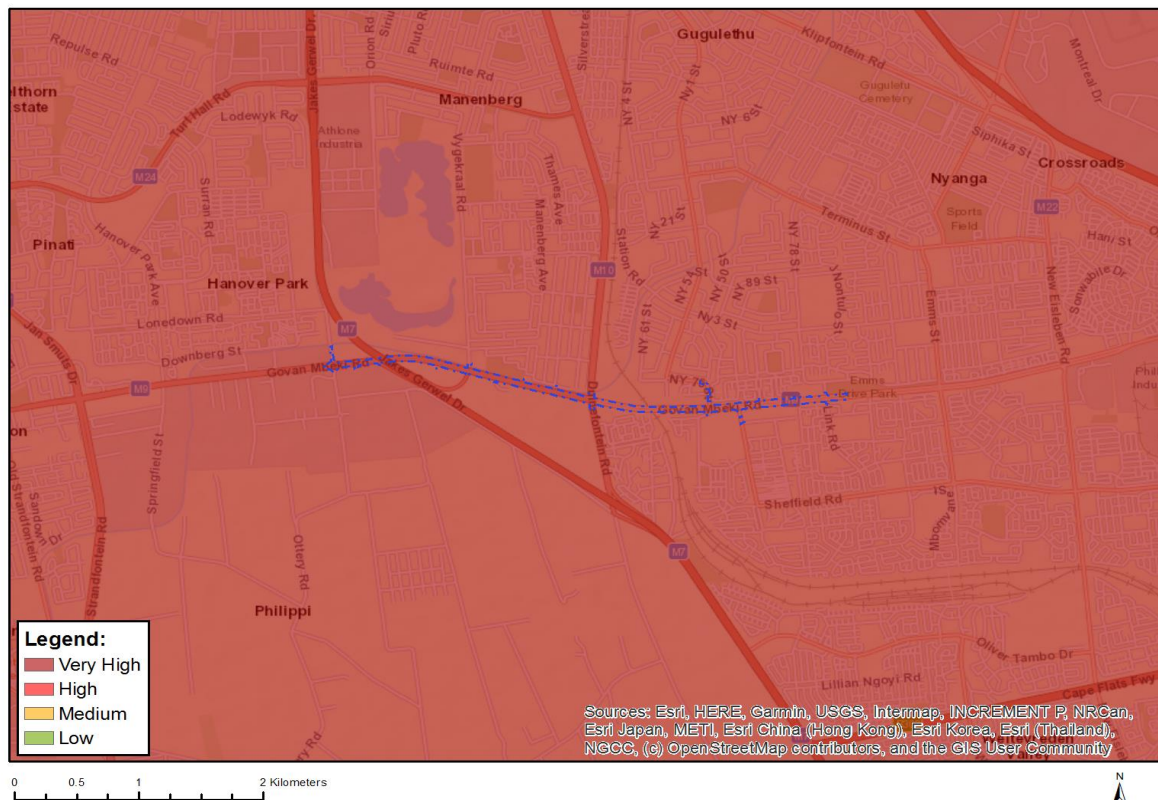
Medium	<i>Psoralea glaucina</i>
Medium	<i>Liparia splendens</i> subsp. <i>splendens</i>
Medium	<i>Indigofera psoraloides</i>
Medium	<i>Aspalathus globulosa</i>
Medium	<i>Aspalathus lotoides</i> subsp. <i>lotoides</i>
Medium	<i>Aspalathus retroflexa</i> subsp. <i>bicolor</i>
Medium	<i>Rafnia angulata</i> subsp. <i>humilis</i>
Medium	<i>Lebeckia plukenetiana</i>
Medium	<i>Podalyria argentea</i>
Medium	<i>Podalyria sericea</i>
Medium	<i>Thesium ecklonianum</i>
Medium	<i>Leucadendron cinereum</i>
Medium	<i>Leucadendron coniferum</i>
Medium	<i>Leucadendron floridum</i>
Medium	<i>Leucadendron lanigerum</i> var. <i>lanigerum</i>
Medium	<i>Leucadendron levisanus</i>
Medium	<i>Leucadendron linifolium</i>
Medium	<i>Leucadendron macowanii</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>canaliculatum</i>
Medium	<i>Leucospermum hypophyllocarpodendron</i> subsp. <i>hypophyllocarpodendron</i>
Medium	<i>Protea burchellii</i>
Medium	<i>Diastella proteoides</i>
Medium	<i>Serruria aemula</i>
Medium	<i>Serruria glomerata</i>
Medium	<i>Serruria trilopha</i>
Medium	<i>Microdon capitatus</i>
Medium	<i>Pentameris bachmannii</i>
Medium	<i>Pentameris pholiuroides</i>
Medium	<i>Ehrharta setacea</i> subsp. <i>uniflora</i>
Medium	<i>Anthospermum ericifolium</i>
Medium	Sensitive species 533
Medium	Sensitive species 878
Medium	<i>Geissorhiza bonaspei</i>
Medium	<i>Geissorhiza brehmii</i>
Medium	<i>Geissorhiza humilis</i>
Medium	<i>Ixia monadelpha</i>
Medium	Sensitive species 881
Medium	Sensitive species 683
Medium	Sensitive species 830
Medium	<i>Pauridia alba</i>
Medium	<i>Pauridia canaliculata</i>
Medium	<i>Pauridia pygmaea</i>
Medium	<i>Pseudalthenia aschersoniana</i>
Medium	<i>Oxalis natans</i>
Medium	<i>Erica capillaris</i> var. <i>capillaris</i>
Medium	<i>Stylapterus fruticosus</i>
Medium	<i>Hermannia procumbens</i> subsp. <i>procumbens</i>
Medium	<i>Sebaea rara</i>
Medium	Sensitive species 493
Medium	<i>Tetragonia caesia</i>
Medium	<i>Adenogramma rigida</i>
Medium	<i>Wachendorfia brachyandra</i>
Medium	<i>Hessea cinnamomea</i>
Medium	Sensitive species 497
Medium	<i>Isoetes capensis</i>
Medium	Sensitive species 133
Medium	<i>Isolepis inconspicua</i>
Medium	<i>Isolepis venustula</i>
Medium	<i>Trianoptiles solitaria</i>
Medium	<i>Ficinia elatior</i>



Medium	<i>Ficinia pinguior</i>
Medium	<i>Elegia prominens</i>
Medium	<i>Restio duthieae</i>
Medium	<i>Restio micans</i>
Medium	<i>Restio sabulosus</i>
Medium	<i>Restio impolitus</i>
Medium	<i>Restio papillosus</i>
Medium	<i>Restio pratensis</i>
Medium	<i>Cynanchum zeyheri</i>
Medium	Sensitive species 985
Medium	Sensitive species 120
Medium	Sensitive species 1139
Medium	<i>Acrolophia bolusii</i>
Medium	<i>Pterygodium cruciferum</i>
Medium	<i>Pterygodium microglossum</i>
Medium	<i>Heliophila promontorii</i>
Medium	<i>Gnidia spicata</i>
Medium	<i>Passerina paludosa</i>
Medium	<i>Lachnaea uniflora</i>
Medium	<i>Poecilolepis maritima</i>
Medium	<i>Steirodiscus tagetes</i>
Medium	<i>Senecio foeniculoides</i>
Medium	<i>Cotula eckloniana</i>
Medium	<i>Arctotis angustifolia</i>
Medium	<i>Arctotheca forbesiana</i>
Medium	<i>Cullumia squarrosa</i>
Medium	<i>Oncosiphon africanum</i>
Medium	<i>Diosma dichotoma</i>
Medium	<i>Agathosma corymbosa</i>
Medium	<i>Agathosma glabrata</i>
Medium	<i>Adenandra villosa</i> subsp. <i>biseriata</i>
Medium	<i>Macrostylis villosa</i> subsp. <i>villosa</i>
Medium	<i>Cliffortia ericifolia</i>
Medium	<i>Cliffortia hirta</i>
Medium	<i>Cliffortia longifolia</i>
Medium	<i>Limonium depauperatum</i>
Medium	<i>Muraltia brevicornu</i>
Medium	<i>Muraltia macropetala</i>
Medium	<i>Muraltia mitior</i>
Medium	Sensitive species 214
Medium	Sensitive species 158
Medium	Sensitive species 1265
Medium	<i>Wurmbea hiemalis</i>
Medium	<i>Wurmbea inusta</i>
Medium	<i>Phylica dioica</i>
Medium	<i>Phylica harveyi</i>
Medium	<i>Phylica plumosa</i> var. <i>squarrosa</i>
Medium	<i>Kewa trachysperma</i>
Medium	<i>Skiatophytum skiatophytoides</i>
Medium	<i>Lampranthus debilis</i>
Medium	<i>Lampranthus glaucus</i>
Medium	<i>Argyrolobium velutinum</i>
Medium	<i>Xiphotheca reflexa</i>
Medium	<i>Psoralea alata</i>
Medium	<i>Aspalathus lebeckioides</i>
Medium	<i>Aspalathus tylodes</i>
Medium	<i>Leucospermum rodolentum</i>
Medium	<i>Protea scolymocephala</i>
Medium	Sensitive species 599
Medium	<i>Elegia verreauxii</i>

Medium	Restio paludosus
Medium	Restio rigoratus
Medium	Sensitive species 53
Medium	Sensitive species 654
Medium	Lachnaea capitata
Medium	Lachnaea grandiflora
Medium	Cotula pusilla
Medium	Sensitive species 1225

## 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 2
Very High	Critically endangered ecosystem
Very High	Endangered ecosystem
Very High	South African Protected Areas

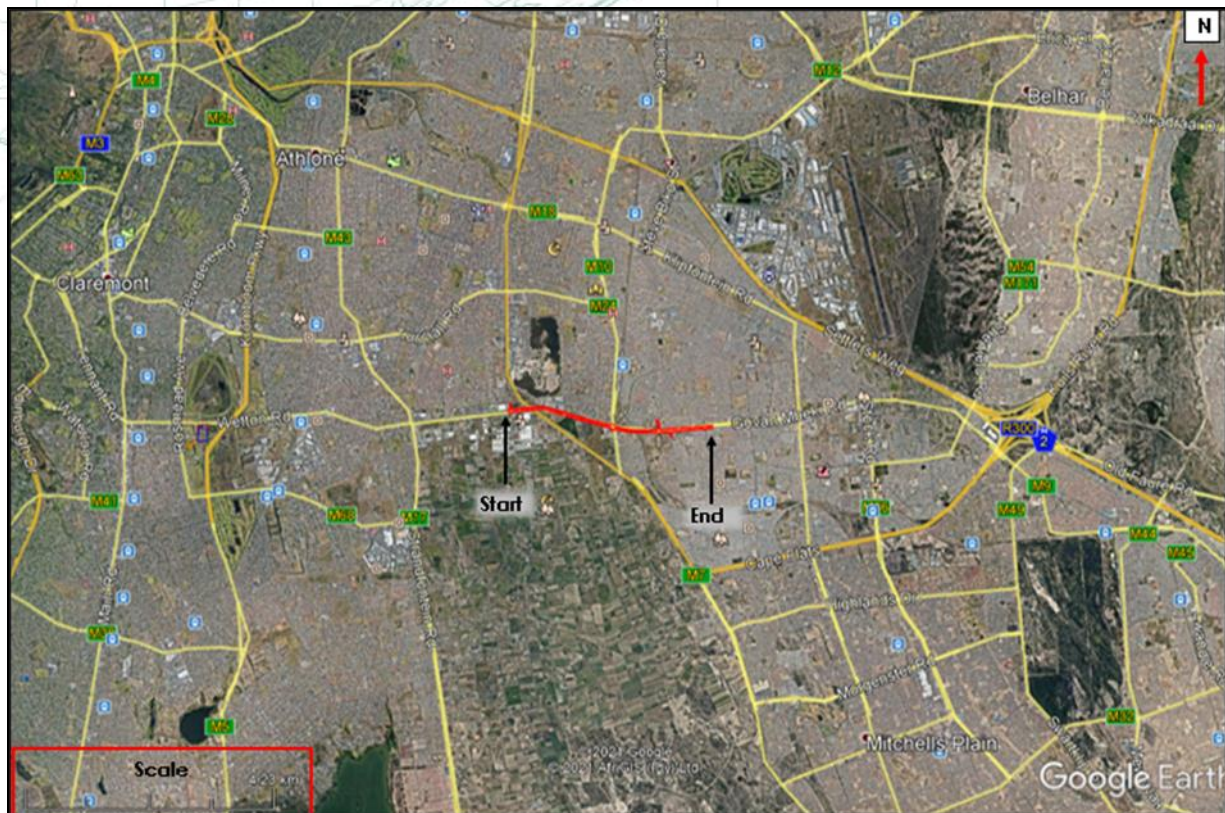
**SITE SENSITIVITY VERIFICATION REPORT**  
**THE PROPOSED IRT PHASE 2A TRUNK ROUTE: PORTION E1, 3.5KM OF GOVAN MBEKI ROAD FROM INTERSECTION WITH HEINZ/OTTERY ROAD TO APPROX 130m EAST OF LINK ROAD, MANENBERG & GUGULETHU**

**INTRODUCTION AND SCOPE:**

The "Protocols for the Assessment and Minimum Criteria for Reporting on identified Environmental Themes ("the Protocols") were promulgated in Government Notice No. 320, published in Government Gazette No. 43110 on 20 March 2020 and came into effect on 9 May 2020. The Protocols are allowed for in terms of Sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA").

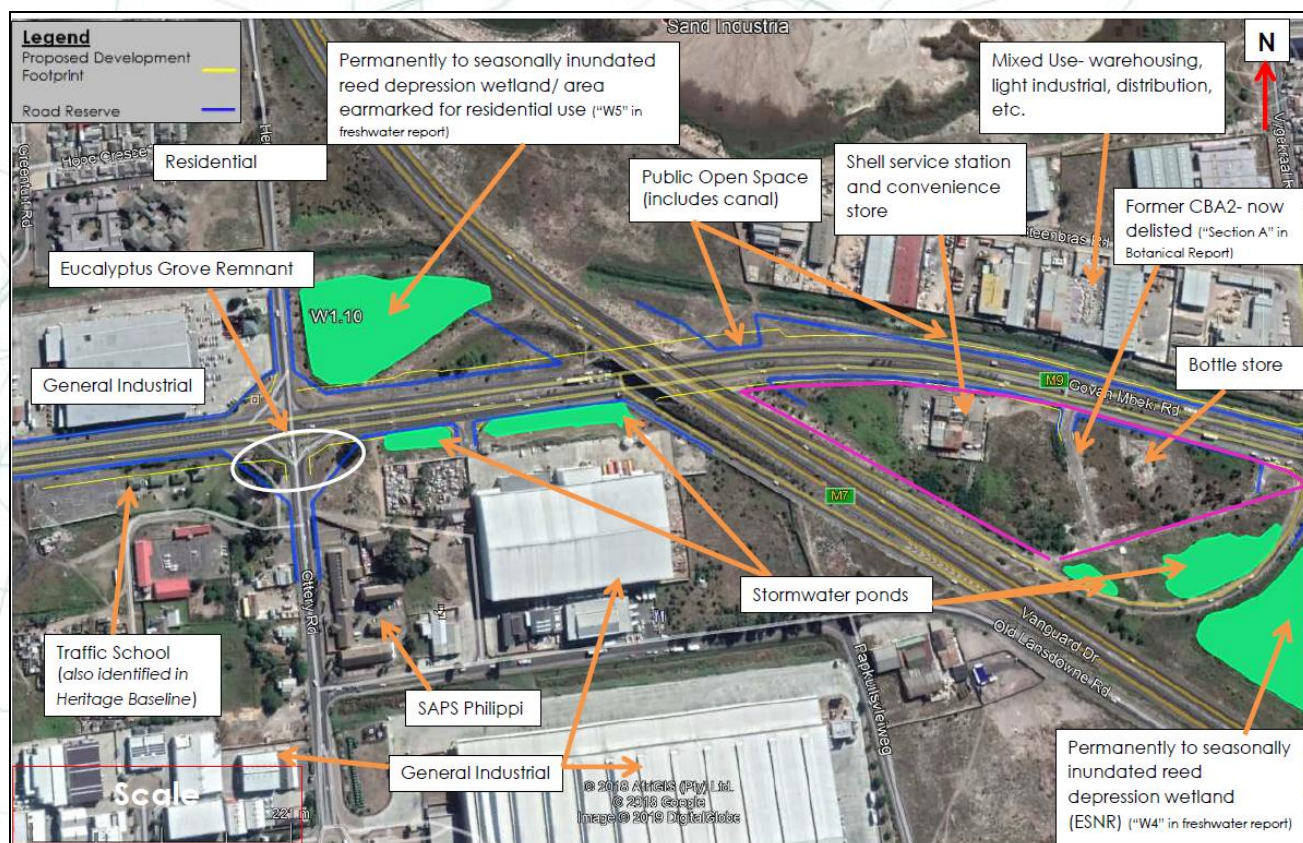
The Protocols must be complied with for every new application for Environmental Authorisation that is submitted after 9 May 2020. According to the Protocols, the EAP must verify the current use of the site in question and its environmental sensitivity as identified by the screening tool to determine the need for specialist inputs in relation to the themes included in the Protocols. This document serves as the Site Sensitivity Verification Report for the proposed IRT Phase 2a Trunk Route Portion E1 which includes 3.5km of Govan Mbeki Road from intersection with Heinz/Ottery Road to approximately 130m east of Link Road in Manenberg & Gugulethu.

The location of the proposed development is shown in the aerial image included as Figure 1 and the surrounding context is indicated Figure 2. This site sensitivity verification relates to two screening tool reports for the above-mentioned development elements that comprise the project and environmental application.



**Figure 1: Locality Map (created using Google Earth Pro and layers provided by GIBB, 17/02/2021, 17/06/2021)**





**Figure 2: Greater Site Context of section of Goven Mbeki road (generated using Google Earth)**

#### **SENSITIVITY VERIFICATION METHODOLOGY:**

The site sensitivity verification statement was compiled by the EAP and is based on:

- Site visits undertaken on February 2019 and February 2020;
- A desktop investigation using biodiversity and land use mapping tools (BGIS, Cape Farm Mapper, City of Cape Town Zoning Viewer, etc.); and
- Information recorded in specialist assessments and reports undertaken by a heritage practitioner, freshwater specialist and botanical specialist.

It should be noted that the Draft protocols were released following submission of the Notification of Intent (NOI) for the application (in January 2018) and also following the compilation of the various specialist reports. This report was thus completed following specialist assessments which has provided further insight into actual sensitivities.

#### **SITE SENSITIVITY VERIFICATION:**

The table below, supporting photographs and maps serve to:

- Verify land use and sensitivities identified in the two screening reports; and
- Confirm / contest the need for the various specialist inputs called for in terms of the screening tool report.

<b>SENSITIVITY AND SPECIALIST INPUT IDENTIFIED IN TERMS OF THE DFFE SCREENING TOOL</b>	<b>VERIFICATION OF SITE-SPECIFIC SENSITIVITY AND MOTIVATION ON THE NEED FOR SPECIALIST INVESTIGATION</b>
<b>Agricultural Theme</b> Very high sensitivity  Necessitating an agricultural impact assessment (in	The STRs note the site as having Very high sensitivity for the agricultural theme, however this is erroneous as the site is within an urban area, and is located on an existing roadway or within a road reserve where there is no farming taking place.

<p>accordance with the protocol prescribed in GNR 320).</p> <p>Actual Sensitivity: <b>None</b></p>	<p>The proposed expansion activities are also located along a planned future MyCiTi Network as per the MSDf. This sensitivity rating is thus disputed, and no agricultural assessment is deemed necessary.</p>
<p><b>Animal Species Theme</b> High sensitivity</p> <p>Necessitating an animal species assessment (in accordance with Animal Species Assessment Protocols prescribed in GN 43855)</p> <p>Actual Sensitivity: <b>Very Low</b></p>	<p>The STRs indicate the road as having high sensitivity for the animal species theme, however given that the site is predominantly an existing, currently used road, with highly transformed and degraded areas/ habitat adjacent to it (Altern, 2021 and Belcher et al, 2021), this ranking is disputed as being low. It may be that the ESNR is what has resulted in a high sensitivity rating, and the preferred alternative for the proposed development would not be located in that area. However, the ESNR is fenced off and it is therefore unlikely for the ground-moving fauna to enter the site area.</p> <p>A list of potential species which could be found along the route is included in the Freshwater Impact Assessment conducted by Belcher et al, (2021). An additional frog species noted by City of Cape Town Biodiversity branch has also been noted in the report.</p> <p>Indirect impacts on fauna have been noted in the impact assessment within the Freshwater report and measures are included in the EMPr for management of trenching and fauna, as well as general measures for how to approach and handle any fauna found on site.</p> <p>It must also be noted that the need for a faunal assessment was one of the points discussed at a meeting with the City of Cape Town Biodiversity branch, with the City agreeing that no faunal assessment is necessary.</p>
<p><b>Aquatic Biodiversity Theme</b> Very High sensitivity</p> <p>Necessitating an aquatic biodiversity impact assessment (in accordance with the protocol prescribed in GNR 320, Aquatic Biodiversity Assessment Protocols).</p> <p>Actual Sensitivity: <b>Very High, with areas of Low sensitivity confirmed along route</b></p>	<p>Given this rating and the presence of watercourses along the roadway, a freshwater impact assessment has been undertaken by Belcher et al, (2021). While some areas of sensitivity have been confirmed adjacent to the proposed expansion (particularly the Edith Stephens Nature Reserve), the development footprint for the preferred alternative would be located in highly transformed and degraded wetland areas (Belcher et al, 2021).</p>
<p><b>Archaeological and Cultural Heritage Theme</b> Low sensitivity</p> <p>Necessitating archaeological &amp; cultural impact assessments (General Assessment Protocols)</p> <p>Actual Sensitivity: <b>Low</b></p>	<p>The STRs indicate low sensitivity in this regard, a finding which is supported by the NID and the HWC response thereto.</p> <p>A Heritage Practitioner conducted a screening assessment on the site and proposed development and completed a Notification of Intent to Develop (NID) in terms of Section 38(1) &amp; (8) of the National Heritage Resources Act (NHRA). Among other aspects, the NID contemplates archaeological resources and areas of cultural significance and the NID concluded that there are no heritage resources on the site. HWC also confirmed their agreement in this regard.</p>
<p><b>Civil Aviation Theme</b> Very High sensitivity</p>	<p>The STRs note that the site is located Within 8 km of a major civil aviation aerodrome. This is presumably as a result of the Cape</p>



<p>The need for a civil aviation assessment (in accordance with the protocol prescribed in GNR 320)</p> <p>Actual Sensitivity: <b>Low</b></p>	<p>Town International Airport being located nearby (approx 7.5 km away) and with the route being located within the noise cones for the airport.</p> <p>The proposed road expansion would, however, not affect the airport given that the structures proposed are no high (i.e., a road and station foundations) and do not comprise any telecommunications structures that may have potential to interfere with the airport. There are also no runway facilities or any other activity that could affect the airport or its operations.</p> <p>Furthermore, the proposal would be a continuation of an existing use that has been around for a significant period of time (i.e., a roadway, Govan Mbeki Road would be widened). This rating is therefore disputed to, in fact, be low.</p> <p>As such, no specialist investigations are deemed necessary.</p>
<p><b>Defence Theme</b> Medium sensitivity</p> <p>Actual Sensitivity: <b>Low</b></p>	<p>Defence is rated as medium sensitivity in the STRs.</p> <p>The screening reports identify the site area as a 'defence site', but no further details are provided in this respect. The medium sensitivity for this theme is presumably due to the site falling within a 5.5 km of the Youngsfield Military Base. None of the components comprising the development proposal would compromise the ability of the defence force to defend the area against any unrest / threats on security or provide training and support to military personnel or affect the day-to-day operations of the base.</p> <p>The proposed development would not interfere with any communications to and from the facility (the proposal does not include telecommunications infrastructure beyond typical internet and phone connections) and would not interfere with any access points (as it is located sufficiently far from it).</p> <p>As such, this rating is disputed to, in fact, be low. As a result, no specialist investigations have been deemed necessary.</p>
<p><b>Paleontology Theme</b> Medium sensitivity</p> <p>Necessitating a palaeontological assessment (General Assessment Protocols)</p> <p>Actual Sensitivity: <b>Low</b></p>	<p>The STRs indicate medium sensitivity in this regard, a finding which is disputed to be of low sensitivity by the NID and the HWC response thereto.</p> <p>A Heritage Practitioner conducted a screening assessment on the site and proposed development and completed a Notification of Intent to Develop (NID) in terms of Section 38(1) &amp; (8) of the National Heritage Resources Act (NHRA). Among other aspects, the NID contemplates palaeontological resources, and this was not marked as a potential sensitivity on the site. In response to the NID, HWC confirmation is implicit in that no further assessment of palaeontological resources would be required.</p> <p>Therefore, this potential issue has been scoped out and the rating is disputed to, in fact, be low.</p> <p>The NID and HWC response thereto has been included in Final Basic Assessment Report.</p>
<p><b>Plant Species Theme</b> High sensitivity</p> <p>Necessitating a plant species assessment (General Assessment Protocols).</p>	<p>The STRs indicate high sensitivity in this regard, but following a Botanical Impact Assessment, this is disputed to be low for the preferred alternative development footprint. In a report conducted by Altern (2021) it is confirmed that the vegetation within development footprints for both Alternative 2 and 3 is highly degraded and transformed and of low sensitivity. The component</p>

Actual Sensitivity: <b>Low</b>	<p>that would be high would be the area within the ESNR, but the proposed development footprint for the preferred alternative would not encroach into that area.</p> <p>The botanical impact assessment report does indicate the various plant species (indigenous and exotic) located within the proposed development footprint, which also includes the pavement trees.</p> <p>The Botanical Impact Assessment has been included in the Final Draft Basic Assessment Report.</p>
<p><b>Terrestrial Biodiversity Theme</b> Very High sensitivity</p> <p>Necessitating a terrestrial biodiversity impact assessment and a plant species assessment (Terrestrial Biodiversity Assessment Protocols)</p> <p>Actual Sensitivity: <b>Low</b></p>	<p>Strangely, one STR indicates high sensitivity and the other indicates very high sensitivity in this regard.</p> <p>A botanical impact assessment has been undertaken and while some areas of sensitivity have been confirmed adjacent to the proposed expansion, the development footprint for the preferred alternative would be located in highly degraded, low sensitivity areas of vegetation (Altern, 2021).</p> <p>As such, this rating is disputed to, in fact, be low. The Botanical Impact Assessment has been included in the Final Basic Assessment Report.</p>
<b>Additional specialist studies called for by the Screening Report</b>	
<p><b>Landscape/Visual Impact Assessment</b> (General Assessment Protocols)</p>	<p>A Heritage Practitioner conducted a screening assessment on the site and proposed development and completed a Notification of Intent to Develop (NID) in terms of Section 38(1) &amp; (8) of the National Heritage Resources Act (NHRA). Among other aspects, the NID contemplates landscapes and natural features of cultural significance and the NID concluded that there are no heritage resources on the site. HWC also confirmed their agreement in this regard.</p> <p>Note that a Landscape Plan has been compiled ensuring to address the aesthetic component of the proposed development. However, a full Visual Impact Assessment will not be conducted as the site has already been found to house no heritage/cultural sensitivity by HWC.</p>
<p><b>Noise Impact Assessment</b> (Noise Impacts Assessment Protocols as prescribed by GN 43855)</p>	<p>The proposed development (widening of the existing road) is not likely to have significant noise increases in terms of traffic/ vehicular use, given that the current stretch of Govan Mbeki Road is a major road which already experiences significant vehicular traffic. The additional lanes and facilities themselves would also not emit any noise, and the construction phase noise would be short term and controlled through measures included in the EMPr.</p> <p>As a result, no further assessment is considered necessary in this regard.</p>
<p><b>Traffic Impact Assessment</b> (General Assessment Protocols)</p>	<p>The proposed draft plans (noting that these would be subject to detail design) have been compiled by transport engineers who are specialists in their subject matter. The designs comply with the various policies and guidelines relevant to transport and road design. The proposed activities are also already aligned with the City of Cape Town objectives for transport infrastructure as it is located on a MyCiTi Future Network in terms of the MSDF.</p> <p>Part of the purpose of the proposal is to improve traffic conditions thus a positive traffic impact is implicit. As such specialist input in the form of a Traffic Impact Assessment is not deemed necessary.</p>
<p><b>Geotechnical Assessment</b> (General Assessment Protocols)</p>	<p>Geotechnical investigations (test pits, drilling, core logging and testing of cores) for the road as well as for the new proposed</p>

Protocols)	<p>overpass and retaining walls have been undertaken. The results of these investigations will inform the detail design of the road.</p> <p>The finalisation of the Geotechnical Assessment report was still underway at the time of writing this SSV report. Given the existence of the current road, there is presently sufficient information available to provide the plans with high confidence and no further assessment is required as part of this process at this stage.</p>
<b>Hydrology Assessment</b> (General Assessment Protocols)	<p>The hydrology on site has been contemplated and addressed from a variety of angles through baseline desktop research conducted by the EAP, freshwater impact assessment, as well as to hydrological modelling of the impact of the proposed development in the stormwater management plan.</p> <p>The Stormwater management plan has been included in the Final Basic Assessment Report.</p>
<b>Socio-Economic Assessment</b> (General Assessment Protocols)	<p>The socio-economic aspects of the site and proposal have been considered and addressed in the Basic Assessment Report through inclusion of the following:</p> <ul style="list-style-type: none"> <li>• Socio-economic profile of the communities adjacent to the affected stretch of Govan Mbeki Road; and</li> <li>• Detailing the financial contribution of the project to the economy as well as to previously disadvantaged individuals.</li> </ul>
<b>Ambient Air Quality Impact Assessment</b>	<p>There are no triggers associated with the NEM: AQA and hence the need for this assessment is disputed. Furthermore, the proposed development would see widening of an existing roadway which is in use, which is earmarked for future use as a MyCiTi Network in terms of the MSDF.</p>

#### References:

S, Altern. 5 May 2021. Botanical Assessment of 59C/2014/15- IRT Phase 2A Trunk & Feeder Infrastructure: East- Vibra St – Sonwabile Dr. NCC Environmental Services, Westlake

T. Belcher, G, Grobler. S, Barrow, July 2021. Freshwater Impact Assessment Report for the Proposed Integrated Rapid Transit System on the Cape Flats: Phase 2A East- Lansdowne-Wetton Corridor for the Section of Govan Mbeki Road Between Heinz and Monwood. BlueScience, Somerset West