

**PROPOSED CONSTRUCTION OF A TRAFFIC CIRCLE ON
BADEN POWELL DRIVE, PORTION OF ERF 547,
MACASSAR, CITY OF CAPE TOWN, WESTERN CAPE
PROVINCE**

SITE SENSITIVITY VERIFICATION REPORT

PREPARED FOR



**CITY OF CAPE TOWN
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PREPARED BY

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1 INTRODUCTION

The Department of Environmental Affairs promulgated regulations for the compulsory submission of a report based on the national web-based environmental Screening Tool when undertaking and submitting applications for environmental authorisation (GN 960 of 2019). On 20 March 2020, Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Section 24 (5) (a) and (h) and 44 of the National Environmental Management Act, 1998 (GN 320 of 2020) were published. These procedures prescribe the requirements for undertaking site sensitivity verification reports as well as describe the requirements for specialist input per environmental 'theme' in the Screening Tool.

According to the above-mentioned notice, the site sensitivity verification report must be recorded in the form of a report that:

- a) Confirms or disputes the current use of the land and the environmental sensitivity as identified by the screening tool, such as a new development or infrastructure, the change in vegetation cover or status, etc.
- b) Contain a motivation and evidence (e.g. photographs) of either the verified or different use of the land and environmental sensitivity.
- c) Is submitted together with the relevant assessment report prepared in accordance with the requirements of the Environmental Impact Assessment Regulations (EIA Regulations)

This report will provide a verification for which themes will be further investigated and provide a motivation for those not requiring further investigation.

2 PROPOSED DEVELOPMENT

The project involves the construction of a new roundabout at the four-way intersection of Baden Powell Drive, Macassar Road and Japhta K Masemola Road in east Khaylitsha, Cape Town. The work is being undertaken on behalf of the City of Cape Town (CCT, or '*The Proponet*') in support of the Macassar Housing Development (Figure 1).

The traffic circle diameter is in the order of 44 to 45 m, with a truck apron to accommodate articulated vehicles and Non-Motorised Transport (NMT) crossings on the four approaches. Works are largely confined to the road reserve, with minor widening into adjoining land that includes indigenous vegetation and depressed wetland areas.

Five property cadastres are affected:

1. Remainder of Erf 18332, Khayelitsha (RE/18332) (south-west quadrant);
2. Remainder of Farm Vergenoegd 547 (RE/547) (north-east quadrant);

3 SCREENING TOOL OUTCOMES

The Screening Tool Report generated under Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended, for the proposed development, lists the following environmental sensitivities and/or constraints:

- Agricultural Theme – High Sensitivity
- Animal Species Theme – High Sensitivity
- Aquatic Biodiversity Theme – Very High Sensitivity
- Archaeological and Cultural Heritage Theme – Very High Sensitivity
- Civil Aviation Theme Sensitivity - High Sensitivity
- Defence Theme – Very High Sensitivity
- Paleontology Theme – Medium Sensitivity
- Plant Species Theme – High Sensitivity Sensitivity
- Terrestrial Biodiversity Theme – Very High Sensitivity

The following sections will address the sensitivity of each theme separately.

4 SPECIALIST STUDIES COMMISSIONED

Two specialist studies were commissioned for the project: a Freshwater and Wetland Specialist Study, and a Botanical Assessment:

1. Freshwater and Wetland Specialist Study (Aquatic Ecological Study, 2026)

EnviroSwift, 2026. *Detailed Freshwater Ecological Assessment: Proposed development of a Roundabout at the intersection of Baden Powell Drive and Macassar Road, Khayelitsha, City of Cape Town, Western Cape*. Prepared by Steytler, N. of EnviroSwift for The Environmental Partnership (Pty) Ltd. 31 March 2026. SACNASP Reg. No. 400029/02.

2. Botanical Compliance Statement (2026)

Capensis, 2026. *Botanical Statement for a Proposed Traffic Circle at the Intersection of Baden Powell Drive (R310) and Macassar Road (M9) within the City of Cape Town Municipality*. Prepared by Nicolson, G. of Capensis Ecological Consulting for The Environmental Partnership (Pty) Ltd. This Study is supported by Full Botanical Assessment undertaken on the adjacent Farm RE/547 (Nicolson, 2022), which included fieldwork in 2014, 2017 and 2021 (Capensis, 2022).

The Freshwater Study was triggered by the Very High Aquatic Biodiversity rating. The Screening Tool picks up mapped Wetland Depressions within the site and the attenuation ponds of the Zandvliet Wastewater Treatment Works sit immediately south-east of the intersection. The study was undertaken in line with the Aquatic Biodiversity Assessment Protocol and covers wetland delineation, Present Ecological State, EIS and a Department of

Water and Sanitation (DWS) Section 21(c) and (i) risk assessment. The Botanical Assessment was triggered by the High Plant Species rating and the Very High Terrestrial Biodiversity rating. The site is mapped as Cape Flats Dune Strandveld, which is listed as Endangered under NEM:BA (the False Bay variant is Critically Endangered), and falls within CBA 1a of the Western Cape Biodiversity Spatial Plan and the NPAES focus area. The assessment covers both the Plant Species Protocol and the Terrestrial Biodiversity Protocol.

The Botanical Assessment also covers the habitat component of the Animal Species theme. The fauna species flagged by the Screening Tool (two harriers, the Southern Black Korhaan, and two sensitive invertebrates) are all wetland-dependent or tied to intact Strandveld. Both habitats are already under specialist review through the Freshwater and Botanical work, and no further purpose would be served by a separate fauna assessment on a narrow road-reserve footprint that is already disturbed.

For the remaining themes (Agriculture, Archaeology and Cultural Heritage, Civil Aviation, Defence and Palaeontology) the nature and scale of the roundabout does not support the need for a separate specialist study. The reasons are given in the theme-by-theme sections that follow, and management measures for these themes are carried through into the Environmental Management Programme.

5 THEME-SPECIFIC VERIFICATIONS

5.1 Agricultural Theme Sensitivity

The screening tool report identifies a high agricultural sensitivity for the proposed Baden Powell, Macassar Roundabout (Figure 1). This rating is linked to the zoning of the property being affected, which is zoned for Agriculture. However, the footprint sits within the existing road reserve and does not include cultivated land. No agricultural potential will be lost through the project. No specialist agricultural study is required.



Figure 1. Agricultural theme sensitivity of Baden Powell, Macassar Roundabout .. Extracted from the Screening Tool Report

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

5.2 Animal Species Theme Sensitivity

The Screening Tool Report assigns a High Animal Species sensitivity to the site due to the possible occurrence of Aves-Circus rainivorus, Aves-circus maurus, Aves-Afrotis afra, Invertebrate- Frankenbergeriuso pacus, Invertebrate-Pachysoma Aesculapius (Figure 2). The direct footprint is transformed road reserve and is of low habitat value for these species. The wetland habitat linked to the two harriers is covered by the Freshwater Specialist Study, and the Strandveld habitat linked to the korhaan and the invertebrates is covered by the Botanical Assessment. No standalone animal species specialist study is therefore required.

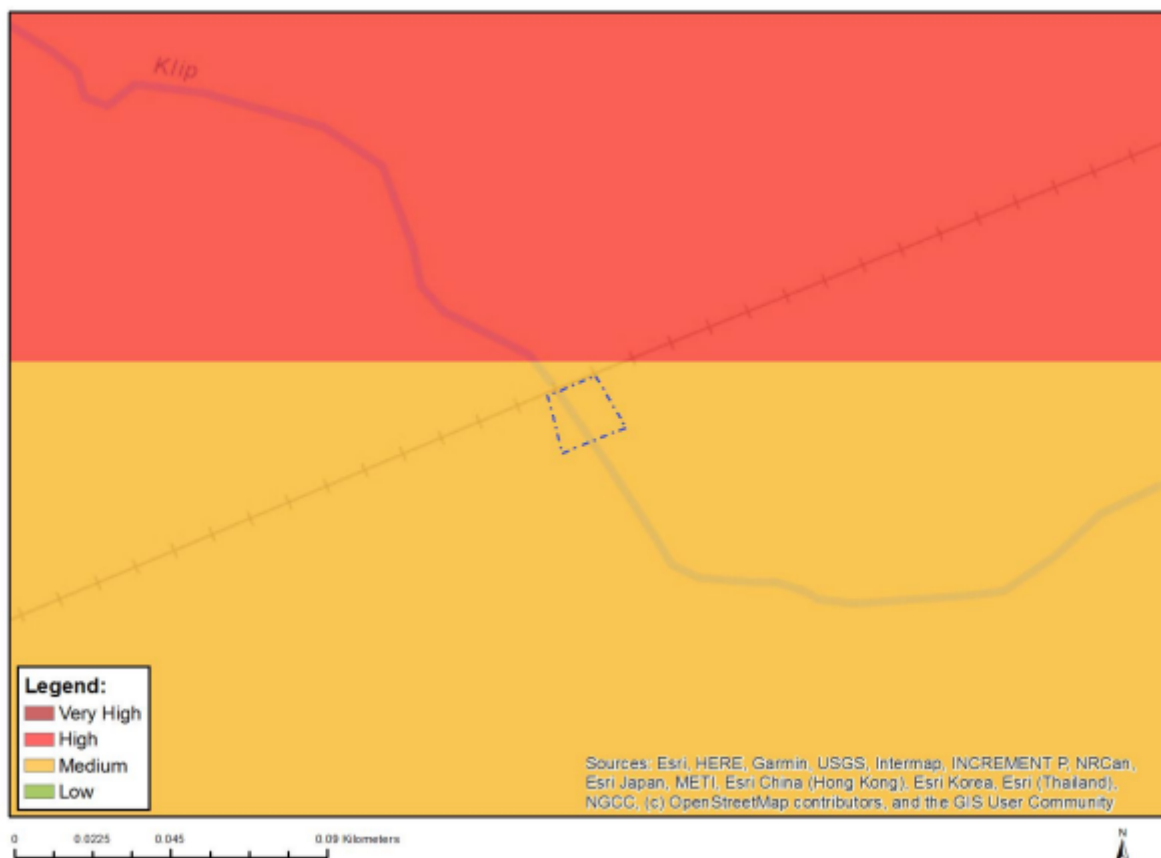


Figure 2: Map indicating the animal species sensitivity of the of Baden Powell, Macassar Roundabout as extracted from the Screening Tool Report.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

5.2.1.1 Sensitivity Features:

Sensitivity	Feature(s)
High	Aves-Circus ranivorus
Medium	Aves-Circus maurus
Medium	Aves-Afrotis afra
Medium	Invertebrate-Frankenbergerius opacus
Medium	Invertebrate-Pachysoma aesculapius

5.3 Aquatic Biodiversity Theme Sensitivity

The Screening Tool Report identifies the aquatic biodiversity sensitivity as very high due to Wetlands Depressions (Figure 3). A Freshwater and Wetland Specialist Study has been undertaken for this reason. The Terms of Reference for the study were to delineate and classify watercourses and wetlands within 500 m of the site, to determine the Present Ecological State, Ecological Importance and Sensitivity and Recommended Ecological Category, to run the DWS Section 21(c) and (i) Risk Matrix, and to recommend mitigation and monitoring for inclusion in the Environmental Management Programme (EMP).

The findings of the Freshwater Study feed into the Basic Assessment Report, the General Authorisation process under GN 4167 and GN 509, and the EMP.



Figure 3: Map indicating the aquatic biodiversity sensitivity of the of Baden Powell, Macassar Roundabout extracted from the Screening Tool Report

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

5.3.1.1 Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Very High	Wetlands_Depression

5.4 Archaeological and Cultural Heritage Theme

The screening tool report indicates a very high sensitivity (Figure 4). The site is rated Very High for heritage because it lies within 5 km of a Grade I heritage site. The roundabout will not directly affect these resources. Work is limited to the disturbed road reserve and no new excavation beyond the existing road formation is planned near the identified heritage sites. Any chance finds encountered during construction will be managed through a Chance Finds Protocol included in the EMP. A standalone heritage specialist study is not required.

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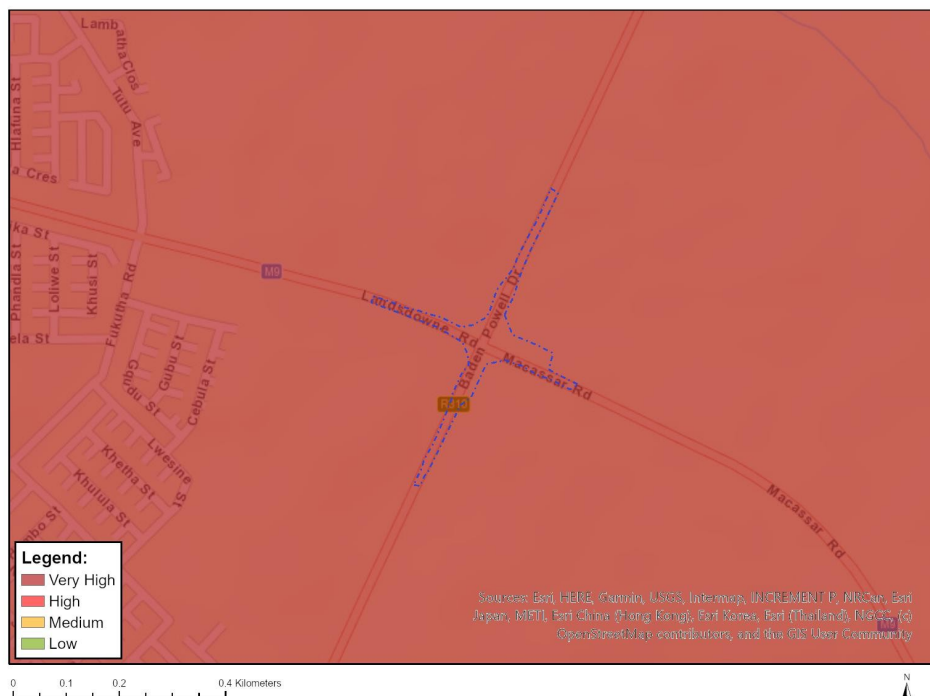


Figure 4: Map indicating the archaeological and Cultural Heritage sensitivity of the proposed Baden Powell, Macassar Roundabout from the Screening Tool Report

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

5.4.1.1 Sensitivity Features:

Sensitivity	Feature(s)
Very High	Within 5km of a Grade I Heritage site

5.5 Civil Aviation Theme Sensitivity

The Screening Tool Report assigns a High sensitivity to Civil Aviation. There is no airfield in close proximity to the site (≥ 15 km away), so no impact is envisaged. The nearest aerodrome is more than 15 km from the site and the roundabout includes no structure taller than 45 m. The South African Civil Aviation Technical Standards only require consent of the Director for structures above that height within 15 km of an aerodrome. No further assessment is required.

MAP OF RELATIVE CIVIL AVIATION THEME SENSITIVITY

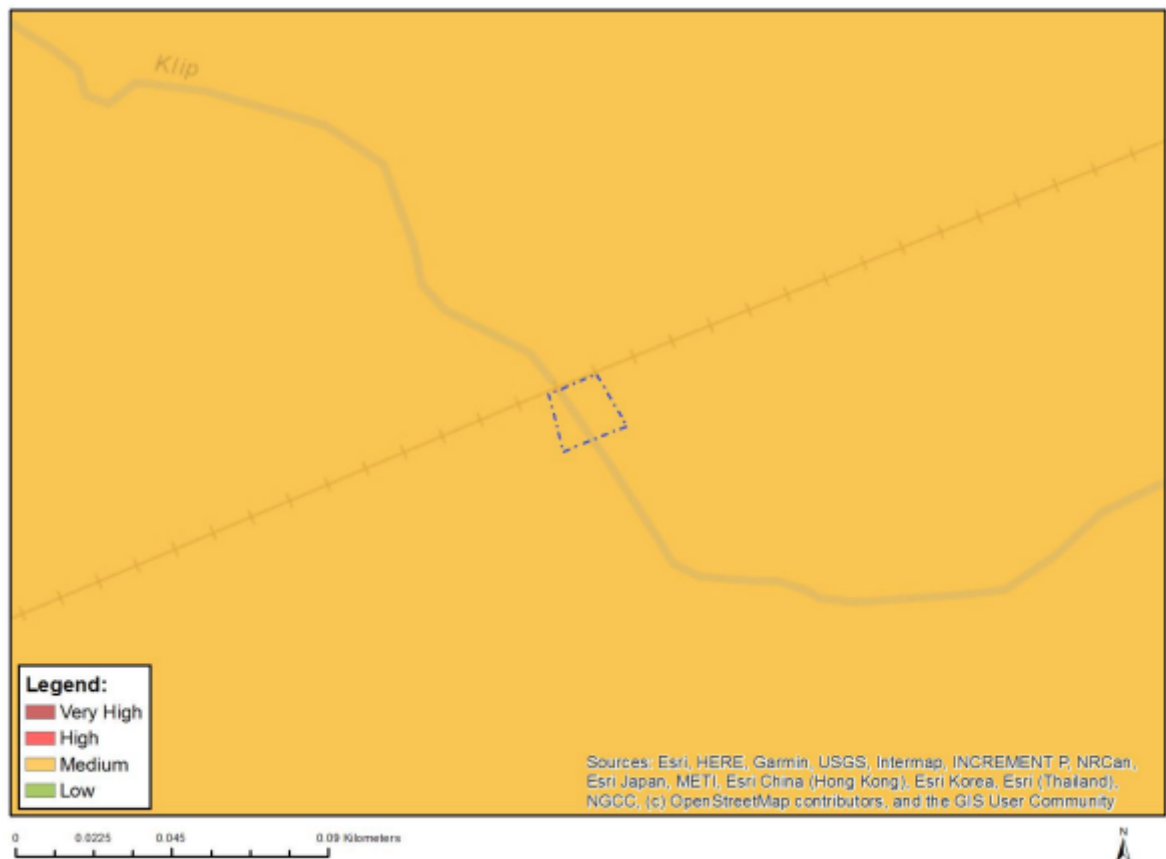


Figure 5: Map indicating the civil aviation sensitivity of the proposed Baden Powell, Macassar Roundabout from the Screening Tool Report.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

5.5.1.1 Sensitivity Features:

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

5.6 Defence Theme Sensitivity

The Screening Tool Report assigns a very high sensitivity to the Defence theme. The closest military base is approximately 10 – 15km away. Thus a specialist Defence input will not be required.

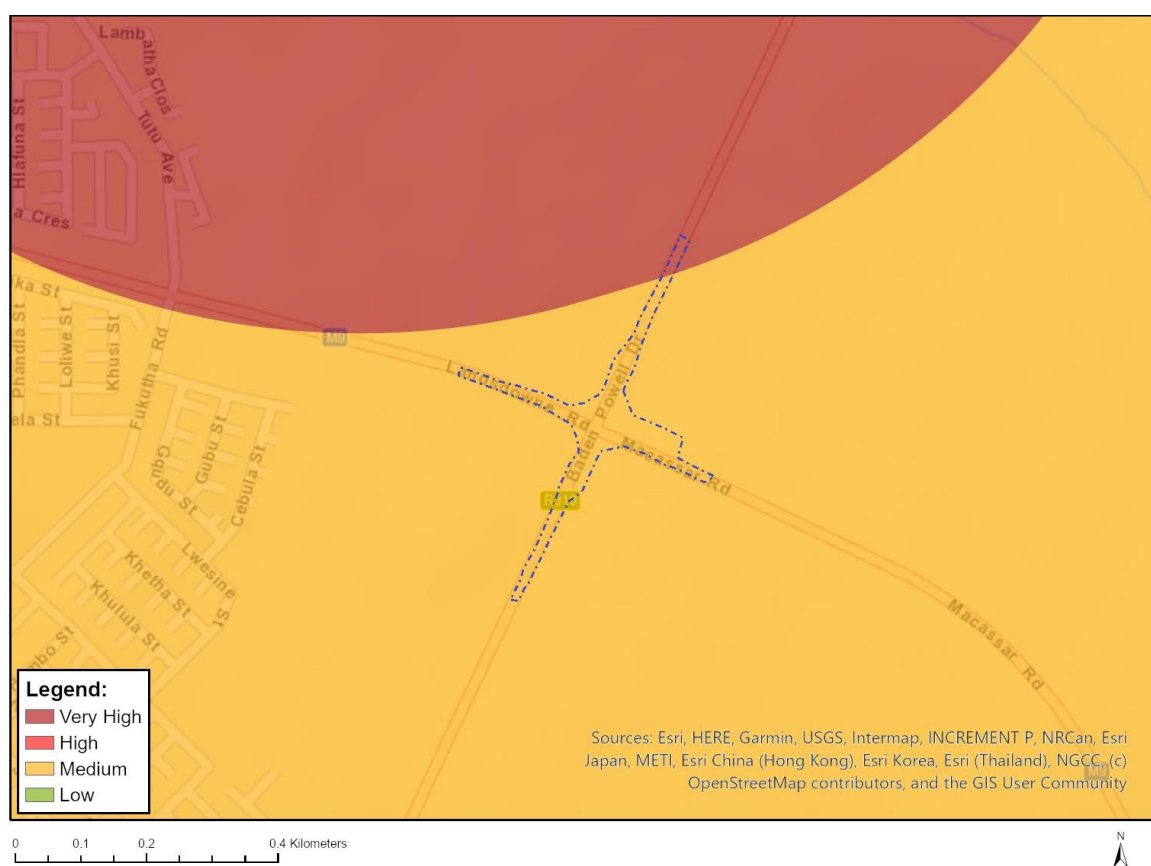


Figure 6: Map indicating the defense theme sensitivity of the proposed Baden Powell, Macassar Roundabout extracted from the Screening Tool Report

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

5.6.1.1 Sensitivity Features:

Sensitivity	Feature(s)
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Medium	Military and Defence Site
Very High	Military and Defence Site

5.7 Paleontology Theme Sensitivity

The Screening Tool rates the site as Medium for palaeontology. The site is underlain by geology is described as comprising mainly Quaternary quartz sand and calcareous dune sand of the Springfontein and Witzand Formations as well as surficial cover formed in situ on Malmesbury rocks (Cape Farm Mapper, 2026). Earthworks will remain at shallow depth within the existing road formation. A Chance Finds Protocol in the EMP will cover any unexpected find. No specialist palaeontological study is required.

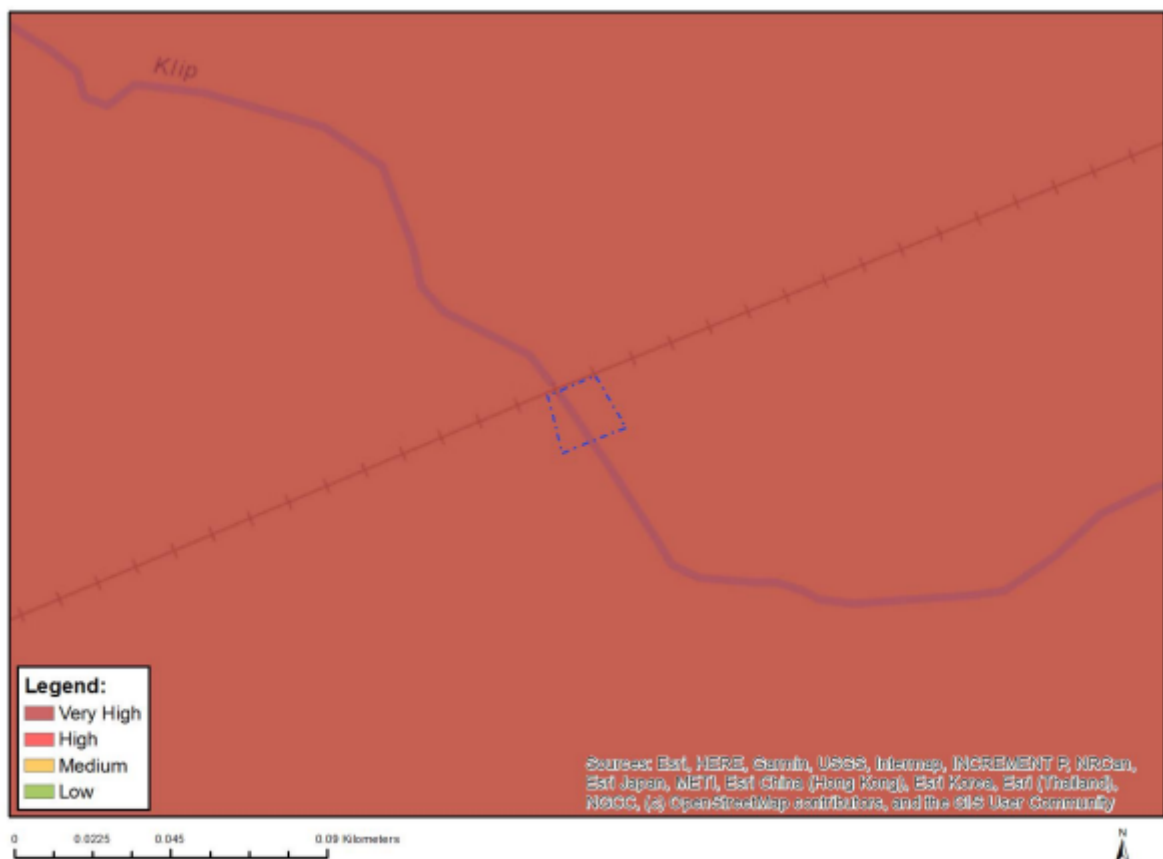


Figure 7: Map indicating the paleontology theme of the proposed Baden Powell, Macassar Roundabout as extracted from the Screening Tool Report

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
		X	

Sensitivity Features

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

5.8 Plant Species and terrestrial Biodiversity Themes

The Screening Tool rates Plant Species as High (Figure 8) and Terrestrial Biodiversity as Very High (Figure 9). The site is mapped as Cape Flats Dune Strandveld (Endangered under NEM:BA; the False Bay variant is Critically Endangered), overlaps WCBSP CBA 1a, and falls within the NPAES focus area.

A Botanical Assessment was undertaken to cover both the Plant Species Protocol and the Terrestrial Biodiversity Protocol under GN 320 of 2020. The Terms of Reference were to characterise the vegetation within the project area of influence, to confirm the presence or absence of the flagged Red List and Sensitive plant species, to assess the habitat against the Western Cape Biodiversity Spatial Plan (WCBSP), National Protected Area Expansion Strategy (NPAES) and National Environmental Management: Biodiversity Act (NEM:BA) listings, to identify no-go areas and residual biodiversity loss, and to recommend avoidance, minimisation and offset measures in line with the National Biodiversity Offset Guidelines (Government Notice 48841 of June 2023).

The Botanical Assessment also covers the habitat component of the Animal Species theme, since the same Strandveld and wetland patches are the habitat on which the flagged fauna depend.

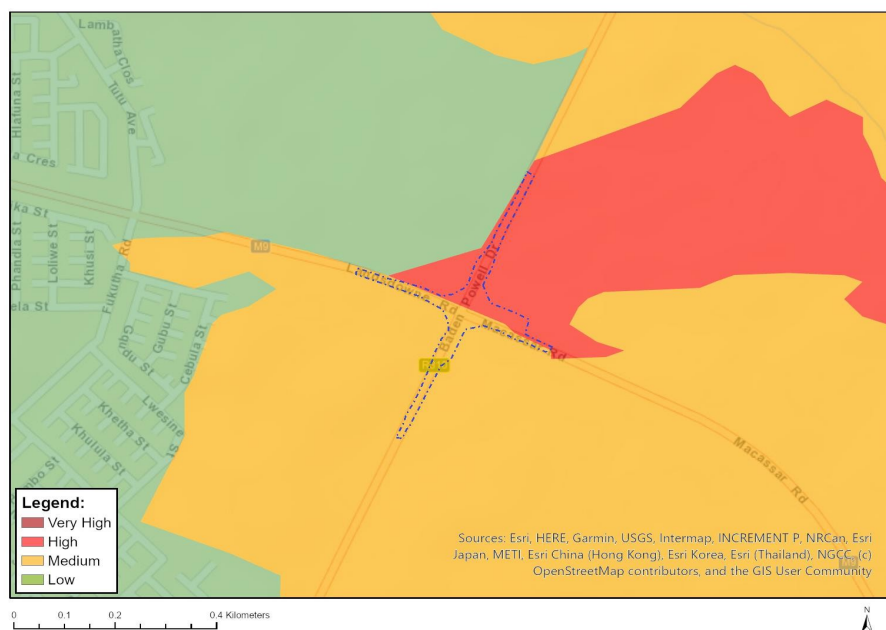


Figure 8: Map indicating the plant species theme sensitivity of the proposed Baden Powell, Macassar Roundabout as extracted from the Screening Tool Report.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
	X		

5.8.1.1 Sensitivity Features:

Sensitivity features (representative; full list in Screening Report):

Sensitivity	Feature(s)
High	Erepsia dunensis
High	Muraltia mitior
Medium	Lampranthus spp. (multiple)
Medium	Leucadendron spp. (including L. levisanus)
Medium	Leucospermum hypophyllocarpodendron subsp.
Medium	Diastella proteoides; Serruria aemula; Serruria brownii
Medium	Additional Red List and Sensitive species (see DFFE Screening Reort attached to the BAR for complete list)

5.9 MAP OF RELATIVE TERRESTRIAL BIODIVERSITY THEME SENSITIVITY

As this is an construction of Baden Powell, Macassar roundabout , a specialist is required due to a very high sensitivity.

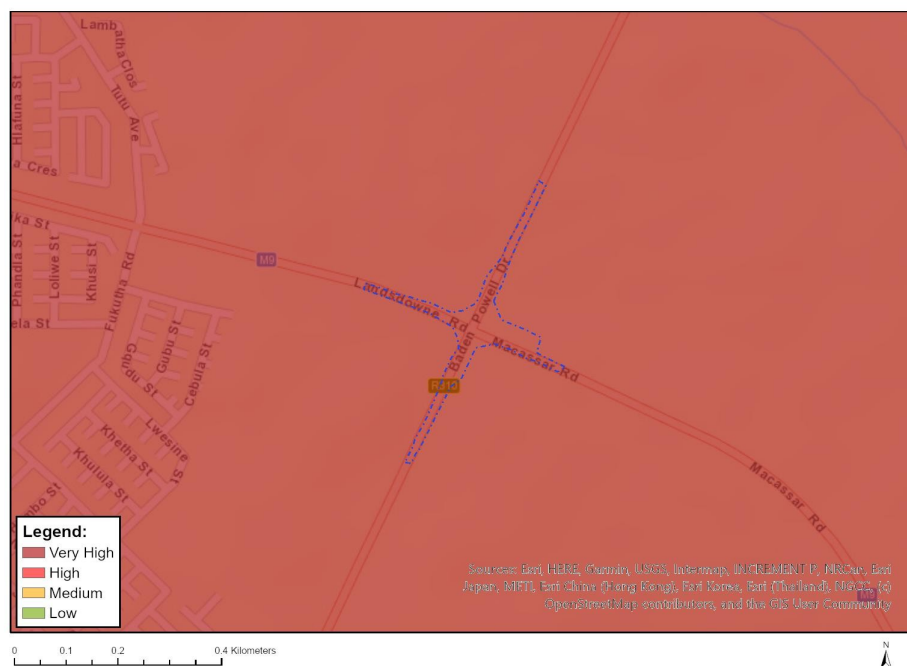


Figure 9: Map indicating the terrestrial biodiversity sensitivity of the proposed Baden Powell, Macassar Roundabout as extracted from the Screening Tool Report.

Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
X			

5.9.1.1 Sensitivity Features:

Sensitivity	Feature(s)
Very High	CBA 1a
Very High	National Protected Area Expansion Strategy (NPAES)
Very High	EN_Cape Flats Dune Strandveld

6 CONCLUSION

The DFFE Screening Tool flags nine themes for the proposed Baden Powell / Macassar roundabout, at sensitivities ranging from Medium to Very High. Two specialist studies have been commissioned for the Basic Assessment: a Freshwater and Wetland Specialist Study (Aquatic Ecological Study) and a Botanical Compliance Statement (Supported by previous Full Botanical Assessment) Compliance Plant Species and Terrestrial Biodiversity, also covering the faunal habitat component of the Animal Species theme).

For the other themes the Screening Tool rating has been considered against the nature and scale of the roundabout, and management measures are built into the EMP. A Notice of Intent to Develop has been lodged with Heritage Western Cape under Section 38(1) of the NHRA.

A summarising table has been compiled which lists these themes and the verification of the associated sensitivities:

Theme	Site Environmental Sensitivities	Is a Specialist Study or other report required for this this theme, to inform this Final BAR?
Agriculture	High	No. The site sits within the existing road reserve at the Baden Powell / Macassar Road / Japhta K Masemola intersection. There are no cultivated lands on the footprint, and the project will not take any land out of agricultural production.
Animal Species	High	Terrestrial Biodiversity Compliance Statement needed. No standalone animal study. Faunal habitat on the footprint is addressed through the Botanical Compliance Statement and the Freshwater Specialist Study. The species flagged by the Screening Tool (Circus ranivorus, Circus maurus,

		Afrotis afra, Frankenbergerius opacus, Pachysoma aesculapius) depend on wetland habitat or intact Strandveld, both of which fall under the two specialist studies already commissioned.
Aquatic Biodiversity	Very High	Yes. A Freshwater and Wetland Specialist Study was commissioned. The Screening Tool picked up Wetland Depressions within the site and the Zandvliet WWTW attenuation system is adjacent to the south-east corner. The findings feed into the BAR, the Section 21(c) and (i) Water Use process (General Authorisation), and the EMP.
Archaeological and Cultural Heritage	Very High	No. Earthworks are shallow and remain within the existing road formation. A Chance Finds Protocol is included in the EMP.
Civil Aviation	High	No. The roundabout is ground-level infrastructure with no structure taller than 45 m, and the site is more than 15 km from any major aerodrome.
Defence	Very High	No. The nearest military facility is about 10 -15 km from the site. The roundabout has no tall structures and will not affect line-of-sight or military operations.
Palaeontology	Medium	No. Earthworks are confined to the shallow Quaternary sands of the existing road formation. A Chance Finds Protocol in the EMP addresses any unexpected finds, in line with the NHRA.
Plant Species	High	Yes. Terrestrial Biodiversity Compliance Statement commissioned. The site falls within Cape Flats Dune Strandveld (Endangered under NEM:BA).
Terrestrial Biodiversity	Very High	Yes. Terrestrial Biodiversity Compliance Statement commissioned. The site overlaps WCBSP CBA 1a and sits within the NPAES focus area.

7 EAP Declaration

This Site Sensitivity Verification Report has been prepared by The Environmental Partnership under Regulation 16(1)(v) of the EIA Regulations, 2014 (as amended) and the Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes (GN 320 of 2020). It is submitted together with the Basic Assessment Report for the proposed Baden Powell Drive / Macassar Road Roundabout.