



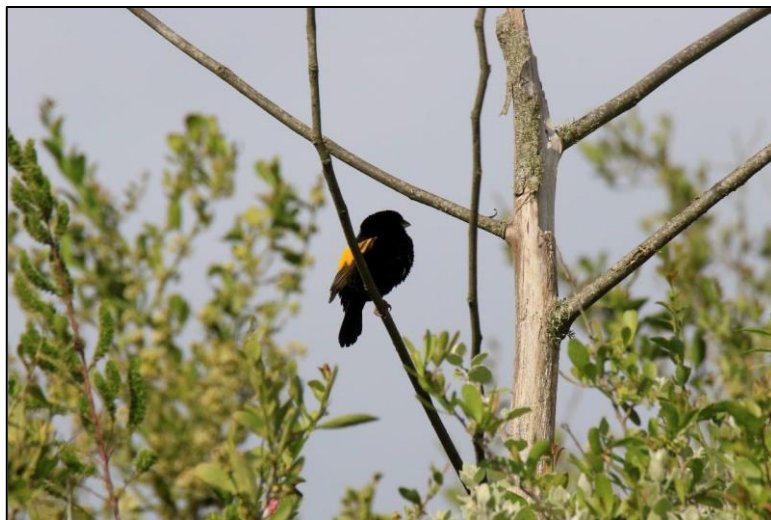
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SITE SENSITIVITY VERIFICATION REPORT

FOR THE

PROPOSED REMOVAL AND REPLACEMENT OF EXISTING ROAD AND CULVERT INFRASTRUCTURE LOCATED ALONG DIVISION ROADS (DR) 1602 KM 8.48, KLEINPLAAS ROAD, CROSSING FARM 338 AND PORTION 6 OF FARM 220 IN MOSSEL BAY LOCAL MUNICIPALITY, GARDEN ROUTE DISTRICT.



Applicant: Western Cape Government Department of Infrastructure: Transport Infrastructure
Environmental Consultant: Sharples Environmental Services CC
Assisted by: Jessica Gossman (Candidate EAPASA: 2022/6154)
Reviewer: Betsy Ditcham (EAPASA: 2020/1480)
SES Reference Number: CT6/SSVR/09/2026
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TABLE OF CONTENTS

1.	Introduction.....	4
2.	Project Description	4
3.	Description of the proposed activity	5
4.	Findings from the Screening Tool Reports	5
5.	Wind and Solar Developments	5
6.	Environmental Management Frameworks	6
7.	Relevant development incentives, restrictions, exclusions, or prohibitions.....	6
8.	DR1602 km 8.4 Kleinplaas Road – Summary Tables	8
9.	Specialist assessments identified for DR1602 km 8.4 (Kleinplaas Road)	9
10.	Site Verification	9
	10.1 Agriculture Theme	10
	10.2 Faunal Theme.....	11
	10.3 Aquatic Biodiversity	14
	10.4 Archaeological and Cultural Heritage	17
	10.5 Civil Aviation	18
	10.6 Defence	19
	10.7 Palaeontology Theme Sensitivity	20
	10.8 Plant Species Theme	21
	10.9 Terrestrial Biodiversity Theme	23
	10.10 Landscape/Visual Impact Assessment	25
	10.11 Socio-economic	25
	10.12 Noise	26
	10.13 Traffic.....	26
	10.14 Geotechnical	26
	10.15 Ambient Air Quality	26
	10.16 Hydrology Assessment.....	26
11.	Summary of applicable specialist studies.....	27
12.	Conclusion	28

LIST OF FIGURES

Figure 1:	Locality map of the proposed infrastructure works along DR1602.	4
Figure 2:	The site within the Gouritz Cluster Biosphere Reserve	6
Figure 3:	Strategic Gas Corridors of South Africa.	7
Figure 4:	Agriculture Theme Sensitivity.....	10
Figure 5:	Faunal Sensitivity Theme Sensitivity.....	11
Figure 6:	Aquatic Biodiversity Theme Sensitivity	14
Figure 7:	DR1602 Aquatic biodiversity map (CBA, ESA, and Wetlands), Western Cape Biodiversity Spatial Plan (Cape Farm Mapper, 2026).	15
Figure 8:	DR1602 delineated aquatic habitat within the 500m radius, (Upstream Consulting, 2023).	16
Figure 9:	Archaeological and Cultural Heritage Theme Sensitivity.....	17
Figure 10:	Civil Aviation Theme Sensitivity	18
Figure 11:	Defence Theme Sensitivity	19

Figure 12. SAHRIS PalaeoSensitivity Map, 2026.	20
Figure 13. Plant Species theme sensitivity	21
Figure 14. Terrestrial Biodiversity Theme Sensitivity	23
Figure 15. CBAs, ESAs and rivers, (Cape Farm Mapper, 2026).	24
Figure 16. DR1602 km 8.4 CBA, ESA and NFEPA, (Cape Farm Mapper, 2026).	24

LIST OF TABLES

Table 1: Property Details of Proposed Development Location for DR1602 km 8.4:	5
Table 2: Site sensitivity and features for the proposed site DR1602 km 8.4 Kleinplaas Road.	8
Table 3: Screening Tool Recommended Specialist Studies for the proposed site: (Themes indicated in green will be assessed only). As of the 30 th of July 2026:	9
Table 4. Faunal species found on site in accordance with the screening tool.	11
Table 5. SAHRIS PalaeoSensitivity Table:	21

1. Introduction

Sharples Environmental Services cc (SES) has been appointed by Hatch Consulting Engineers, on behalf of the Western Cape Department Infrastructure: Transport Infrastructure Directorate (Previously referred to as the Western Cape Department of Road Design, Transport and Infrastructure) to undertake the environmental assessment in accordance with the Environmental Impact Assessment (EIA) Regulations of 2014, as amended (GNR 326 of 2017; GNR 517 of 2021) promulgated in terms of the National Environmental Management Act, 1998 (NEMA; Act 107 of 1998), as amended, to oversee the environmental processes required for the proposed re-establishment of a causeway along Division Road (DR) 1602 8.5km (Kleinplaas Road)) on Farm 338 and Portion 6 of Farm 220. The site is located within the Mossel Bay Local Municipality, Garden Route District Municipality, Western Cape.

Several roads in the Garden Route suffered flood damage during a flood event in November 2021. The proposed development forms part of the strategy toward repairing and upgrading the affected sections of these roads. The proposed development forms part of the overarching project and is aimed towards preventing future damage to the ecological resources and service infrastructure, as well as to mitigate the road safety implications of the existing infrastructure.



Figure 1: Locality map of the proposed infrastructure works along DR1602.

2. Project Description

Several roads in the Garden Route suffered flood damage during a flood event in November 2021. The proposed project forms part of the strategy aimed toward repairing and upgrading the affected sections of these roads. The proposed project forms part of the overarching project and is aimed toward preventing future damage to the ecological resources and services infrastructure, as well as to mitigate the road safety implications of the existing infrastructure.

Located at DR 1602 (Kleinplaas Road), the existing causeway sees its starting coordinates at 33°57'35.28"S 22°14'28.41"E, its end coordinates at 33°57'35.22"S 22°14'29.21"E and is located within a road reserve with a width of 20 m. In order to effectively re-establish and upgrade the existing causeway, it is required that a bypass be installed north of the existing road. The bypass will be 4 m in width, however, only approximately 2.5 m of the proposed bypass will be located outside of the existing road reserve (excluding the 2 m working corridor). The bypass will see its starting coordinates at 33°57'35.50"S 22°14'27.51"E and its end coordinates at 33°57'35.71"S 22°14'30.06"E.

Although the re-establishment of the causeway does lie under the ambit of the definition of commencement of an original activity, the construction of the additional bypass (road), specifically the portion located outside of the existing road reserve does trigger one or more listed activities in terms of Environmental Impact Assessment (EIA) Regulations of 2014, as amended (GNR 326 of 2017; GNR 517 of 2021).

3. Description of the proposed activity

Table 1: Property Details of Proposed Development Location for DR1602 km 8.4:

No	Farm Name	Farm/ Erf No	Portion	Latitude	Longitude	Property Type
DR1602 km 8.4 Kleinplaas Road – Farm 338 ERFAG						
1	ERFAG	338	0	33°57'31.79S	22°14'53.13E	Farm
2	ERFAG	338	0	33°57'31.79S	22°14'53.13E	Farm Portion
3	HARTEBEEST KUIL	220	6	33.959532°S	22.240383°E	Farm Portion

A Environmental Sensitivity Screening Tool Report was produced for the proposed project using the Department of Forestry, Fisheries and the Environment's (DFFE) Web-based National Environmental Screening Tool (2025). This Site Sensitivity Verification Report (SSVR) reports on the ground truthing undertaken to verify the indicated sensitivity ratings of the screening report, and to motivate why some of the specialist studies recommended by the screening report, will or will not be undertaken for the proposed development upgrades.

The DFFE Screening Tool dated 30 July 2026 was reviewed against the full proposed development and construction footprint, including temporary working areas, the bypass and associated access areas. The surrounding area was also considered to identify relevant environmental sensitivities. The Screening Tool findings were verified through site assessment and specialist investigations to ensure that the identified sensitivities are appropriately addressed and that the proposed works are undertaken in accordance with the applicable environmental requirements.

4. Findings from the Screening Tool Reports

The National Sector Classification Category chosen for the Screening Tool Report was dated February 17, 2025, and was updated on April 15, 2026, and July 30, 2026. Following the DEADP's second round of comments, the SSVR was further updated on September 6, 2026.

Any activities within or close to a watercourse.

5. Wind and Solar Developments

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

No	EIA Reference No	Classification	Status of application	Distance from proposed area (km)
1	14/12/16/3/3/1/1292/AM1	Solar PV	Approved	17
2	14/12/16/3/3/1/1292	Solar PV	Approved	17
3	12/12/20/2536	Wind	Approved	29.9
4	12/12/20/2536/AM3	Wind	Approved	29.9
5	12/12/20/2536/AM4	Wind	Approved	29.9

6. Environmental Management Frameworks

No Environmental Management Frameworks for the areas.

7. Relevant development incentives, restrictions, exclusions, or prohibitions

Incentives, restriction or prohibition	Implication
Strategic Gas Pipeline Corridors-Phase 2: Mossel Bay to Coega	https://screening.environment.gov.za/ScreeningDownloads/DevelopmentZones/Combined_GAS.pdf

- South African Conservation Areas

The site is located within the Gouritz Cluster Biosphere Reserve (GCBR) as seen in the figure below.

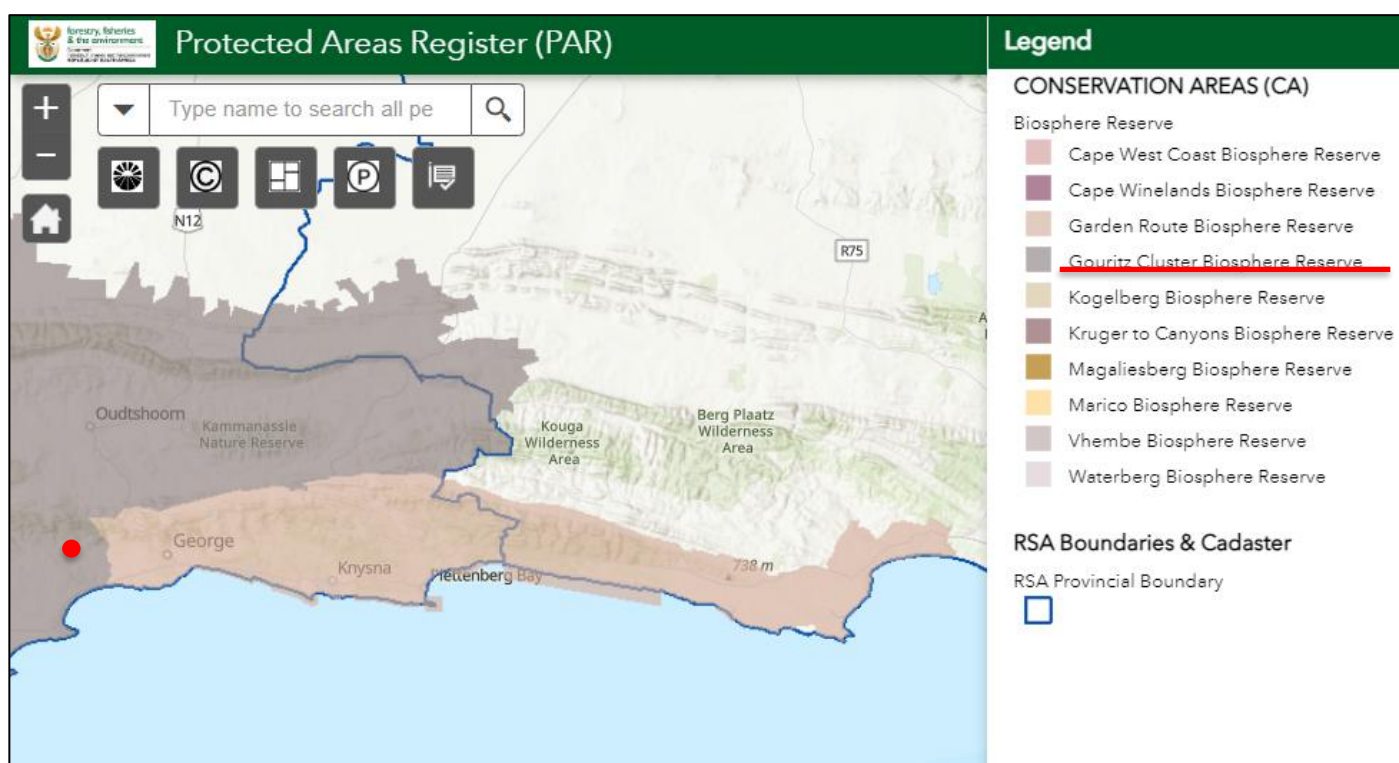


Figure 2: The site within the Gouritz Cluster Biosphere Reserve

- Strategic Gas Pipeline Corridors-

The site is located within the Phase 2: Mossel Bay Strategic Gas Pipeline Corridor as seen in the figure below This does not restrict the replacement of existing structures.

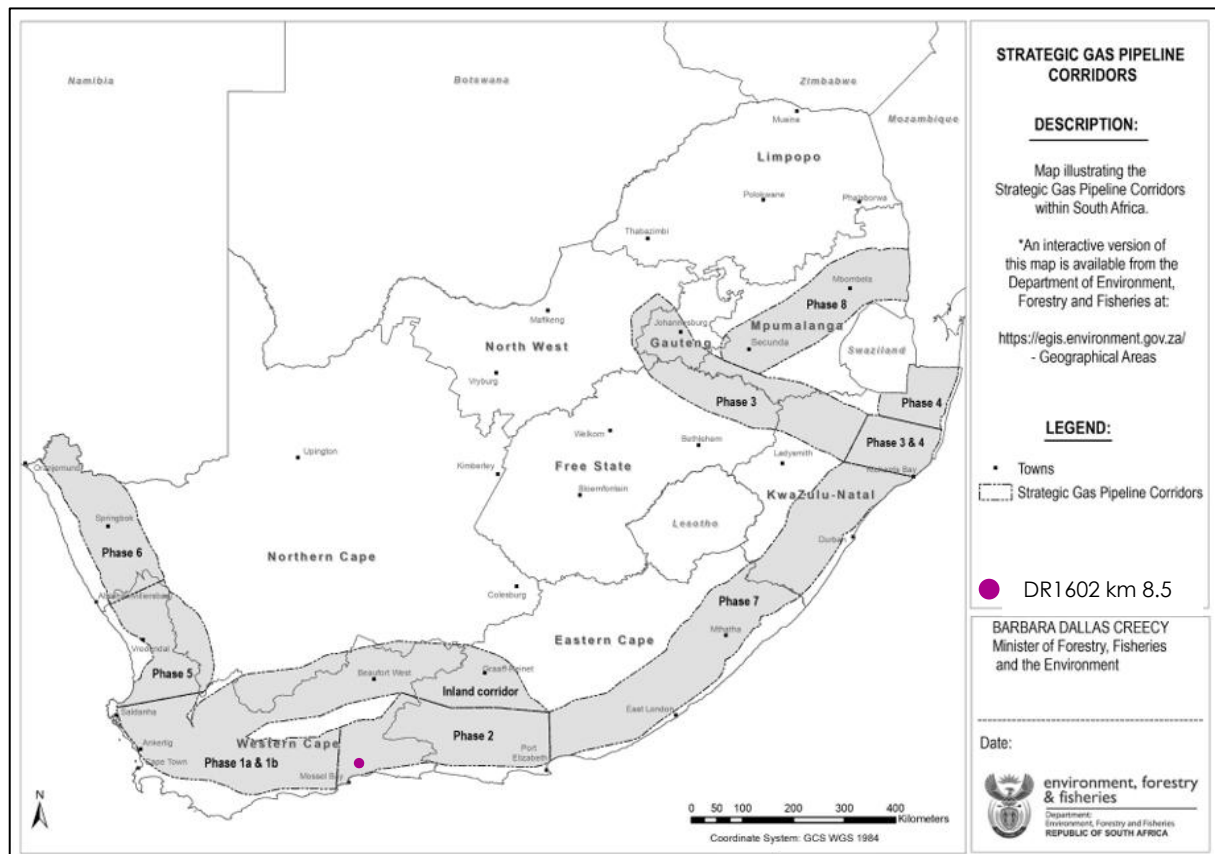


Figure 3: Strategic Gas Corridors of South Africa.

8. DR1602 km 8.4 Kleinplaas Road – Summary Tables

The following summary of the development footprint environmental sensitivities is identified by the screening tool report (2026) for DR1602 km 8.4 (Kleinplaas road). The footprint environmental sensitivities for the proposed development area as identified by the screening tool report, are indicative only and must be verified on-site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Table 2: Site sensitivity and features for the proposed site DR1602 km 8.4 Kleinplaas Road.

Theme	Sensitivity				Features
	Very High	High	Medium	Low	
Agriculture	X				Very High: Land capability;05. Low & 06. Low-Moderate/ Groot Brak-George PAA
Animal Species		X			High: - Aves-Bradypterus sylvaticus - Aves-Neotis denhami Medium: - Aves-Circus ranivorus - Sensitive species 13 - Invertebrate-Aneuryphymus montanus
Aquatic Biodiversity	X				Very high: - CBA: Wetland - Wetlands_Channelled valley-bottom
Archaeological, Cultural Heritage				X	Low
Civil Aviation		X			High: - Within 15 km of a civil aviation radar - Between 8 and 15 km from a major civil aviation aerodrome
Defence				X	Low
Plant Species			X		Medium: - Lampranthus pauciflorus - Freesia fergusoniae - Diosma passerinoides - Sensitive species 683
Terrestrial Biodiversity	X				Very High: CR_Garden Route Granite Fynbos

9. Specialist assessments identified for DR1602 km 8.4 (Kleinplaas Road)

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 studies including the provision of photographic evidence of the footprint situation.

Table 3: Screening Tool Recommended Specialist Studies for the proposed site: (Themes indicated in green will be assessed only). As of the 30th of July 2026:

No.	Specialist Assessment	Assessment Protocol
1.	Landscape/Visual Impact Assessment	General
2.	Archaeological and Cultural Heritage Impact Assessment	Heritage Impact Assessment
3.	Palaeontology Impact Assessment	Palaeontological Impact Assessment
4.	Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity Assessment
5.	Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity Assessment
6.	Hydrology Assessment	General
7.	Socio-Economic Assessment	General
8.	Plant Species Assessment	Plant Species Assessment
9.	Animal Species Assessment	Animal Species Assessment

10. Site Verification

The initial site inspection for this report was conducted on August 4, 2022, by Ms. Carla Swanepoel (Candidate EAPASA Registration: 2021/3267). A desktop study, along with additional information and summarised specialist findings, was provided by Jessica Gossman (Candidate EAPASA Registration: 2022/6154) and verified by Madeleine Knoetze (EAPASA Registration: 2021/3230) in December 2023. The findings were re-evaluated by Jessica Gossman and reviewed by Betsy Ditcham (EAPASA Registration: 2020/1480) on April 15, 2026, and again on the 3rd of August 2026. After thorough analysis, various specialists were appointed to verify and assess the environmental impacts of the project, aiming to develop a comprehensive understanding of the best plan from an environmental perspective.

10.1 Agriculture Theme

Finding Screening the Tool: DR1602 km 8.4 report indicates that the land capability is Medium to Very High sensitivity rating ;06. Low-Moderate. The Screening Tool has further mapped the area within a very high sensitivity, mapped as Groot Brak-George Protected Agriculture Area.

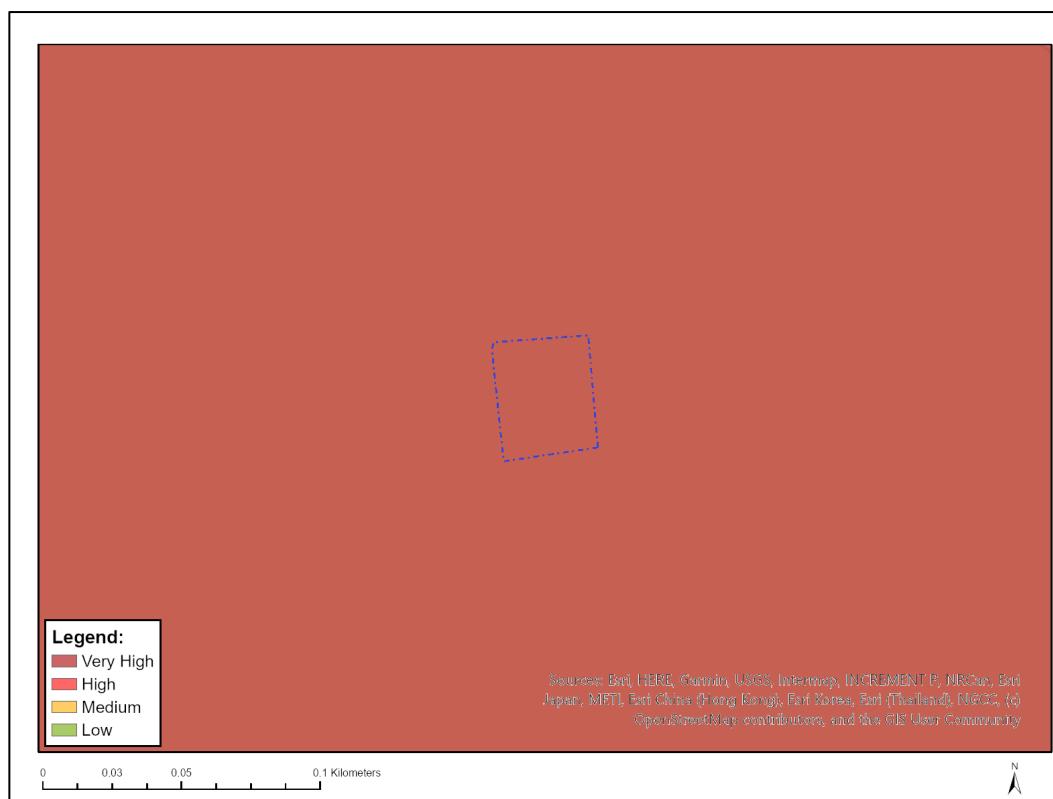


Figure 4. Agriculture Theme Sensitivity

Sensitivity	Features(s)
Medium	06. Low-Moderate
Very High	Groot Brak-George PAA

EAPs observation:

Based on the desktop study of the area, the project is not expected to interfere with agricultural activities. The primary objective is to remove and repair existing culverts and roads, mainly over a watercourse. A temporary by-pass will be implemented, along with an extended construction footprint, to minimise road disruptions during the construction process. This approach will require only a small portion of land to facilitate the by-pass. The area will be fully rehabilitated once construction is completed.

Conclusions:

According to the DFFE Screening Tool, it is recommended that an Agricultural Impact Assessment be conducted for DR1602 km 8.4. Based on the EAPs above reasoning it is therefore not required that a further assessment in terms of the Agricultural sensitivity of the site be undertaken. However, the Provincial Department of Agriculture was included as an Interested and Affected Party (I&AP) during public participation.

10.2 Faunal Theme

Findings from the Screening Tool: The report rated the site as high sensitivity. The proposed site may have evidence of faunal Species of Conservation Concern. An animal species specialist and avifaunal specialist were appointed to undertake an animal species assessment of the site.

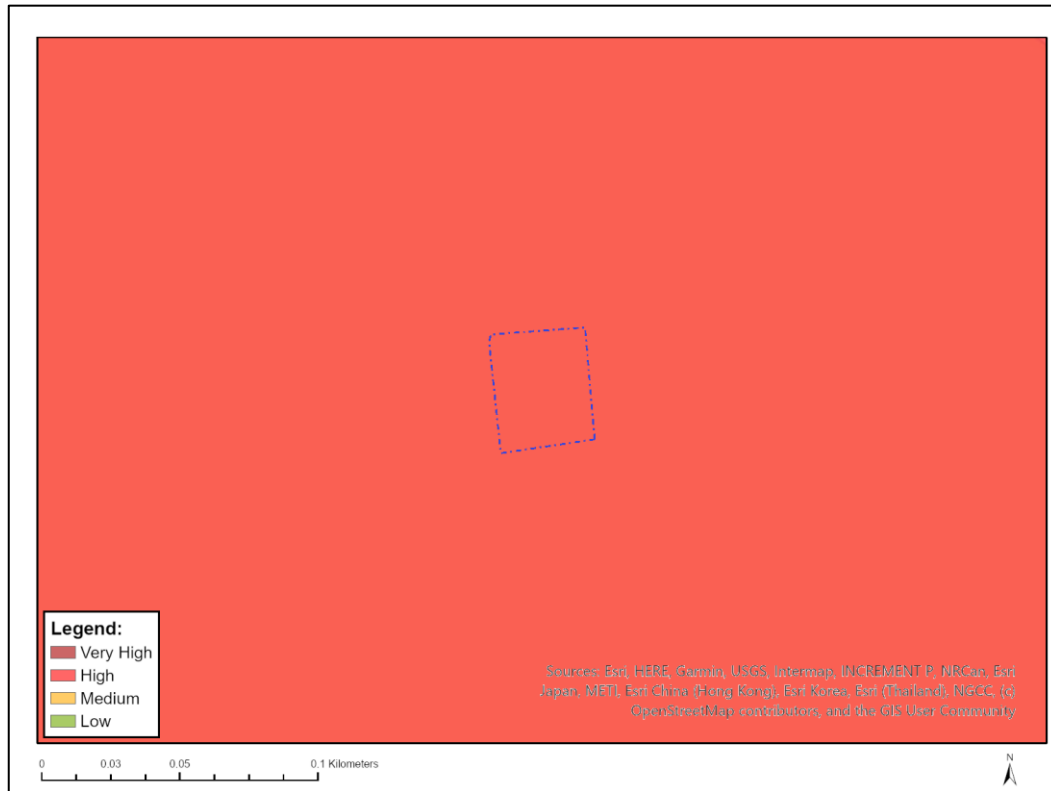


Figure 5. Faunal Sensitivity Theme Sensitivity

Table 4. Faunal species found on site in accordance with the screening tool.

Sensitivity	Feature(s)	Common Name	IUCN	Habitat preference	iNaturalist
High	Aves-Bradypterus sylvaticus	Knysna Warbler	Vulnerable	Forest and Fynbos	Not Found within iNaturalist data.
High	Aves-Neotis denhami	Denham’s Bustard	Vulnerable	Forest, Grassland	
Medium	Aves-Circus ranivorus	African Marsh Harrier	Endangered	Permanent wetlands (roosting) and fynbos (hunting)	
Medium	Sensitive species 13		Vulnerable	Forest and wooded habitat	
Medium	Invertebrate-Aneuryphymus montanus	Yellow-winged Agile Grasshopper	Vulnerable	Fynbos	
iNaturalist data of the study area, not found within the DFFE Screening Tool:					
No data	Orthetrum Julia	Julia Skimmer	Least Concern	Freshwater, inland waters/ terrestrial	Identified within the proposed project footprint
	Allocnemis Leucosticta	Goldtail	Least Concern	Wooded/ forested	

				streams and rivers	from iNaturalist data.
	<i>Chlorolestes Tessellatus</i>	Forest Malachite	Least Concern	Vegetated and shaded streams, pristine/ near pristine banks	
	<i>Elattonaneura Frenulata</i>	Sooty Threadtail	Least Concern	Freshwater, inland water	
	<i>Pseudagrion Furcigerum</i>	Palmiet Sprite	Least Concern	Freshwater, inland water	
	<i>Pseudagrion Kersteni</i>	Powder-faced Sprite	Least Concern	Freshwater, inland water	

EAPs observation:

Based on the desktop study of the area, a Faunal and Avifaunal specialist were required to conduct an assessment to verify the species on site. Based on the screening tool map, the site is largely regarded as having high faunal sensitivity. During the site visit conducted by the EAP, no Species of Conservation Concern (SCC) were identified.

Specialist Findings:

The Animal Species Theme was informed by two specialist investigations. The avifaunal component (Class Aves) was assessed by Mr Mokgatla Molepo of MORA Ecological Services (Pty) Ltd, while the terrestrial animal species component was assessed by Ms Megan Smith (Pr.Sci.Nat.) of Enviroworks (Pty) Ltd through the Plant Species, Animal Species and Terrestrial Biodiversity Theme Compliance Statement. Collectively, these specialist investigations informed the verification of the Animal Species Theme.

Avi-Faunal Assessment

MORA Ecological Services (Pty) Ltd (Mokgatla Molepo) was appointed to undertake the site sensitivity verification of the avifaunal species present within the proposed development footprint for DR1602 km 8.4. Before the site visit took place the specialist confirmed from the DFFE screening tool (2023) that three species have been identified as possible highly likely finds on site, *Bradypterus sylvaticus*, *Circus ranivorus* and *Neotis denhami*.

The specialist conducted their avifaunal site visits on the 30th and the 29th of October 2023. During the site visits, the appointed specialist confirmed that there were no sensitive avifaunal species on site and that 5 bird species were recorded, and no identified sensitive bird species from the DFFE Screening Tool report were observed during the site visits.

The Bradypterus sylvaticus (Knysna Warbler), *Circus ranivorus* (African Marsh Harrier) and *Neotis denhami* (Denham's Bustard) were assessed as having a low likelihood of occurrence within the development footprint. No Species of Conservation Concern (SCC) were recorded during the site visits, and the likelihood of SCC occurring within the construction footprint is considered low.

Faunal Assessment

Enviroworks (Pty) Ltd, represented by Ms Megan Smith (Pr.Sci.Nat.), was appointed to undertake the Plant Species, Animal Species and Terrestrial Biodiversity Theme Compliance Statement, including the terrestrial faunal assessment, for the proposed development footprint at DR1602 km 8.48. The assessment included a desktop review of the DFFE Screening Tool results, followed by a site verification undertaken on 30 October 2023.

The DFFE Screening Tool initially classified the Animal Species Theme as High sensitivity; however, following the site verification, the specialist confirmed that the proposed development footprint should be classified as Low sensitivity. The assessment found that the footprint is located within an existing disturbed road reserve that is heavily invaded by alien vegetation and lacks suitable habitat to support

Species of Conservation Concern (SCC). No terrestrial faunal Species of Conservation Concern identified by the DFFE Screening Tool were observed during the site visit, and the specialist concluded that it is unlikely that these species would occur within the development footprint due to the degraded habitat conditions. Common terrestrial fauna may occur within the surrounding natural areas and, where present, would be able to relocate to adjacent suitable habitat during construction. The Animal Species Theme was therefore verified as Low sensitivity.

Conclusions: The Screening Tool identified the Animal Species Theme as High sensitivity due to the potential occurrence of the Knysna Warbler, Denham's Bustard and African Marsh Harrier within the broader landscape.

Specialist verification confirmed that the proposed development footprint is confined to an existing disturbed road reserve where habitat has been substantially modified. Suitable breeding, nesting and long-term habitat for the screened Species of Conservation Concern is absent from the project footprint. Although these species may occur elsewhere within the surrounding landscape, the likelihood of them occurring within the proposed development footprint is considered to be low.

Based on the updated specialist assessments and habitat verification, the verified Animal Species sensitivity of the project footprint is therefore considered to be Low. The specialists confirmed that an Animal Species Compliance Statement will be required for the proposed site. Furthermore, CapeNature was included as an I&AP during public participation.

2026 Specialist Confirmation:

A verification site inspection was undertaken by the SES team (Photographs Appendix C) on 1 July 2026. The terrestrial specialist subsequently confirmed that no material changes have occurred within the proposed development footprint that would alter the findings or conclusions of the original Animal Species Compliance Statement. The terrestrial habitat remains substantially unchanged, and no additional features or habitat characteristics were identified that would increase the ecological sensitivity of the site. The verified Animal Species Theme sensitivity therefore remains Low, and the original findings, conclusions and recommendations remain applicable. No further terrestrial animal species investigations are considered necessary.

10.3 Aquatic Biodiversity

Findings from the Screening Tool: DR1602 km 8.4 is regarded as having a very high sensitivity, with the nature of the site being over a watercourse. An aquatic specialist was appointed to undertake an Aquatic Impact Assessment.



Figure 6. Aquatic Biodiversity Theme Sensitivity

Sensitivity	Feature(s)
Very High	CBA : Wetland
Very High	Wetlands_Channelled valley-bottom

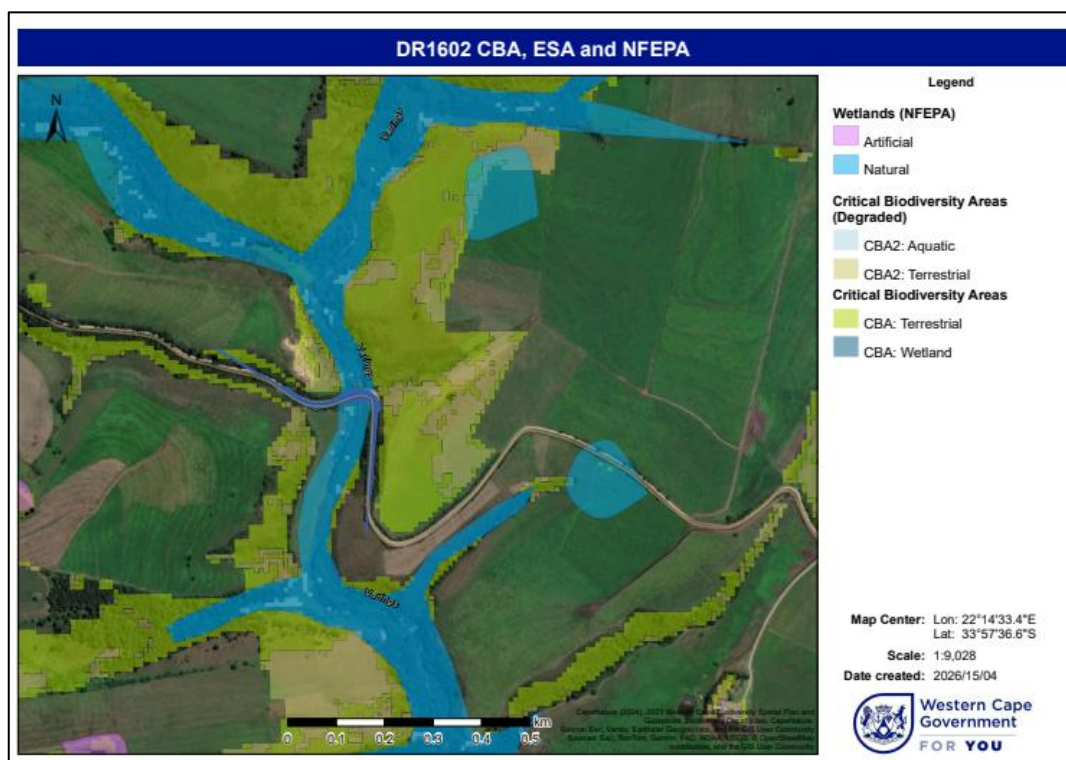


Figure 7. DR1602 Aquatic biodiversity map (CBA, ESA, and Wetlands), Western Cape Biodiversity Spatial Plan (Cape Farm Mapper, 2026).

EAPs observation:

Based on the desktop study of DR1602 km 8.5 the site is located within a Critical Biodiversity Area for Wetlands (Figure 7). The proposed site crosses the Varings River that is mapped as Aquatic Biodiversity Area 1 and is within a wetland classified as a Fresh Water Priority Area.

Specialist findings:

Upstream Consulting (Debbie Fordham) was appointed to conduct the aquatic site sensitivity verification for DR1602 km 8.5. The sensitivity verification site visit was conducted on the 4th of November 2023 in order to confirm the findings of the desktop assessment.

The specialist confirmed the presence of four Hydrogeomorphic (HGM) Units within the 500-meter radius of DR1602 km 8.5 study area, with regards to the construction footprint, the Varings River is directly affected (HGM1). In the lower area, the channeled valley bottom wetland has been established. The construction footprint on both sides (Left and right) has a seep wetland that is regarded as HGM4 and HGM5, both enter the Varings River and have been disturbed by the causeway. Upstream from the proposed construction footprint HGM6, is a tributary channeled valley bottom wetland that forms within the Varings River that is located within DR1602 km 8.5 study area. See Figure 8 below regarding the findings of the aquatic assessment within the study area of DR1602 km 8.5.

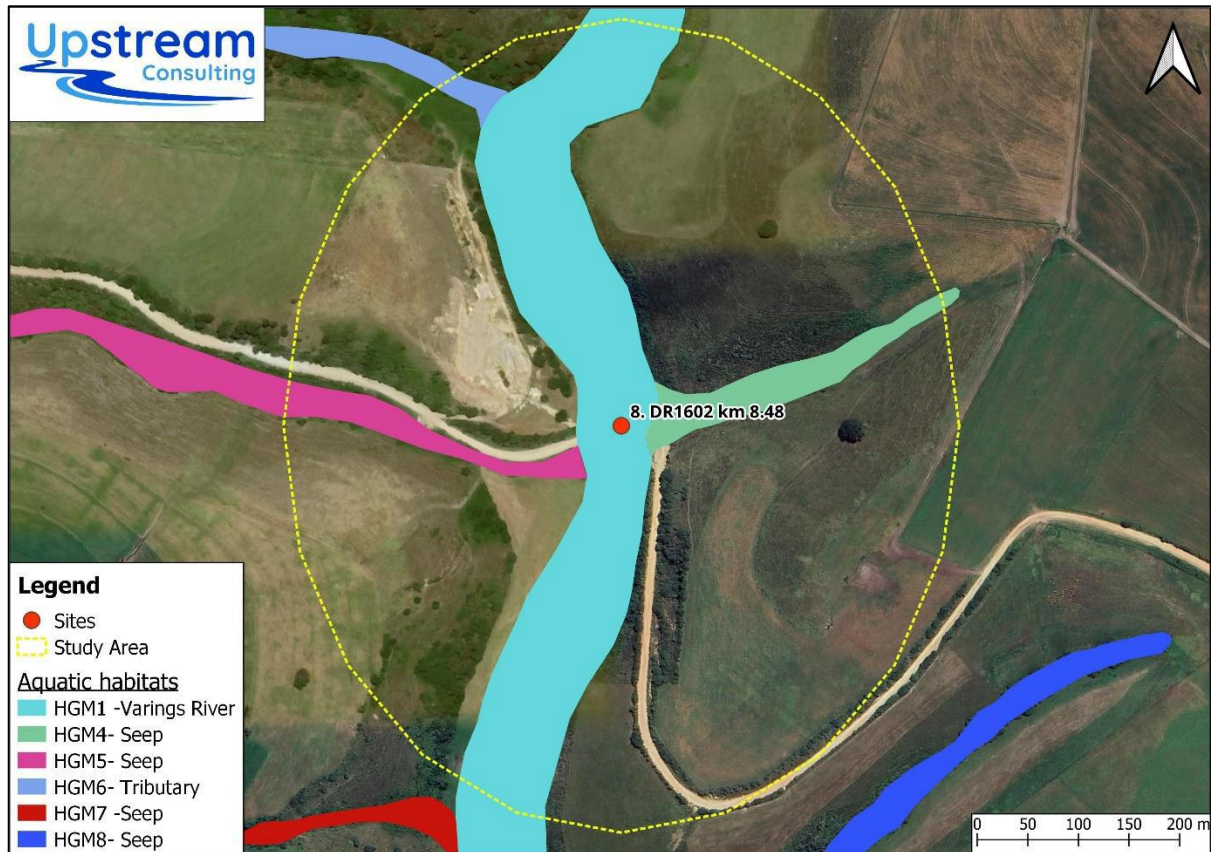


Figure 8. DR1602 delineated aquatic habitat within the 500m radius, (Upstream Consulting, 2023).

Conclusion: A specialist was appointed to conduct an Aquatic Biodiversity Impact Assessment for the proposed development area. In terms of water-use authorisation, the proposed activity falls within the ambit of Section 21(c) and (i) water uses of the National Water Act, 1998 (Act No. 36 of 1998), and is subject to the applicable General Authorisation requirements. The Breede-Olifants Catchment Management Agency (BOCMA) was included as a Stakeholder during the public participation process.

The Aquatic Biodiversity Impact Assessment was undertaken by Upstream Consulting in November 2023. Following consideration of the updated engineering design, the aquatic specialist provided a confirmation dated 3 August 2026 confirming that the proposed structure, with substantially larger hydraulic openings than the existing causeway, is supported in principle from an aquatic perspective. The specialist confirmed that an amendment to the 2023 Aquatic Biodiversity Impact Assessment is not considered necessary, subject to the aquatic mitigation recommendations being incorporated into the final engineering and environmental documentation.

10.4 Archaeological and Cultural Heritage

Findings from the Screening Tool: The Archaeological and cultural heritage theme has a low sensitivity. The DFFE Screening Tool suggests that an archaeological assessment to be conducted. The proposed repairs and riverbank reinstatement will be undertaken on existing footprints and previously disturbed areas, additionally the proposed activities do not trigger Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) with regards to the site.



Figure 9. Archaeological and Cultural Heritage Theme Sensitivity

Sensitivity	Features(s)
Low	Low Sensitivity

EAPs observation:

During the site visit, the EAP did not observe any features of cultural heritage concern. At the time of the site visit, the age of the causeways on site was unknown. Further investigations with regard to the ages of the causeway infrastructure will be undertaken during the Environmental Impact Assessment Phase in order to ascertain the requirement of a demolition permit for the site.

Specialist Findings:

It was confirmed by the appointed Heritage Consultant, Dr Peter Nilssen (ASAPA Professional Member No. 097), that the proposed activities do not trigger the provisions of Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) (NHRA) and that a Notification of Intent to Develop (NID) to Heritage Western Cape is therefore not required.

The Heritage Statement concludes that, although portions of the existing road and causeway infrastructure are likely older than 60 years, these structures were substantially damaged during the 2023 flood events and do not possess structural, architectural or cultural heritage significance. The proposed works are limited to the replacement of flood-damaged road and culvert infrastructure within an

already transformed road reserve and disturbed river crossing, and no heritage resources were identified within the temporarily or permanently affected areas. Consequently, the proposed works do not constitute the demolition of a protected heritage resource and a permit in terms of Section 34 of the NHRA is therefore not required.

A precautionary Heritage Chance-Find Procedure has been incorporated into the Environmental Management Programme (EMPr). Should any archaeological, palaeontological, burial or other heritage material be uncovered during construction, all work within the immediate vicinity of the discovery must cease immediately and the Environmental Control Officer (ECO) must notify the appointed Heritage Specialist and/or Heritage Western Cape before works recommence.

Conclusion: Based on the findings of the specialist, a NID will not be required to be completed for the proposed project. However, a statement was obtained from the specialist regarding the Heritage Sensitivity for the site. Furthermore, Heritage Western Cape (HWC) will be included as an Interested and Affected party of the project during all public participation processes.

10.5 Civil Aviation

Findings from the Screening Tool: The Civil Aviation Theme is of high sensitivity for the proposed site.



Figure 10. Civil Aviation Theme Sensitivity

Sensitivity	Feature
High	Within 15 km of a civil aviation radar
High	Between 8 and 15 km from a major civil aviation aerodrome
Medium	Between 15 and 35 km from a civil aviation radar

Medium	Between 15 and 35 km from a major civil aviation aerodrome
Medium	Between 8 and 15 km of other civil aviation aerodrome

EAPs observation:

George Airport is approximately 13.8 km from the proposed site, located in the southeastern direction. The flight strip and landing area are not aligned with the site at DR1602 km 8.5. Additionally, Mossel Bay Aerodrome (FAMO) and Mossel Bay Aero Club are situated 26.9 km from the proposed site, and their landing and flight strips do not fall within the area of concern regarding the proposed construction.

Conclusion: A dedicated civil aviation assessment will not be conducted, as the proposed development is not expected to impact the flight paths of the airport or aerodrome. The South African Civil Aviation Authority (CAA) was included as Interested and Affected Parties (I&APs), and no further action is necessary.

10.6 Defence

Findings from the Screening Tool: The defence theme is of Low Sensitivity for DR1602 km 8.5. The DFFE Screening Tool has not indicated an assessment is needed and no impacts on existing Defence areas were noted on site, as such, no further action will be undertaken.



Figure 11. Defence Theme Sensitivity

Sensitivity	Feature
Low	Low Sensitivity

10.7 Palaeontology Theme Sensitivity

Findings from the Screening Tool: The proposed study area does not have any data regarding palaeontology within the study area.

EAPs Observation:

The proposed repairs and riverbank reinstatement will be undertaken on existing footprints and previously disturbed areas, additionally the proposed activities do not trigger Section 38 of the National Heritage Resources Act, 1999 (Act No. 25 of 1999) for DR1602 km 8.5.

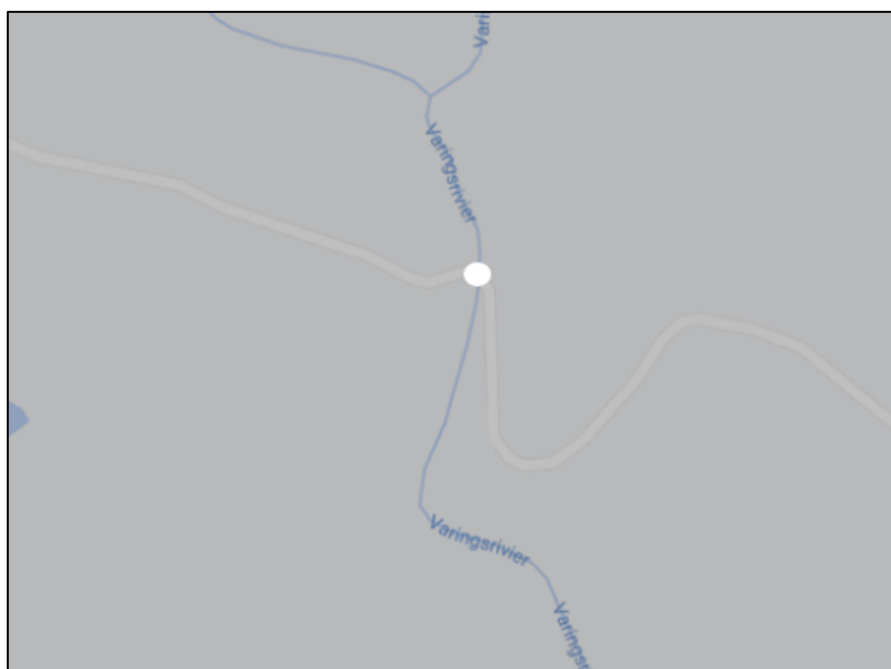


Figure 12. SAHRIS PalaeoSensitivity Map, 2026.

Table 5. SAHRIS PalaeoSensitivity Table:

Colour	Sensitivity	Required Action
RED	VERY HIGH	field assessment and protocol for finds is required
ORANGE/YELLOW	HIGH	desktop study is required and based on the outcome of the desktop study, a field assessment is likely
GREEN	MODERATE	desktop study is required
BLUE	LOW	no palaeontological studies are required however a protocol for finds is required
GREY	INSIGNIFICANT/ZERO	no palaeontological studies are required
WHITE/CLEAR	UNKNOWN	these areas will require a minimum of a desktop study. As more information comes to light, SAHRA will continue to populate the map.

Conclusion: Based on desktop observation and sourced images from the South African Heritage Resources Information System (SAHRIS), the site has no features of palaeontological significance, and regarding the nature of the already disturbed area is to replace and repair existing infrastructure, the likelihood of interacting with fossils can be considered insignificant for the proposed site. However, should remains be found, further information and procedures have been included in the Environmental Management Programme (EMPr) to minimise risk and disturbance.

10.8 Plant Species Theme

Findings from the Screening Tool: The plant species theme has a medium sensitivity for sensitive plant species for the proposed development area. Four sensitive plant species are documented within the Screening Tool. A plant species specialist was appointed as the repair works will include the removal of some vegetation along the riverbanks and could have evidence of SCCs on site based on the Screening Tool findings.

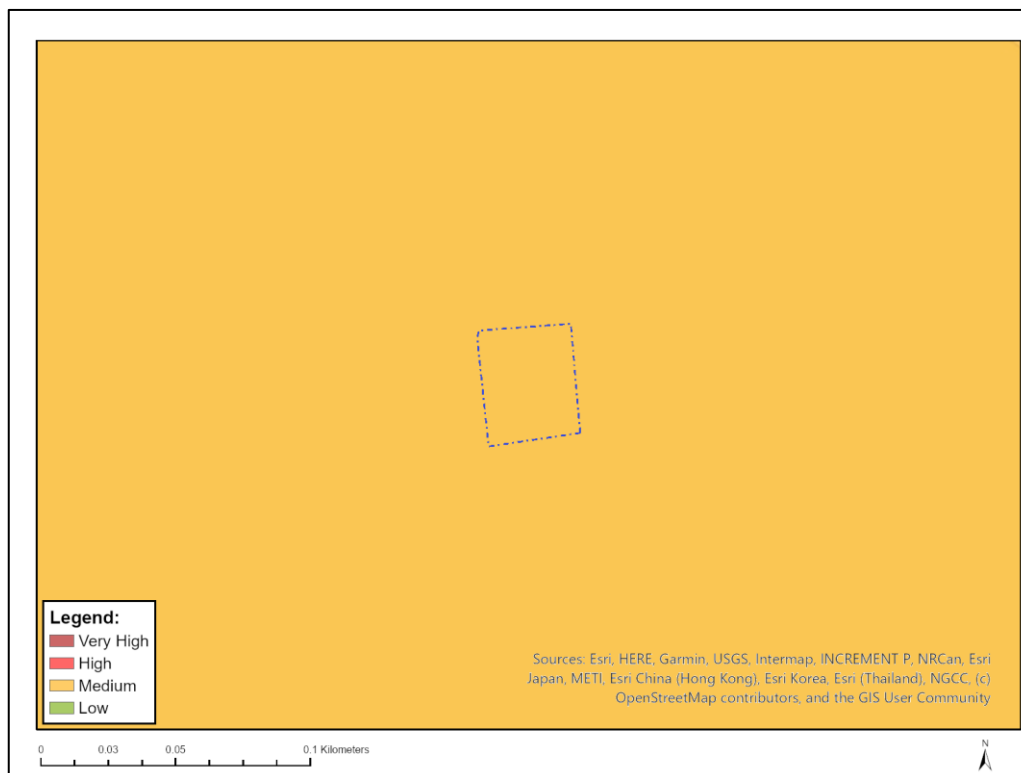


Figure 13. Plant Species theme sensitivity

Sensitivity Features:

Sensitivity:	Feature(s)	Red List Status	Habitat	iNaturalist
DR1602				
Medium	<i>Lampranthus pauciflorus</i>	Endangered	Groot Brak Dune Strandveld, Blombos Strandveld, Overberg Dune Strandveld, Potberg Sandstone Fynbos, Garden Route Granite Fynbos, Albertinia Sand Fynbos, Knysna Sand Fynbos, Hartenbos Strandveld, Goukamma Dune Thicket	Not Found within iNaturalist data.
Medium	<i>Freesia fergusoniae</i>	Vulnerable	Mossel Bay Shale Renosterveld, Eastern Ruens Shale Renosterveld, Ruens Silcrete Renosterveld, Central Ruens Shale Renosterveld, Garden Route Shale Fynbos, Swellendam Silcrete Fynbos, Montagu Shale Renosterveld, Garden Route Granite Fynbos, Potberg Ferricrete Fynbos	
Medium	<i>Diosma passerinoides</i>	Vulnerable	Ruens Shale Renosterveld, Elim Ferricrete Fynbos, Potberg Ferricrete Fynbos, Garden Route Granite Fynbos, Breede Alluvium Renosterveld, Ruens Silcrete Renosterveld, Swellendam Silcrete Fynbos, Central Ruens Shale Renosterveld, Breede, Shale Renosterveld, Mossel Bay Shale Renosterveld, Uniondale Shale Renosterveld, Langkloof Shale Renosterveld, Baviaanskloof Shale Renosterveld, Matjiesfontein Shale Renosterveld, Montagu Shale Renosterveld, Western Ruens Shale Renosterveld	
Medium	<i>Sensitivity Species 683</i>	Endangered	seasonally moist grasslands and open, sandy or loamy soils, often in areas with winter rainfall; typically occurs in disturbed or cultivated landscapes as well as natural veld..	
iNaturalist data of the study area, not found within the DFFE Screening Tool:				
No data found	<i>Family Asteraceae</i>	No data	Found within diverse habitat, ranging between tropical rainforests to arid desert.	Found within iNaturalist data.
	<i>Subfamily Mimosoideae</i>	No data	Tropical and subtropical climates.	
	<i>Family Cyperaceae</i>		Perennial herbs rarely annual; perennating by means of creeping rhizomes or tubers. The members are inhabitants of damp areas.	
	<i>Gomphocarpus Fruiticosus</i>	Least Concern	Grassland and savannas	
	<i>Pteridium aquilinum</i>	Least Concern	Temperate and subtropical regions widely distributed.	
	<i>Berzelia Intermedia</i>	Least Concern	Reede Sand Fynbos, Hawequas Sandstone Fynbos, Garden Route Shale Fynbos, Cape Winelands Shale Fynbos, Garden Route Granite Fynbos, Robertson Granite Fynbos.	
	<i>Cliffortia Ordorata</i>	Least Concern	Reede Sand Fynbos, Hawequas Sandstone Fynbos, Garden Route Shale Fynbos, Cape Winelands Shale Fynbos, Garden Route Granite Fynbos, Robertson Granite Fynbos, Pondoland-Ugu Sandstone Coastal Sourveld, Boland Granite Fynbos, South Sonderend Sandstone Fynbos, Hangklip Sand Fynbos, Cape Flats Sand Fynbos, Atlantis Sand Fynbos, Knysna Sand Fynbos.	

EAP's Observation

During the site visit conducted for the respective site, no plant SCCs were identified on site.

Specialist Findings: Enviroworks (Megan Smith and Edmari Lewis) conducted a site visit on the 30th of October 2023. Based on the site visit the specialist identified no Species of Conservation Concern (SCC) within the development footprint of DR1602 km 8.5. The specialist noted that the screening tool regarded the area as having a **Medium sensitivity** rating and has assessed and recommended that the area is of low sensitivity. Alien species have been recorded to be prevalent in the area, and the Garden Route Alien Invasive Species Management plan should be implemented. It's also important to note that the site is degraded and has been disturbed, and therefore the project is more of a restoration of the infrastructure and will not be impacting on the Ecological Support Area.

Conclusion: The specialist noted that the site has existing infrastructure and that additional inspections are not needed. The specialist noted that a compliance statement will be required for the proposed site. CapeNature was also included as a Stakeholder during public participation.

10.9 Terrestrial Biodiversity Theme

Findings from the Screening Tool: The area's sensitivity is regarded as Very High. A specialist has been appointed to undertake the Terrestrial Biodiversity Assessment.



Figure 14. Terrestrial Biodiversity Theme Sensitivity

Sensitivity:	Feature(s)
Very High	CR_Garden Route Granite Fynbos

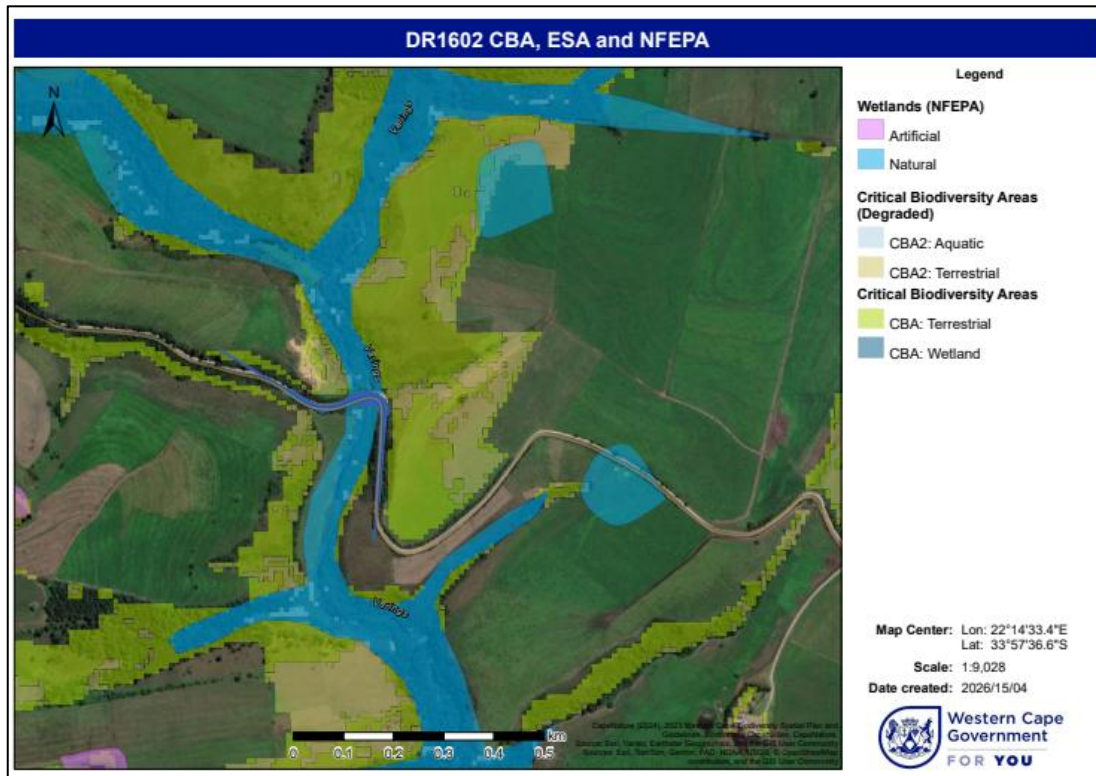


Figure 15. CBAs, ESAs and rivers, (Cape Farm Mapper, 2026).

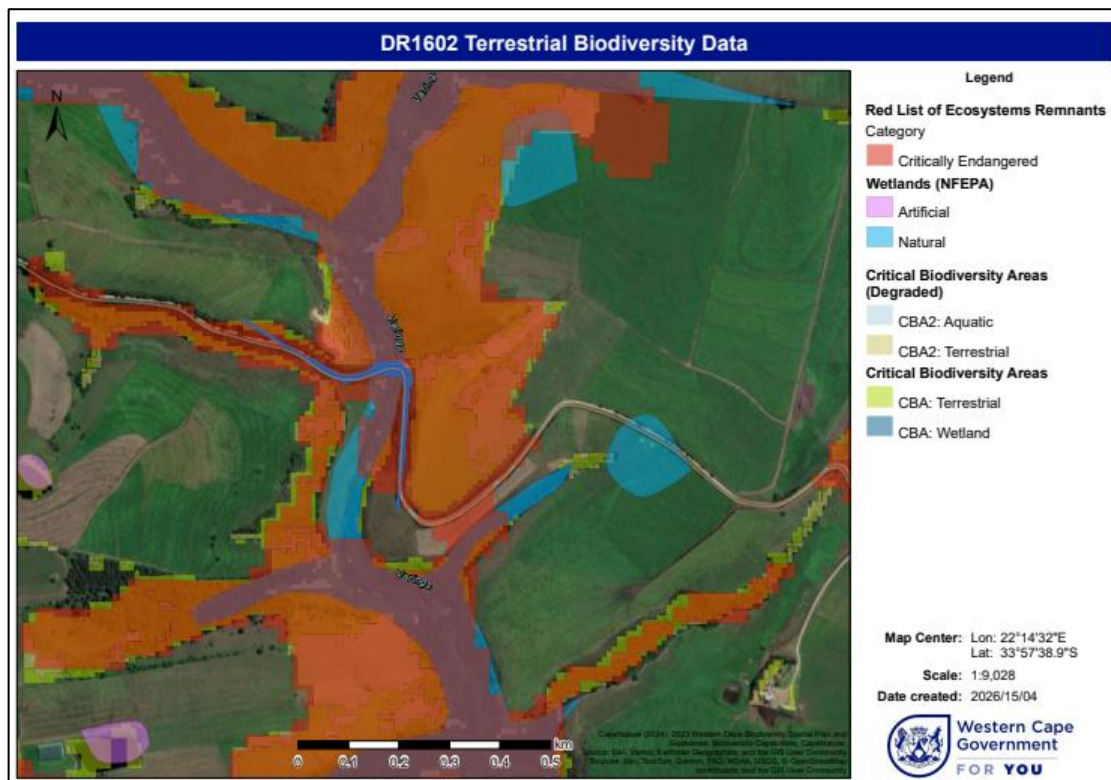


Figure 16. DR1602 km 8.4 CBA, ESA and NFEPA, (Cape Farm Mapper, 2026).

EAP's Observation:

The proposed project site (DR1602 km 8.4) is located within the Garden Route Granite Fynbos, that is classified as Critically Endangered B1(i) (Figure 16). Based on Figure 15, it is important to note that the area is also located over the Varings River watercourse and associated Critical Biodiversity Area. Based on the findings for the site visit, the specialist will need to assess the impact on the terrestrial ecology of the site.

Specialist findings:

Enviroworks (Megan Smith and Edmari Lewis) conducted a site visit for DR1602 km 8.5 on the 30th of October 2023, and verified the site terrestrial findings. The DFFE Screening Tool suggested that the site is of very high terrestrial significance; however, based on the site visit findings, the area is of low concern.

The specialist verified that the Site Ecological Importance (SEI) is rated **Very Low**. This is due to the area having a low biodiversity value and ecological functioning and a medium recovery rate.

The vegetation of DR1602 is within Critically Endangered Garden Route Granite Fynbos; however, there is a large amount of alien invasive species in the area that has altered the ecology. There is still a chance that the ecosystem may have some ecological importance as the buffer area does fall outside the road reserve. According to the specialist the chances of finding SCC on site are of low likelihood of occurring.

Conclusion: The specialist has stated that the site has been confirmed to be classified as being low sensitivity for the Terrestrial Biodiversity Theme. Based on the area having a high alien invasive species and the site being already disturbed and the existing infrastructure. A compliance statement has been compiled.

2026 Verification:

The specialist confirmed that the terrestrial habitat within the proposed development footprint remains substantially unchanged and that no material changes have occurred that would alter the original findings. The Terrestrial Biodiversity Theme therefore remains Low sensitivity. The original Compliance Statement and its recommendations remain applicable, and no further terrestrial specialist investigation is required.

10.10 Landscape/Visual Impact Assessment

Findings from the Screening Tool: The report indicates that a Visual Impact Assessment should be undertaken for DR1602 km 8.5. This assessment will not be undertaken as the proposed activities are to repair existing infrastructure, therefore after rehabilitation, the site will revert to the visual setting prior to the flood damage.

10.11 Socio-economic

Findings from the Screening Tool: It is not expected that this environmental process related to the proposed project will have a significant effect on the socio-economics of the area as it is anticipated that the project (upon completion) will greatly benefit road users and the ecology in the area. The proposal is to repair flood damage to existing infrastructure and riverbanks. The socio-economic aspects of the proposal are thus known and straight forward in nature and as such an assessment will not be undertaken. No further action will be undertaken.

10.12 Noise

EAP's Observation and Conclusion:

It is not expected that this environmental process related to the proposed upgrades will have a detrimental effect on the noise levels within the area as it is anticipated that the project (upon completion) will greatly benefit road users and the ecology in the area. The proposal is to repair flood damage to existing infrastructure and riverbanks. The noise aspects of the proposal are thus negligible and temporary in nature, and as such an assessment will not be undertaken. No further action will be undertaken.

10.13 Traffic

EAP's Observation and Conclusion:

It is not expected that this environmental process related to the proposed upgrades will have a detrimental effect on traffic management within the area as it is anticipated that the project (upon completion) will greatly benefit road users and the ecology in the area. The proposal is to repair flood damage to existing infrastructure and riverbanks. A temporary by-pass will be constructed to avoid road closures. The proposal is thus negligible and temporary in nature, and as such an assessment will not be undertaken. No further action will be undertaken.

10.14 Geotechnical

EAP's Observation and Conclusion:

For this current environmental process, a geotechnical assessment is not anticipated to be required as the planned construction should not have significant geological impacts due to the surface level nature of the project. Additionally, the screening tool did not identify any geologically or geotechnically relevant sensitive features. Due to the lack of relevant sensitive features and the nature of the proposed development, a Geotechnical Assessment will not be undertaken.

10.15 Ambient Air Quality

EAP's Observation and Conclusion:

For this current environmental process, an air quality assessment is not anticipated to be required as the planned construction should not have significant air quality emissions impact due to the nature of the proposed works to repair and replace damaged road and culverts. Additionally, the screening tool did not identify any air quality relevant sensitive features. Due to the nature of the proposed development, an air quality assessment will not be undertaken.

10.16 Hydrology Assessment

EAP's Observation and Conclusion:

Although the 30 July 2026 DFFE Screening Tool identifies a Hydrology Assessment, a separate standalone hydrological assessment is not considered necessary for the proposed activity. The proposed development involves the replacement and realignment of an existing road crossing and associated culvert infrastructure. The hydraulic and flood-related aspects of the proposed crossing have been addressed through engineering design, which was undertaken in accordance with the SANRAL Drainage Manual (6th Edition) and considers the applicable design flood return period and hydraulic

design criteria. The engineering documentation further addresses the hydraulic openings, road level, inlet and outlet structures, apron slabs and associated erosion protection.

The aquatic specialist has also reviewed the updated engineering design and, in correspondence dated 3 August 2026, confirmed that the proposed structure, which provides substantially larger hydraulic openings than the existing crossing, is supported in principle from an aquatic perspective, subject to implementation of the recommended mitigation measures. Stormwater, erosion and sediment management measures are further addressed through the EMPr.

Accordingly, the hydrological considerations relevant to the proposed crossing are adequately addressed through the engineering assessment, Aquatic Biodiversity Impact Assessment and associated environmental management measures. A separate Hydrology Assessment is therefore not proposed.

11. Summary of applicable specialist studies

Specialist assessment	Applicability	Assessment Protocol
Agriculture Impact Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Agriculture_Assessment_Protocols.pdf
Landscape/Visual Impact Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
Archaeological and Cultural Heritage Impact Assessment	No, a statement will be obtained from the specialist regarding the site sensitivity.	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforHIA.pdf
Palaeontology Impact Assessment		https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/GuidanceforPIA.pdf
Terrestrial Biodiversity Impact Assessment	Yes	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf
Aquatic Biodiversity Impact Assessment	Yes	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Aquatic_Biodiversity_Assessment_Protocols.pdf
Hydrology Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
Noise Impact Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Noise_Impacts_Assessment_Protocol.pdf
Traffic Impact Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf

Geotechnical Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
Ambient Air Quality Impact Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
Socio-Economic Assessment	No	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_General_Requirement_Assessment_Protocols.pdf
Plant Species Assessment	Yes, (as part of Terrestrial Biodiversity Impact Assessment)	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Plant_Species_Assessment_Protocols.pdf
Animal Species Assessment	Yes	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/Gazetted_Animal_Species_Assessment_Protocols.pdf

12. Conclusion

From the findings of this report, SES undertook the following assessments:

Terrestrial Biodiversity Compliance Statement
Aquatic Biodiversity Impact Assessment
Plant Species Compliance Statement
Animal Species Compliance Statement
Avifaunal Compliance Statement

The relevant specialist assessments were undertaken and have contributed to the environmental assessment.

All assessments were undertaken in line with the protocols as promulgated for the respective themes. The requirements of the protocols were incorporated into the Terms of References of the various specialists.