



Site Sensitivity Verification Report

SECTION 24G RETROSPECTIVE
ENVIRONMENTAL AUTHORISATION
APPLICATION FOR THE CLEARING OF
VEGETATION ON FARM CA 974/1,
MISTY CLIFFS, CAPE TOWN

PREPARED IN COMPLIANCE WITH THE REQUIREMENTS
OF THE EIA REGULATIONS, 2014 (AS AMENDED) AND
THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT,
ACT NO. 107 OF 1998 (AS AMENDED)

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1 INTRODUCTION

1.1 Screening Tool and Protocols for Assessment

The Minister of Environment, Forestry and Fisheries on 5 July 2019 promulgated regulations requiring the compulsory submission of a report generated by the national web based environmental screening tool, when submitting applications for environment authorisation (GN 960 of 2019). The screening tool generates a report based on mapping of environmental sensitivities and on proximity to other features such as defence installations and civil aviation installations. On 20 March 2020, the Minister published Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of sections 24(5)(a) and (h) and 44 of the National Environmental Management Act, 1998 (GN 320 of 2020). These Procedures prescribe the general requirements for undertaking site sensitivity verification and for protocols for the assessment and minimum report content requirements of environmental impacts for specific environmental themes identified by the screening tool. Further Protocols were gazetted on 30 October 2020 for terrestrial plant and animal species assessment in GN 1150 of 2020.

1.2 Sensitivity Verification

Each set of specialist protocols provides for a Site Sensitivity Verification to be undertaken by an Environmental Assessment Practitioner (EAP) or suitable specialist, prior to commencing with specialist assessment and reporting on the identified themes. The purpose of a site sensitivity verification is to confirm the current use of the land and potential environmental sensitivity of the site, and to compare these with the sensitivity mapped or identified by the screening tool. The outcome of the verification must be recorded in the form of a site sensitivity verification report (**this report**) that is submitted together with the application for environmental authorisation and confirms or disputes the environmental sensitivities mapped by the screening tool. The purpose of the site sensitivity verification is to confirm the actual state of the site as compared with that what has been identified by the screening tool. The site sensitivity verification is intended to confirm or refute the need to undertake specialist studies as identified in the screening report.

This report is prepared in accordance with the requirements of the Protocols as published in terms of GN 320 of 2020 and GN 1150 of 2020. It has been prepared by a registered EAP (Jeremy Rose of Infinity Environmental, EAP Reg No: 2019/1116) based on a desktop analysis, several site inspections, and other available information.

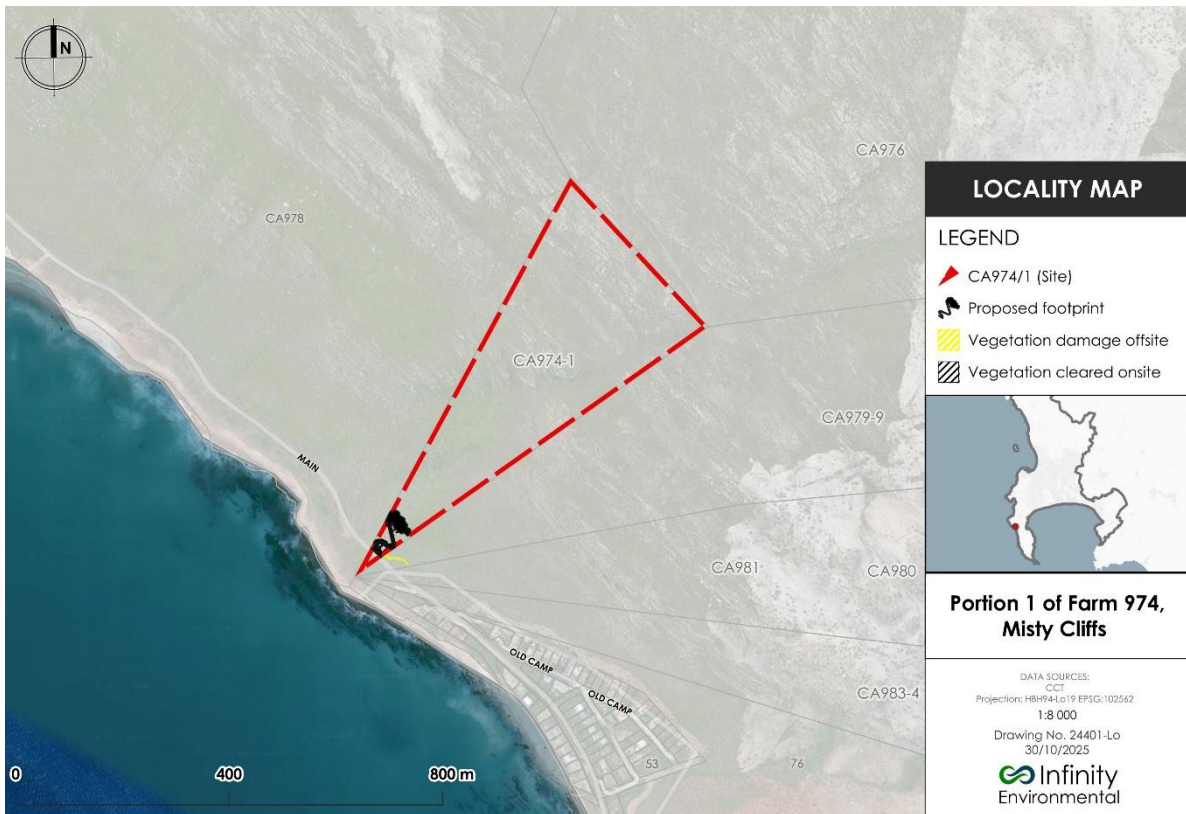


Figure 1-1: Locality map

1.3 Methodology

The site sensitivity verification included the following activities:

- A desktop review, including -
 - » City of Cape Town's aerial imagery, including imagery from 1996 to present,
 - » Aerial imagery available via the Western Cape Department of Agriculture's (WCDoA) CapeFarmMapper Version 3; and
- Screening-level assessments by specialists, including a site visit by wetland specialist Toni Belcher (Wednesday 12 March), botanical specialist Nick Helme (25 July 2024) and archaeologist Jonathan Kaplan (25 February 2025).
- Site inspection on 26 February 2025 and 4 April 2025, which included walking over all accessible parts of the site and consideration of the vegetation, soils, and topography.

This report presents the outcomes of the site sensitivity verification as described above.

2 NATIONAL ENVIRONMENTAL SCREENING TOOL SENSITIVITIES FOR THE SITE

The National Environmental Screening Tool Report (generated at <https://screening.environment.gov.za/>) identifies the following mapped environmental sensitivities for the subject sites. It notes that the sensitivities are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified by the Screening Tool can be confirmed.

Theme	Sensitivity			
	Very High	High	Medium	Low
Agriculture				X
Animal species			X	
Aquatic biodiversity	X			
Archaeological and cultural heritage				X
Civil aviation			X	
Defence				X
Palaeontology		X		
Plant species			X	
Terrestrial biodiversity	X			

In terms of the Protocols, the themes above require a site sensitivity verification by the EAP, followed by specialist assessments for those sensitivities confirmed by the EAP.

The sections below provide an overview of the verified site sensitivity.

Other specialist studies unrelated to the identified themes but listed in the screening tool report, included:

- Landscape/Visual Impact Assessment
- Noise Impact Assessment
- Traffic Impact Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Ambient Air Quality Impact Assessment

In terms of the Protocols, the themes above require a site sensitivity verification followed by specialist assessments of confirmed sensitivities. The sections below provide an overview of the verified site sensitivity.

3 FINDINGS

3.1 Current Land Use

The site is classified as a Critical Biodiversity Area (1a), zoned for Agricultural use and was a greenfield site until the unauthorised commencement of vegetation clearing in February 2025. According to the botanical scoping report, which was based on a site inspection in July 2024, the site was in relatively pristine condition with 90% of the site covered in indigenous vegetation. The remaining 10% was bare Table Mountain Group sandstone.

In February 2025, the applicants, Aaron Samuels and Rachael Joseph, appointed a civil contractor to commence construction of an access road to the future proposed site of the residential home. A total of approximately 600 m² of indigenous vegetation was impacted, with 400 m² cleared from the proposed site (Farm 974/1) and 200 m² damaged on the adjacent site (Farm 979/9) before the applicant was made aware of the need for – and lack of – environmental authorisation. The applicant intends to rectify the unlawful commencement and will also seek environmental authorisation to continue with the proposed development of the carriageway, access road and house.

The surrounding land use includes farm portions to the north (farm 976-RE) and east (farm 979) which form part of the Table Mountain National Park and are classified as Protected Areas, zoned for Agricultural uses. The farm portions to the west (farm 978) are classified as a Conservation Area and form part of the Soetwater Reserve, zoned as a Limited Use Zone. The farm portions southeast of the site along the coastline are classified as Critical Biodiversity Areas (1a) and zoned for Residential, Transport, Open Space and Agricultural uses.



Photograph 1: Aerial image of the site including the vegetation cleared on the site and visible trail of trampled vegetation on the adjacent land (Photo taken on 26 February 2025 by Jeremy Rose)



Photograph 2: Upper section of the site above the proposed development dominated by Peninsula Sandstone Fynbos (Photo taken on 26 February 2025 by Jeremy Rose)



Photograph 3: Overhead aerial image of the vegetation cleared on the site and visible trail of trampled vegetation on the adjacent land (Photo taken on 26 February 2025 by Jeremy Rose)

3.2 Terrestrial Biodiversity

According to the WCDoA's online CapeFarmMapper version 3, the site is located in the West Strandveld Bioregion and Southwest Fynbos Bioregion. Below the site along the coastline is the Cape Seashore Vegetation bioregion. According to the 2024 National Vegetation Map, the vegetation on the lower section of site is classified as Cape Flats Dune Strandveld (Endangered on a National basis) and the vegetation on the upper regions of the site is classified as Peninsula Sandstone Fynbos (Critically Endangered on a National basis). An impact assessment compiled by Nick Helme identified that the development footprint falls within the Cape Flats Dune Strandveld which also has elements of the nearby Peninsula Sandstone Fynbos. According to Helme (2025), there is a gradual transition as one moves upslope from 20masl to 60 masl with increasing elements of Peninsula Sandstone Fynbos dominating the upper regions of the site. CapeFarmMapper also indicates that the site falls within a Critical Biodiversity Area (CBA), predominantly classified as CBA category 1 (likely natural condition) with the areas bordering the main road classified as CBA category 2 (likely degraded condition).



This site sensitivity verification **confirms** the Screening Tool rating of **Very High sensitivity** for the Terrestrial Biodiversity theme. The Terrestrial Biodiversity Impact Assessment is incorporated in the Botanical Impact Assessment conducted by Nick Helme (Pr. Sci. Nat).



Photograph 4: View looking northwest from the site over Cape Flats Dune Strandveld vegetation (Photo taken on 25 February 2025 by Jonathan Kaplan)

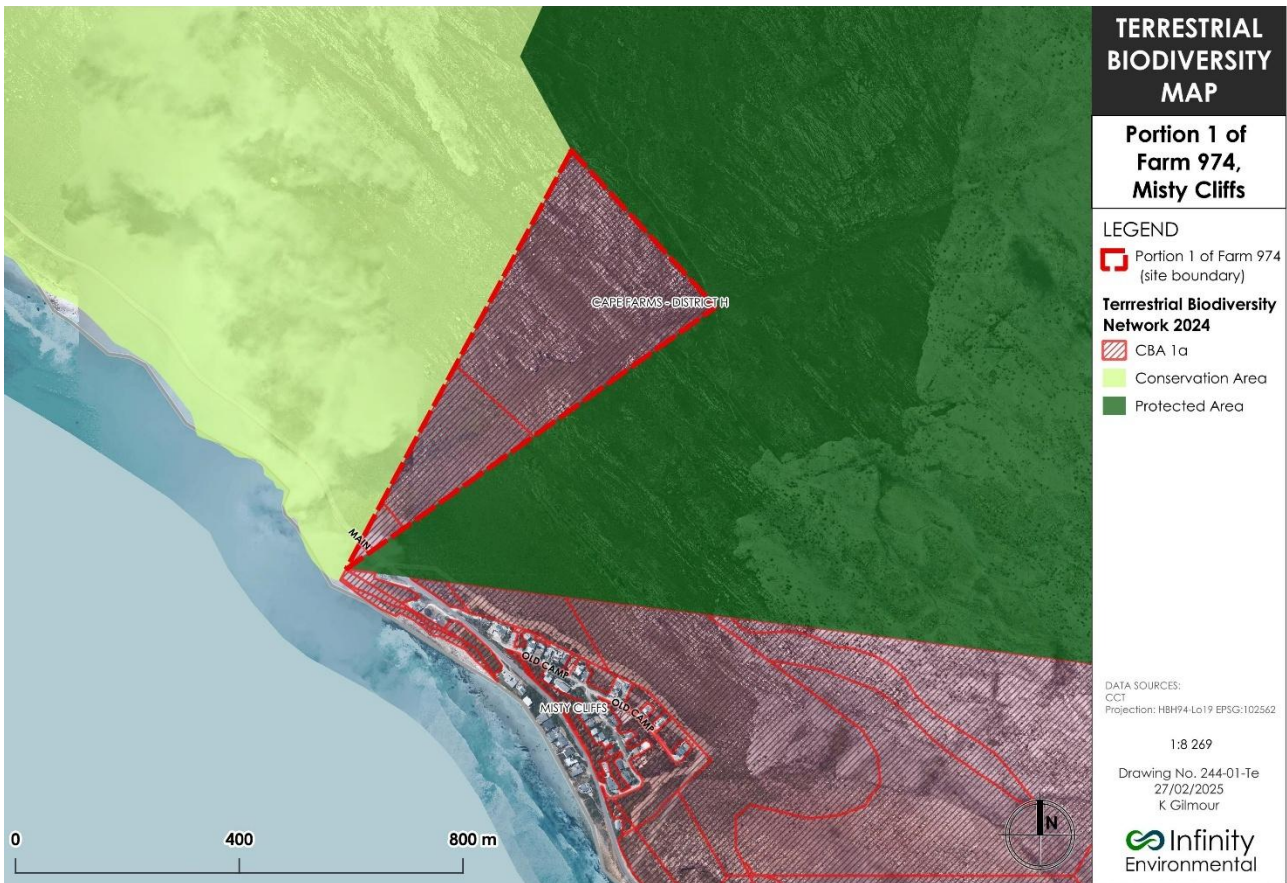


Figure 3-1: Terrestrial biodiversity map indicating the 2024 Terrestrial Biodiversity Network

Table 1. Summary of terrestrial biodiversity features for the development footprint

Bioregion	Ecosystem Type	IUCN RLE Status	Dominant species Identified
West Strandveld Bioregion	Cape Flats Dune Strandveld	Endangered	<i>Metalasia densa</i> , <i>Tarchonanthus littoralis</i> , <i>Pseudopentameris macrantha</i> and <i>Erica plukenetii</i>
Southwest Fynbos Bioregion	Peninsula Sandstone Fynbos	Critically Endangered	<i>Protea lepidocarpodendron</i>

3.3 Aquatic biodiversity

The site falls within the Table Mountain Strategic Water Source Area (SWSA). Desktop studies using QGIS City of Cape Town 2024 Aerial Imagery indicated that there is a stream flowing through the site and the botanical specialist noted wetland habitat on site during the inspection, which was confirmed by the aquatic specialist. The aquatic specialist delineated the drainage corridor, seep wetlands and associated recommended buffer (Figure 3-2), and stated that the overall impact of the proposed development on aquatic resources and ecosystems is expected to be insignificant due to the proximity and small scale of the single residential development in relation to aquatic ecosystems on the site.

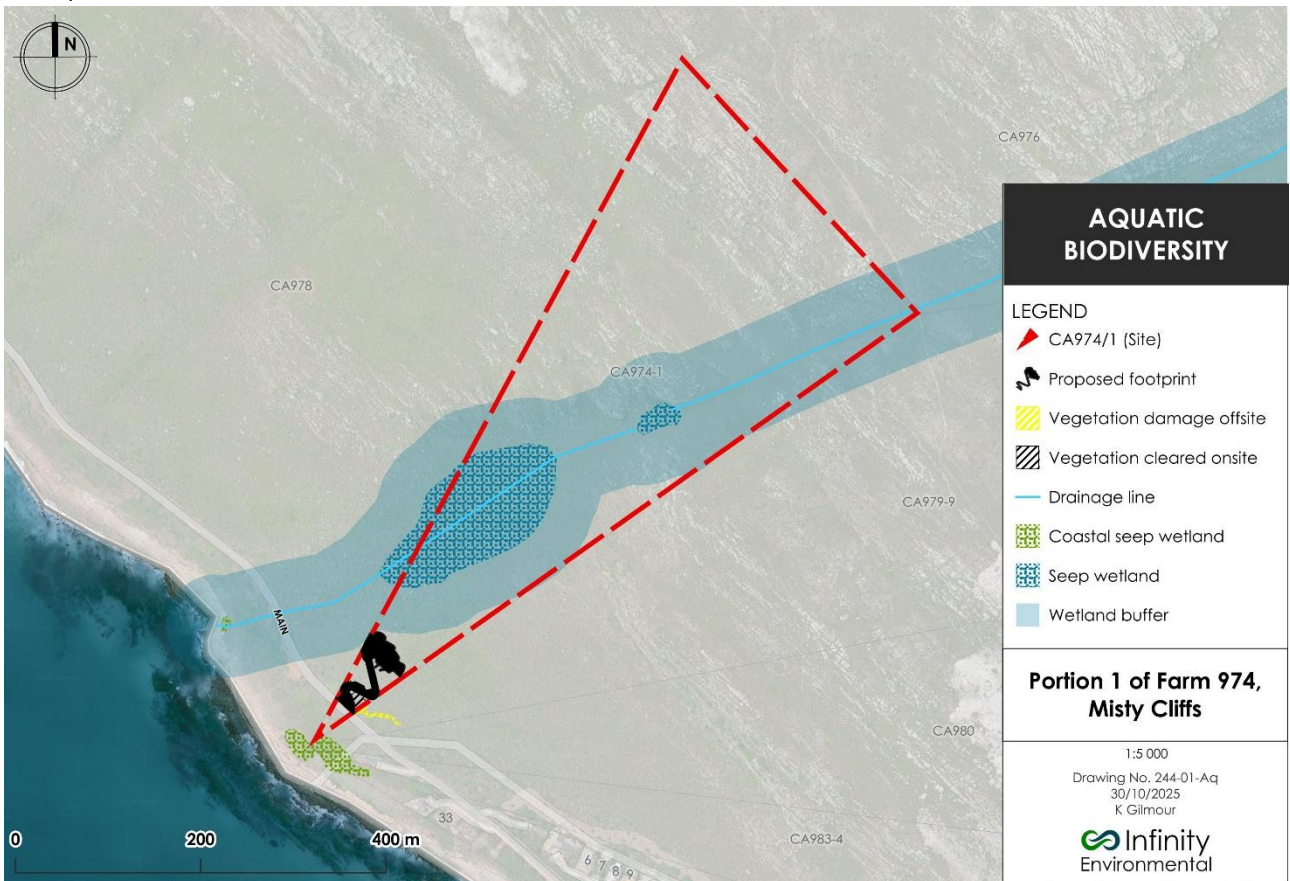


Figure 3-2: Aquatic sensitivities on and adjacent to the site (Farm 974/1) extracted from the freshwater specialists comment (Belcher, 2025).



This site sensitivity verification **disputes** the Screening Tool rating of **Very High sensitivity** for the **Aquatic Biodiversity** theme and confirms aquatic sensitivity to be **non-existent**. An aquatic Compliance Statement was prepared by Antonia Belcher (Pr.Sci.Nat.) to inform the S24G Application and EMPr.

3.4 Agriculture Theme

The site's **Low** sensitivity rating for the agricultural theme results from its identification as having low agricultural land capability. This assessment is based on the National Land Capability dataset which considers climate and soil type but does not consider existing land use. The site is steep and falls adjacent to the Table Mountain National Park. There is no evidence of land use associated with agriculture recorded for the site, which has remained vacant and covered in indigenous vegetation until the unauthorised commencement of vegetation clearing in February 2025.



This site sensitivity verification **disputes** the Screening Tool rating of **Low sensitivity** for the agriculture theme and **confirms** the agricultural sensitivity to be **non-existent**. No agricultural assessment or compliance statement is required.

3.5 Animal Species Theme

The site is mapped as having a **Medium to High** sensitivity rating for the animal species theme, although the development footprint falls within the **Medium** sensitivity area. The mapped species distributions justifying this sensitivity rating, as noted in the screening tool report, are responded to as follows:

Circus maurus (Black Harrier): The Black Harrier is a Near-Endemic and Endangered species whose population is estimated at fewer than 1000 individuals (BirdLife International, 2021a). Its distribution includes both coastal Renosterveld and upland Grassland and Fynbos areas, and its preferred breeding habitat is coastal and upland marshes with tall shrubs or reeds. This species prefers open ground with low vegetation for hunting, where it feeds on a diet comprising mainly of small mammals. According to Helme (2025), the habitat in the study area, and particularly in the marshy section about 200m above the study area, is potentially good Black Harrier habitat. However, there are no records of Black Harrier for the Peninsula on iNaturalist, and only a few (<2) records for the Peninsula in the SA Bird Atlas Project, so the balance of evidence would suggest that this species does not breed on site nor on the property.

Xenopus gilli (Cape platanna / Cape clawed frog): The Cape platanna is endemic to the southwestern area of South Africa on the Cape Peninsula, nearby Cape flats and southwestern Cape coast (SANBI). It is only found in Cape fynbos heathland, breeding in winter and aestivating if waterbodies dry up. The wetland habitat on site is unlikely to support this species which thrives in blackwater wetlands, while the site has largely subsurface flows.

Table 2. Summary of animal biodiversity for the site

Species	Common name	Habitat	IUCN RL Status	Habitat within site footprint
<i>Circus maurus</i>	Black Harrier	Coastal Renosterveld, upland Grassland and Fynbos areas	Endangered	None on site
<i>Xenopus gilli</i>	Cape platanna / Cape clawed frog	Cape fynbos heathland	Endangered	None on site

The development footprint is adjacent to the main road and the extent lies below the 42 m contour, impacting a small area (~0.08 ha) of the site (~15 ha). The rest of the site is not anticipated to be impacted by the proposed development, and impacts on these species are not anticipated during the project. **In summary**, the proposed project is not expected to impact significantly on any of the animal species identified by the screening tool, due to its location adjacent to the main road and small scale of the development.



This site sensitivity verification therefore **disputes** the Screening Tool rating of **Medium** sensitivity for the animal species theme, and confirms the sensitivity to be **nil**.

3.6 Archaeological and Cultural Heritage Theme

The site is mapped as having a **Low** sensitivity rating for the archaeological and cultural heritage theme. A scoping assessment was done by **heritage specialist Jonathan Kaplan** and a Section 38 Notification of Intent to Develop (NID) was submitted to provincial heritage resources authority, Heritage Western Cape (HWC). The HWC comment supported the heritage specialist's recommendation and confirmed that no further impact assessments are required.



This site sensitivity verification **confirms** the Screening Tool rating of **Low sensitivity** for the **Archaeological and Cultural Heritage theme**. An NID prepared by an archaeologist was submitted to Heritage Western Cape and their comment received confirming no further impact assessments are required.

3.7 Civil Aviation Theme

The site is mapped as **Medium** sensitivity for being:

- Between 15 and 35 km from a civil aviation radar (medium sensitivity).
- Between 15 and 35 km from a major civil aviation aerodrome (medium sensitivity).

The site is located approximately 30 km southwest of the Cape Town International Airport and approximately 30 km south-southwest of Ysterplaat Airbase. The proposed activity is the development of a single residential dwelling. Any impact by the development on civil aviation radars is highly unlikely as the activity is taking place on the slopes of a mountain and will not require the erection of any structures above the height of surrounding rocky outcrops. As a result, a compliance statement will not be necessary.



This site sensitivity verification therefore **disputes** the Screening Tool rating of **Medium sensitivity** for the civil aviation theme, and **confirms** that the site for the development of a single residential dwelling, in the context of the proposed activity, has **no** sensitivity. No negative impacts on the civil aviation installation are expected.

3.8 Defence Theme

The site is mapped as **Low** sensitivity for the defence theme. This rating is supported as there are no military-related activities near the project site. The closest military base is the Simons Town Naval Base approximately 7km east of the site and Silvermine Military base approximately 12km northeast of the site. It is not anticipated that the proposed development will interfere with defence operations and a compliance statement is not required.



This site sensitivity verification therefore **disputes** the Screening Tool rating of **Low sensitivity** for the defence theme and confirms that the site has no sensitivity related to the defence theme.

3.9 Palaeontology Theme

The site is identified as having **Medium and High** palaeontological sensitivity, with the development footprint falling within an area classified as **Medium** sensitivity. A palaeontologist, John Pether, was consulted and the following information obtained:

"The site of the proposed dwelling overlooking Perdebank is on the talus apron fringing the steep slopes of the TMG Peninsula Formation, as evident in the NID images. The 250k Geological Map 3318 Cape Town mistakenly maps the mountain footslope talus apron as the Holocene aeolian Strandveld Fm. dunes. Hence the SAHRIS PalaeoMap classifies that polygon as MEDIUM/YELLOW. The more detailed 50k geomap (3418AB & AD Cape Peninsula) corrects this error, as reproduced below.

The talus/colluvial apron is not an environment favourable to fossil bone preservation due to overall slow overall burial rates, excluding infrequent slumping in places. It is possible that animal lairs with bones, such as those of brown hyaenas and porcupines, may occur in spaces between chinked boulders.


However, due to the typically slightly acidic groundwater draining off the Peninsula Fm. mountains, the long term preservation of any fossil bones at depth in the porous talus is unlikely. Accordingly, the talus has VERY LOW palaeontological sensitivity. An alert for archaeological material and the "just in case" HWC FFP applies. The Peninsula Fm is rated HIGH/RED due to trace fossils such as worm burrows and trilobite tracks. However, these are sparse and mostly in thin mudrock intervals which weather easily. The occurrence of ex-situ boulders possibly with trace fossils in the talus is not expected to impact the palaeontological resources of the Peninsula Formation."

It is therefore very unlikely that fossil bone or palaeontological artefacts are present within the proposed development footprint.

 This site sensitivity verification therefore **disputes** the Screening Tool rating of **Medium sensitivity** for the palaeontological theme, and **confirms** that the site has **no sensitivity**.

3.10 Plant Species Theme

The site is mapped as having a **Medium** sensitivity rating due to the presence of Medium sensitivity plant species. The vegetation type that occurs in this area is endangered Cape Flats Dune Strandveld and critically endangered Peninsula Sandstone Fynbos, according to the botanical scoping report, and four plant species of conservation concern (SCC) were identified by the botanical specialist Helme (2025).

 This site sensitivity verification **confirms** the Screening Tool rating of **Medium sensitivity** for the **Plant Species theme**. The Botanical Impact Assessment was compiled by Nick Helme.

4 OTHER SPECIALIST STUDIES IDENTIFIED IN THE SCREENING TOOL REPORT

4.1 Landscape and Visual Impact Assessment

The proposed single residential dwelling will be located on the slopes of the Misty Cliffs mountains and the proposed design incorporates elements that reduce the visual impact of the house from the main road. These include the building being at ground level with stone cladding on the walls and planted roofs. It is the opinion of the heritage specialist that a landscape and visual assessment is not required. The proposed development aligns with the following aspect of the Misty Cliffs Development Guidelines (2010):

- Building components should be expressed in groupings of smaller elements that form protected outdoor space, rather than large monolithic blocks.
- Articulate buildings and walls and other structures in such a way as to maintain the flow of vegetation around and between buildings and neighbours.
- Allow for the existing features of the site such as indigenous trees and notable rock formations to be retained wherever possible.
- Design for energy efficiency, including choice of building materials, and consider saving and storing water from roofs, and economising on electricity by including solar water heating.

The proposed development aligns with the above guidelines in the following ways. It consists of a small, single residential development designed to protect the outdoor space by incorporating stone-faced exterior walls and a stepped design which accommodates the natural contours of the site. The development also includes terraces and the rehabilitation of indigenous vegetation surrounding the house. The location of the proposed development avoids (where possible) and minimises negative impacts on SoCC and notable rock formations. Solar water heating systems and low demand lighting is included in the design, as well as a rain harvesting system (gutters and rainwater tanks).

4.2 Hydrological Impact Assessment

The proposed upgrades are not expected to have any effect on hydrological functionality or flooding in the catchment. The proposed development is a small single residential development which is not expected to impact any aquatic resources or ecosystems according to the comment received from the freshwater specialist.

4.3 Socio-economic Impact Assessment

A socio-economic assessment is not required as the Need and Desirability considerations required as part of the S24G Report are sufficient to address the socio-economic impact of the proposed development.

4.4 Traffic Impact Assessment

The proposed project will include the installation of road signs and construction of a carriageway and driveway. The impacts on traffic will be assessed as part of the Basic Assessment process.

5 CONCLUSION

The site sensitivity verification is intended to confirm or refute the need to employ specialists as identified in the Screening Tool Report.

Based on the findings in the Site Verification Report, it is confirmed that a Botanical (including Terrestrial) Impact Assessment is required. The Aquatic Compliance Statement was compiled by Antonia Belcher and the Botanical Impact Assessment compiled by Nick Helme. An NID was submitted to Heritage Western Cape by heritage specialist Jonathan Kaplan which confirmed a Heritage Impact Assessment is not required.

This SSV confirms that no further specialist input apart from those identified above are required for the safe and effective undertaking of the proposed project.

6 REFERENCES

Stapleton, P & Hewitt, J. 1927. *Xenopus gilli*. RedList Assessment. South African National Biodiversity Institute. Available: <https://speciesstatus.sanbi.org/assessment/last-assessment/1431/> [Accessed 25 March 2025].

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Bircher, T. 2025. Aquatic comment on the presence of watercourses/wetland areas and risk assessment on portion 1 of farm 974, Misty Cliffs, Cape Town.

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