

**TERRESTRIAL FAUNAL AND AVIFAUNAL SPECIES COMPLIANCE
STATEMENT REPORT FOR THE PROPOSED DEVELOPMENT OF A
SECTIONAL TITLE RETIREMENT COMPLEX AND
ARCHAEOLOGICAL MUSEUM WITH TOURIST FACILITIES ON
PORTIONS 59 AND 62 OF THE FARM BRAKKLOOF 443,
PLETTENBERG BAY, BITOU MUNICIPALITY**

February 2026



Prepared for:

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Table of contents

Specialist details and expertise	1
Declaration of independence by the independent person who compiled a specialist report or undertook a specialist process	3
1. Introduction	5
2. Terms of Reference	6
2.1. <i>General legislature pertaining to this report</i>	6
2.2. <i>Other sources consulted</i>	7
3. Reporting protocol	7
4. Overview of the study area	9
4.1 <i>Geographic location</i>	9
4.2 <i>Vegetation</i>	11
4.4 <i>Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)</i>	13
4.6 <i>Freshwater features</i>	15
5. Study methodology	17
5.1 <i>Study aims</i>	17
5.2 <i>Desktop assessment</i>	17
5.2.1 <i>Mammals</i>	18
5.2.2 <i>Amphibians</i>	18
5.2.3 <i>Avifauna</i>	18
5.2.4 <i>Butterflies</i>	19
5.3 <i>Field survey</i>	19

6. Assumptions and limitations	22
7. Faunal habitat types within the study area	22
8. Faunal and avifaunal composition within the study area	27
8.1 <i>Mammals</i>	27
8.3.1 Desktop assessment	27
8.3.2 Field survey	27
8.2 <i>Amphibians</i>	31
8.2.1 Desktop assessment	31
8.2.2 Field survey	31
8.3 <i>Avifauna</i>	32
8.3.1 Desktop assessment	32
8.3.2 Field survey	33
8.4 <i>Butterflies</i>	37
8.4.1 Desktop assessment	37
8.4.2 Field survey	37
8.5 <i>Faunal and avifaunal diversity within the study area</i>	39
9. Species of Conservation Concern	40
10. Evaluation of Site Ecological Importance (SEI)	47
10.1 <i>Evaluating SEI for habitats in the study area</i>	47
10.2 <i>SEI of habitats in the study area</i>	52
11. Current impacts, project-related impacts, and mitigation measures and impact management actions	54
11.1 <i>Current impacts</i>	54
11.2 <i>Proposed development</i>	54
11.3 <i>Anticipated project impacts</i>	58
11.4 <i>Impacts</i>	59

11.4.1 Destruction and loss of habitats	59
11.4.2 Direct mortality of, or displacement of fauna	60
11.4.3 Noise and vibration through machinery and people (construction phase)	61
11.4.4 Introduction of dispersal barriers to faunal movement within the landscape	61
11.4.5 Vibration and noise through machinery and people (operational phase)	62
11.4.6 Predation on the resident fauna by domestic dogs and cats	62
12. Conclusion	63
<i>12.1 Listed sensitivity in the DFFE Screening Tool Report</i>	63
<i>12.2 Overlap with Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)</i>	63
<i>12.3 Conclusion</i>	64
13. Conditions to which this statement is subjected	64
14. References	66
Appendix A	72
Appendix B	74
Appendix C	75
Appendix D	83
Appendix D	84
List of figures	

Figure 1 Relative Animal Species Sensitivity Map retrieved for the study area by the DFFE Screening Tool (https://screening.environment.gov.za/screeningtool/).	8
Figure 2 Spatial location of the study area relative to major settlements on a broad scale (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).	10
Figure 3 Spatial extent of the study area at a finer spatial scape (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).	10
Figure 4 Vegetation type across the study area (VEGMAP 2024 Beta; map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).	12
Figure 5 Vegetation types over the study area as outlined in Vlok (2009, updated 2026).	12
Figure 6 Previously transformed areas which are of a low sensitivity from a botanical perspective as outlined in Vlok (2009, updated 2026).	13
Figure 7 Spatial location of Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) overlapping with the study area (information sourced from Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).	14
Figure 8 Distribution of freshwater features relative to the study area (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).	15
Figure 9 Mapped freshwater features, inclusive of buffer zones, over the study area (as per the aquatic specialist assessment, Fordham, 2026).	16
Figure 10 Spatial tracks recorded by GPS for all the search meanders across the study area over the surveying period.	20
Figure 11 Spatial locations of all the faunal observations across the study area over the surveying period.	21
Figure 12 A broad indication of the spatial extent of habitat types in the study area. Photo localities (A to F) correspond to the habitat photos in Table 2.	24
Figure 13 Photographic evidence of the different mammal species recorded in the study area. A) Tunnel (arrowed) of the Cape Golden Mole (<i>Chrysochloris asiatica</i>). B) Track of the Cape Grysbok (<i>Raphicerus melanotis</i>). C) Chacma Baboon (<i>Papio ursinus</i>). D) Mounds of the African Mole-rat (<i>Cryptomys hottentotus</i>). E) Feeding	

hole of the Cape Porcupine (<i>Hystrix africaeaustralis</i>). F) Runs (arrowed) of the Four-striped Grass Mouse (<i>Rhabdomys pumilio</i>). G) Burrow of the Aardvark (<i>Orycteropus afer</i>).	29
Figure 14 Spatial locations of the different mammal species recorded within the study area.	30
Figure 15 Photographic evidence of different avifaunal species recorded in the study area. A) Yellow-billed Duck (<i>Anas undulata</i>). B) Speckled Pigeon (<i>Columba guinea</i>). C) Red-knobbed Coot (<i>Fulica cristata</i>). D) Neddicky (<i>Cisticola fulvicapilla</i>). E) Karoo Prinia (<i>Prinia maculosa</i>). F) Cape Siskin (<i>Crithagra totta</i>). G) Greater Striped Swallow (<i>Cecropis cucullata</i>). H) Southern Boubou (<i>Laniarius ferrugineus</i>). I) Cape Wagtail (<i>Motacilla capensis</i>). J) Cape Robin-Chat (<i>Cossypha caffra</i>). K) Fiscal Flycatcher (<i>Melaenornis silens</i>). L) Southern Double-collared Sunbird (<i>Cinnyris chalybeus</i>). M) Southern Grey-headed Sparrow (<i>Passer diffusus</i>). N) Yellow Bishop (<i>Euplectes capensis</i>). O) Cape Weaver (<i>Ploceus capensis</i>). P) Cape Bulbul (<i>Pycnonotus capensis</i>). Q) Common Starling (<i>Sturnus vulgaris</i>).	34
Figure 16 Spatial locations of the different avifaunal species recorded within the study area.	36
Figure 17 Photographic evidence of one of the different butterfly species recorded in the study area. A) Almeida Copper (<i>Aloeides almeida</i>).	37
Figure 18 Spatial locations of the different butterfly species recorded within the study area.	38
Figure 19 Spatial representation of the SEI of habitats within the study area.	53
Figure 20 Site development plan (SDP) of the proposed Sectional Title Retirement Complex over the residential footprint.	55
Figure 21 Site development plan (SDP) of the proposed archaeological museum, amphitheatre and parking zones over the museum footprint.	56
Figure 22 Site development plan (SDP) of the proposed development.	57

List of tables

Table 1 List of Species of Conservation Concern (SCC) identified in the DFFE Screening Tool Report (<https://screening.environment.gov.za/screeningtool/>) for the study area. For each, the listed sensitivity (possibility of occurrence within the study

area), scientific name and common name is shown, along with its current IUCN status. The name of “Sensitive Species 8” is purposefully omitted, given the sensitivity of this species. 8

Table 2 Habitat locations, habitat descriptions and visual representations of the single habitat type within the study area. Location designations (A to F) correspond to the photo locations in Figure 12. 25

Table 3 Probability of occurrence of specific SCC in the study area. For each species, the taxonomic Family, scientific name and common name is shown, along with its current classification under the IUCN Red List of Threatened Species (IUCN, 2021). In addition, the species’ preferred habitat and the probability that the species occurs within the study area is given, along with a justification for listing this probability. 41

Table 4 Conservation importance (CI) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 48

Table 5 Functional integrity (FI) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 49

Table 6 Matrix for calculating Biodiversity Importance (BI) (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 50

Table 7 Receptor Resilience (RR) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 50

Table 8 Matrix for calculating Site Ecological Importance (SEI) (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 51

Table 9 Guidelines for interpreting SEI in the context of the proposed development activities (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020). 51

Table 10 Evaluation of SEI for habitats within the study area. BI = Biodiversity Importance, RR = Receptor Resilience. 52

Appendix A Desktop species list of the mammal species which have a distribution overlapping with the study area (constructed with reference to Skinner and Chimimba, 2005). Species in bold have been previously recorded within the study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species. 72

Appendix B Desktop species list of the amphibian species which have a distribution overlapping with the study area (constructed with reference to Preez and Carruthers, 2009). Species in bold have been previously recorded within the study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species. 74

Appendix C Desktop species list of the avifaunal species which have been recorded in the pentad (3405_2320) which overlaps the study area (the South African Bird Atlas Project 2, <https://sabap2.birdmap.africa/>). To create this species list, the species observed in this pentad was included, noting the total number of observations and the latest date the species was recorded (both shown). Furthermore, for each, the common group name, common species name, genus and species is shown. Species in bold represent avifaunal species of conservation concern (SCC). 75

Appendix D Desktop species list of the reptile species which have been previously recorded within the broader study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species. 83

Appendix E Species list of the faunal species recovered within the study area during the field survey. For each, the taxonomic Order, Family, species binomial name and species common name are shown, along with the current IUCN Red List classification of the species, and the number of records of the species during the surveying period. 84

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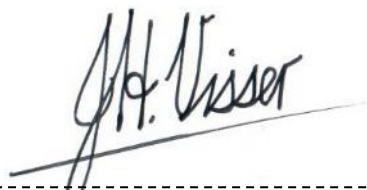
- 14 Peer-reviewed publications in high impact national and international scientific journals on the patterns and processes which drive and maintain faunal biodiversity, as well as on aspects of faunal biology and ecology
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- Contributor on the National Biodiversity Assessment 2018: The status of South Africa's ecosystems and biodiversity. Synthesis Report. South African National Biodiversity Institute, an entity of the Department of Environment, Forestry and Fisheries, Pretoria.

Declaration of independence by the independent person who compiled a specialist report or undertook a specialist process

I, Dr Jacobus Hendrik Visser, as the appointed independent specialist hereby declare that I:

- act/ed as the independent specialist in this application;
- regard the information contained in this report as it relates to my specialist input/study to be true and correct, and
- do not have and will not have any financial interest in the undertaking of the activity, other than remuneration for work performed in terms of the NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act;
- have no and will not have any vested interest in the proposed activity proceeding;
- have disclosed, to the applicant, EAP and competent authority, any material information that have or may have the potential to influence the decision of the competent authority or the objectivity of any report, plan or document required in terms of the NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act;
- am fully aware of and meet the responsibilities in terms of NEMA, the Environmental Impact Assessment Regulations and any specific environmental management Act, and that failure to comply with these requirements may constitute and result in disqualification;
- have ensured that information containing all relevant facts in respect of the specialist input/study was distributed or made available to interested and affected parties and the public and that participation by interested and affected parties was facilitated in such a manner that all interested and affected parties were provided with a reasonable opportunity to participate and to provide comments on the specialist input/study;
- have ensured that the comments of all interested and affected parties on the specialist input/study were considered, recorded and submitted to the competent authority in respect of the application;

- have ensured that the names of all interested and affected parties that participated in terms of the specialist input/study were recorded in the register of interested and affected parties who participated in the public participation process;
- have provided the competent authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not; and
- am aware that a false declaration is an offence.



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TERRESTRIAL FAUNAL AND AVIFAUNAL SPECIES COMPLIANCE STATEMENT REPORT FOR THE PROPOSED DEVELOPMENT OF A SECTIONAL TITLE RETIREMENT COMPLEX AND ARCHAEOLOGICAL MUSEUM WITH TOURIST FACILITIES ON PORTIONS 59 AND 62 OF THE FARM BRAKKLOOF 443, PLETTENBERG BAY, BITOU MUNICIPALITY

1. Introduction

Star Gate Innovations (Pty) Ltd is proposing the development of a Sectional Title Retirement Complex (residential development) and archaeological museum with tourist facilities on portions 59, 62 and 63 of the Farm Brakkloof 443, Plettenberg Bay, Bitou Municipality. The three properties are collectively known as Stargate Farm, situated in the Plettenberg Municipal Area to the southwest of the Whale Rock residential area and about 1km west of the Robberg Nature Reserve, while the Robberg Coastal Corridor is located to the south. For the proposed development, the following scope of works is proposed:

- The intention is to develop areas identified as least sensitive on Portion 59 into a Sectional Title Retirement Complex, consisting of about 120 semi-attached units of approximately 300m² each, as well as associated roads and infrastructure.
- An archaeological museum is planned on Portion 62 with tourist facilities such as an amphitheatre and a limited number of tourist accommodation units.
- Portion 63 and the remainder of Portion 62 will be rezoned from Agriculture 1 to Open Space III (Nature Conservation Area) and are in the process of being incorporated into the Robberg Coastal Corridor.

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In addition, limited municipal services are available for the development and alternative water and sewer supply options will be explored. The intention is to extract water from an existing borehole on the site subject to the confirmation of water quality and quantity. The water will be stored and redistributed to residential units. A Private Bio Sewage Waste Wastewater Treatment Plant is proposed to accommodate the expected sewer demand.

The placement of the respective project footprints follow areas of lower environmental sensitivity, as inform by respective botanical (Vlok, 2009, updated 2026, aquatic (Fordham, 2026) and archeological (Kaplan, 2012) specialist assessments. A terrestrial faunal and avifaunal assessment of the proposed project footprints (collectively referred to as the “study area” or “site” and respectively referred to as the “residential footprint” and “museum footprint”) are further required in accordance with the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment (EIA) Regulations 2014 (Government Notice (GN) 984), as amended. To this end, Blue Skies Research was appointed by Eco Route Environmental Consultancy on behalf of Star Gate Innovations (Pty) Ltd to perform the required terrestrial faunal and avifaunal assessment (see Sections 2 and 3). The current report represents a Compliance Statement for the proposed development over the site and respective footprints.

2. Terms of Reference

2.1. General legislature pertaining to this report

This terrestrial faunal and avifaunal assessment report is compiled in accordance with the following guidelines:

- *Department of Environmental Affairs and Development Planning (DEA&DP) Guidelines for Involving Biodiversity Specialists in the EIA Process (Brownlie, 2005).*

- *Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes, Government Notice No. 320 (Gazetted 20 March 2020).*
- *Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal Species, Government Notice No. 1150 (Gazetted 30 October 2020).*
- South African National Biodiversity Institute (SANBI). 2020. *Species Environmental Assessment Guideline. Guidelines for the implementation of the terrestrial fauna and terrestrial flora species protocols for environmental impact assessments in South Africa.* South African National Biodiversity Institute, Pretoria. Version 2.1 2021.

2.2 Other sources consulted

Other sources pertaining to this report are as follows:

- IUCN. 2021. The IUCN Red List of Threatened Species. Version 2021-3. <https://www.iucnlist.org>.
- *National Environmental Management: Biodiversity Act, 2004 (Act 10 of 2004): Publication of lists of critically endangered, endangered, vulnerable and protected species, Government Notice No. 2007 (Gazetted 14 December 2007).*

3. Reporting protocol

The DFFE Screening Tool Report generated for the study area (dated 02/06/2025) identifies the site as being of an overall “High” sensitivity under the “Relative Animal Species Sensitivity Theme” (**Figure 1**). This follows from the projected and possible occurrence of two mammal, one amphibian, seven avifaunal and two invertebrate Species of Conservation Concern (SCC) (see **Table 1**). The current report therefore assesses the presence or likely presence of these SCC (as well as other possible SCC in these faunal groups, see Section 9) within the proposed development

footprints in accordance with the protocols outlined in the Species Environmental Assessment Guideline (SANBI, 2020).

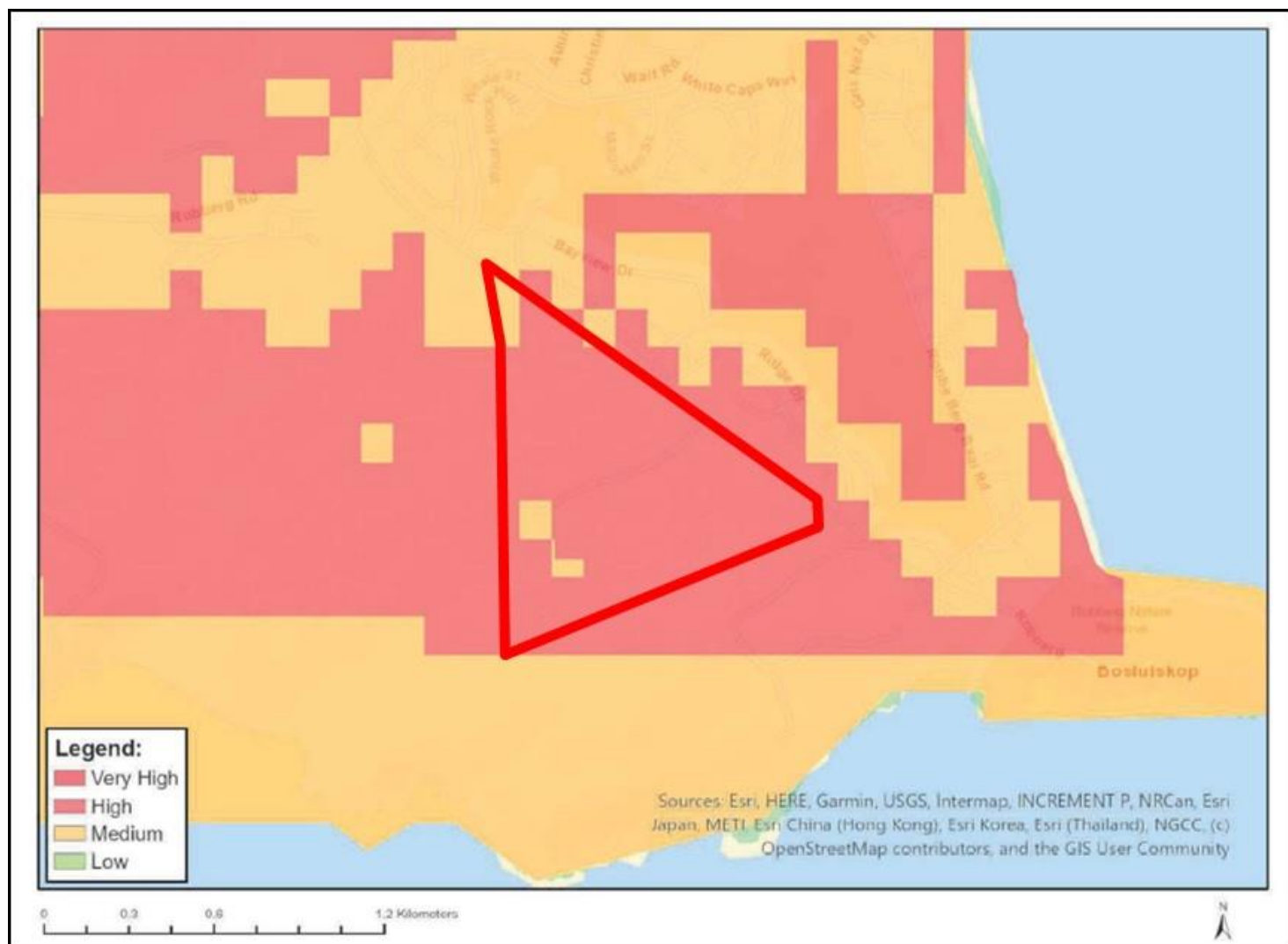


Figure 1 Relative Animal Species Sensitivity Map retrieved for the study area by the DFFE Screening Tool (<https://screening.environment.gov.za/screeningtool/>).

Table 1 List of Species of Conservation Concern (SCC) identified in the DFFE Screening Tool Report (<https://screening.environment.gov.za/screeningtool/>) for the study area. For each, the listed sensitivity (possibility of occurrence within the study area), scientific name and common name is shown, along with its current IUCN status. The name of “Sensitive Species 8” is purposefully omitted, given the sensitivity of this species.

Sensitivity	Species	Common name	IUCN status
High	<i>Circus ranivorus</i>	African Marsh-harrier	Least Concern
High	<i>Hydropogone caspia</i>	Caspian Tern	Least Concern

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High	<i>Neotis denhami</i>	Denham's Bustard	Near-Threatened
Medium	<i>Afrivalus knysnae</i>	Knysna Leaf-folding Frog	Endangered
Medium	<i>Podica senegalensis</i>	African Finfoot	Least Concern
Medium	<i>Circus maurus</i>	Black Harrier	Endangered
Medium	<i>Stephanoaetus coronatus</i>	Crowned Eagle	Near-Threatened
Medium	<i>Bradypterus sylvaticus</i>	Knysna Warbler	Vulnerable
Medium	<i>Aloides thyra orientis</i>	Red Copper	Endangered
Medium	<i>Chlorotalpa duthieae</i>	Duthie's Golden Mole	Vulnerable
Medium	<i>Sensitive Species 8</i>	Sensitive Species 8	Least Concern
Medium	<i>Aneuryphymus montanus</i>	Yellow-winged Agile Grasshopper	Vulnerable

4. Overview of the study area

4.1 Geographic location

The study area encompasses two separate footprints respectively located on portions 59 and 63 of the Farm Brakkloof 443, Plettenberg Bay (**Figures 2 and 3**). These sites are situated adjacent to, and to the southwest of Whale Rock, separated from this residential area by Whale Rock Drive.

The residential footprint earmarked for a Sectional Title Retirement Complex is around 13.3 hectares in size. The museum footprint is located over the northern part of portion 63 and includes a roughly 5 hectare area which will house a proposed archaeological museum with tourist facilities and -accommodation, an amphitheatre, parking areas and the proposed Bio Sewage Waste Wastewater Treatment Plant.

In a broader context, the sites are located about 1km west of the Robberg Nature Reserve, while also being just north of the Robberg Coastal Corridor. Indeed, Portion 62 and the remainder of Portion 63 are earmarked for rezoning to Open Space III (Nature Conservation Area) for incorporation into the Robberg Coastal Corridor.

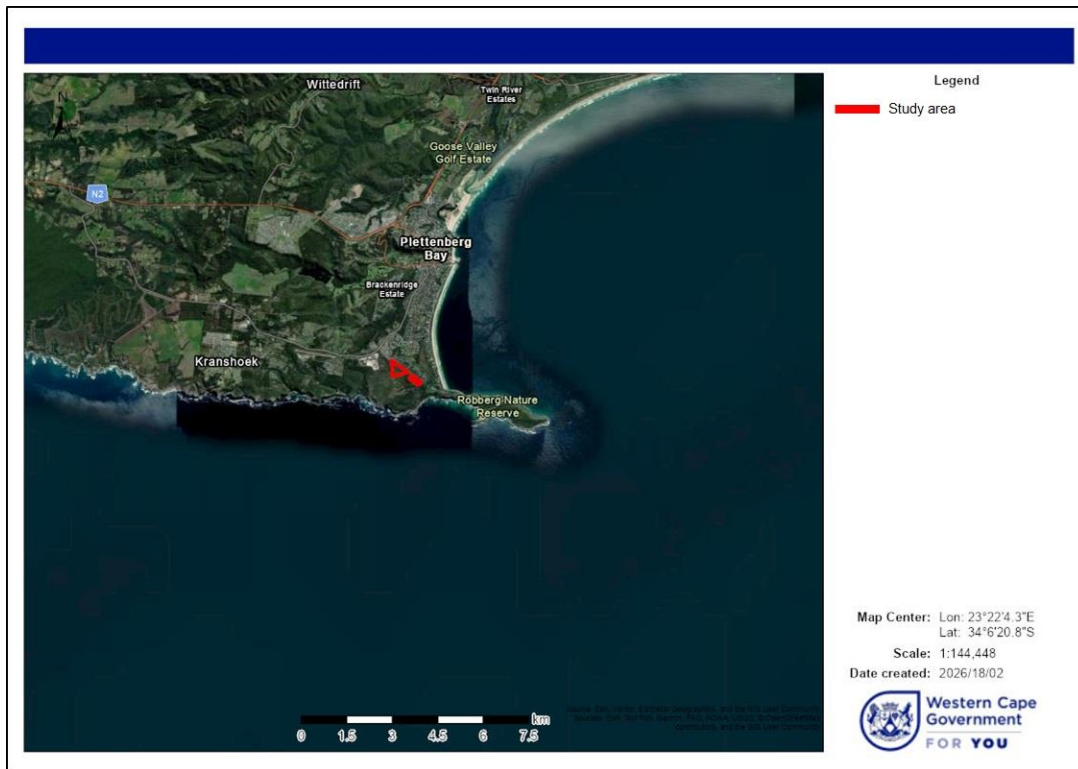


Figure 2 Spatial location of the study area relative to major settlements on a broad scale (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).



Figure 3 Spatial extent of the study area at a finer spatial scape (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).

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4.2 Vegetation

Vegetation is mapped as South Outeniqua Sandstone Fynbos over the larger north-eastern part of the residential footprint, and Knysna Sand Fynbos over the museum footprint and southern part of the residential footprint (VEGMAP 2024 Beta; **Figure 4**). These vegetation types are respectively classified as a “Least Threatened” and “Critically Endangered” ecosystem types according to *The Revised National List of Ecosystems that are Threatened and in Need of Protection* (Government Notice No. 2747 of 18 November 2022).

In a more fine-scale study Vlok *et al.* (2008) mapped the vegetation over the northern part of the residential footprint as Roodefontein Grassy Fynbos with the remaining southern part including Noetzie Protea Fynbos (Vlok, 2009, updated 2026, **Figure 5**). A small eastern section was also mapped as Groot Brak River & Floodplain vegetation. The north-eastern part of the museum footprint was mapped as Noetzie Thicket Fynbos, the north-western part as Noetzie Protea Fynbos and the southern margin as Groot Brak River & Floodplain vegetation owing to the presence of a non-perennial drainage line (see subsection 4.4).

According to this botanical assessment, none of the plant species recorded represents botanical SCC, with the site is also unlikely to support any such Red Data plant species. The botanical assessment further indicated that the areas earmarked for the respective project footprints are of a lower botanical sensitivity (biodiversity decimated to a point where the land serves little point of conserving) due to previous severe transformation (agricultural use and mining) and proliferation of dense alien vegetation (mostly *Acacia* species over several fire intervals, **Figure 6**). These areas were therefore identified for the proposed project footprints given their lower botanical sensitivity.

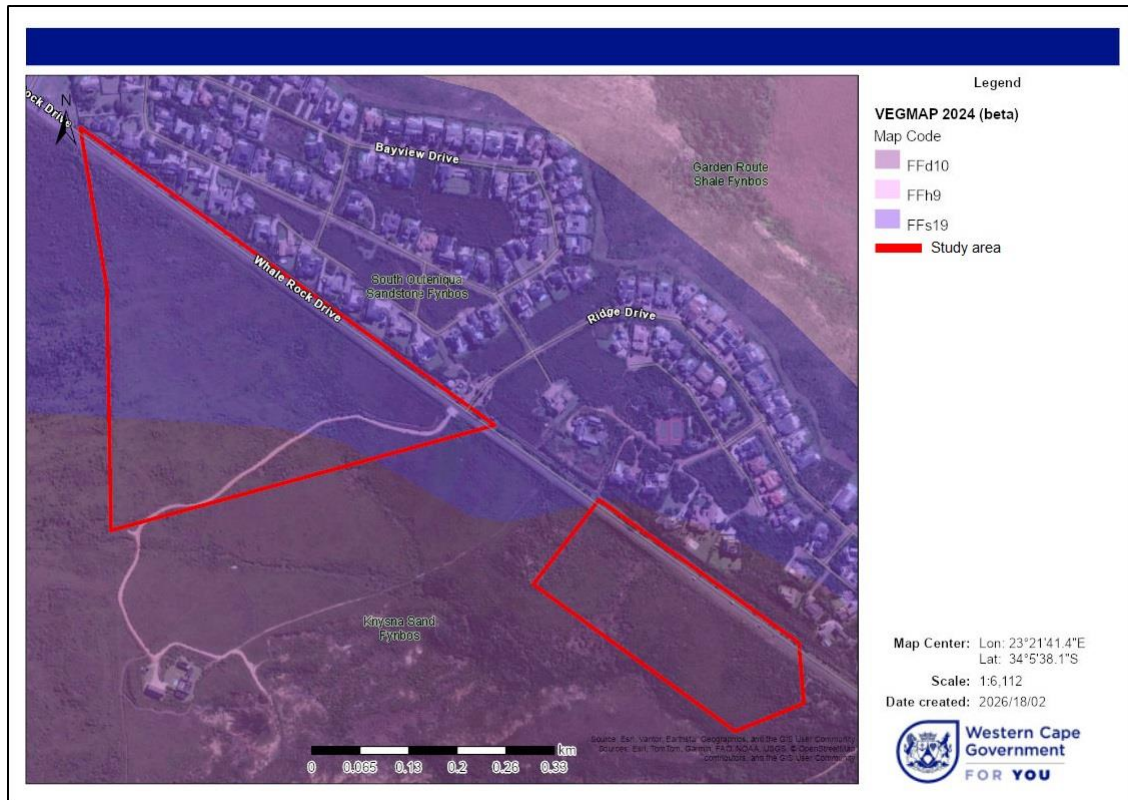


Figure 4 Vegetation type across the study area (VEGMAP 2024 Beta; map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).

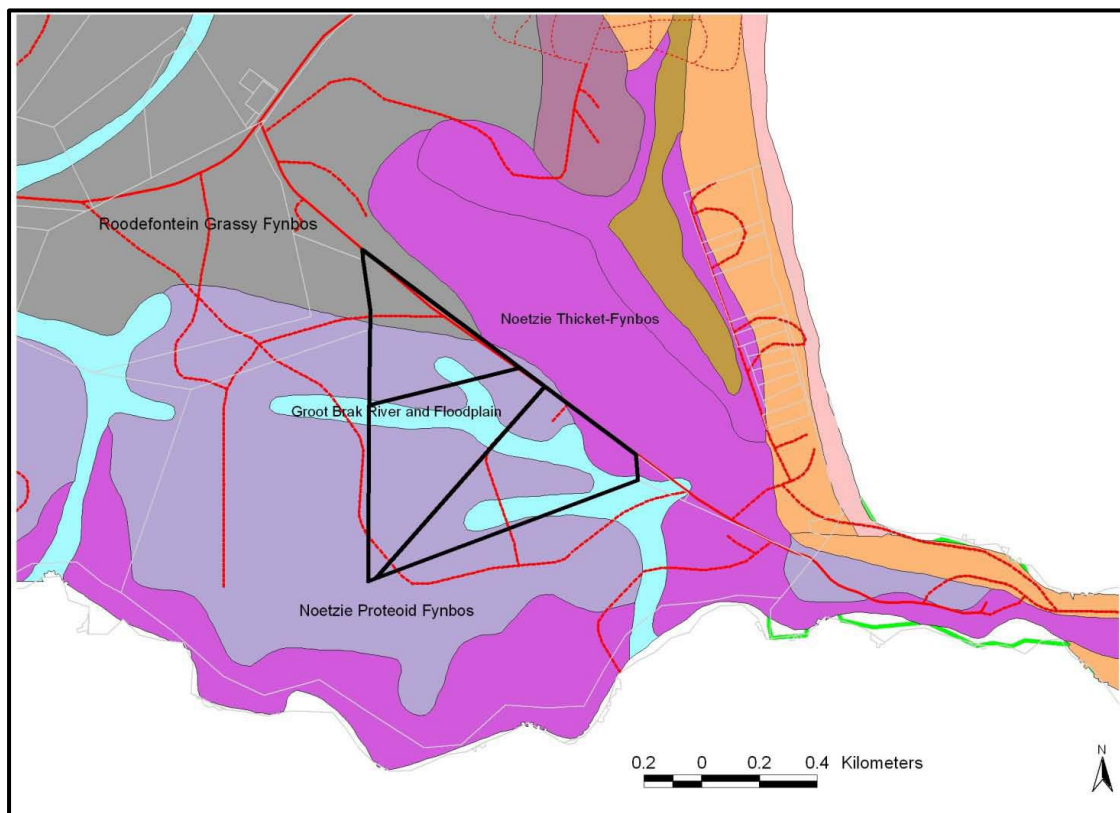


Figure 5 Vegetation types over the study area as outlined in Vlok (2009, updated 2026).

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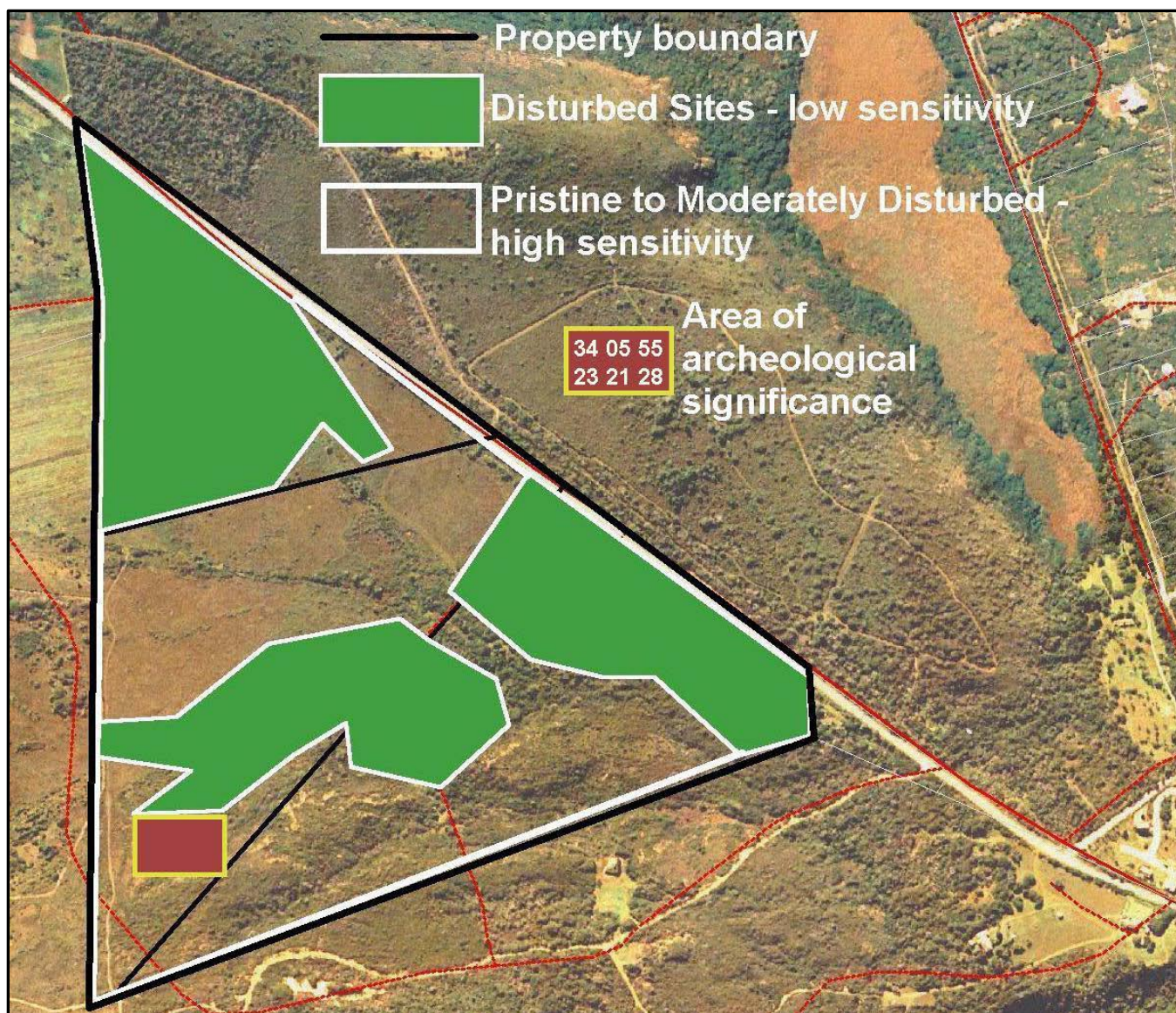


Figure 6 Previously transformed areas which are of a low sensitivity from a botanical perspective as outlined in Vlok (2009, updated 2026).

4.3 Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)

Critical Biodiversity Areas (CBAs) are areas required to meet biodiversity targets for ecosystems, species and ecological processes, as identified in a systematic biodiversity plan (Purves and Holmes, 2015). Ecological Support Areas (ESAs) are not essential for meeting biodiversity targets but play an important role in supporting the ecological functioning of CBAs and / or in delivering ecosystem services.

According to the 2023 Western Cape Biodiversity Spatial Plan (WCBSP), the larger parts of the residential footprint (northern and southern sections) and entire museum footprint overlap with terrestrial CBA1 owing to the mapped presence of “Critically Endangered” Knysna Sand Fynbos (**Figure 7**). The central section of the residential footprint is also mapped as a mixture of aquatic ESA1 (owing to the presence of a Surface Water Source / Water Course) and Other Natural Areas (ONAs) identified as unselected natural areas in good, fair or restorable condition. The presence and integrity of these mapped CBA and ESA are discussed in Section 12.

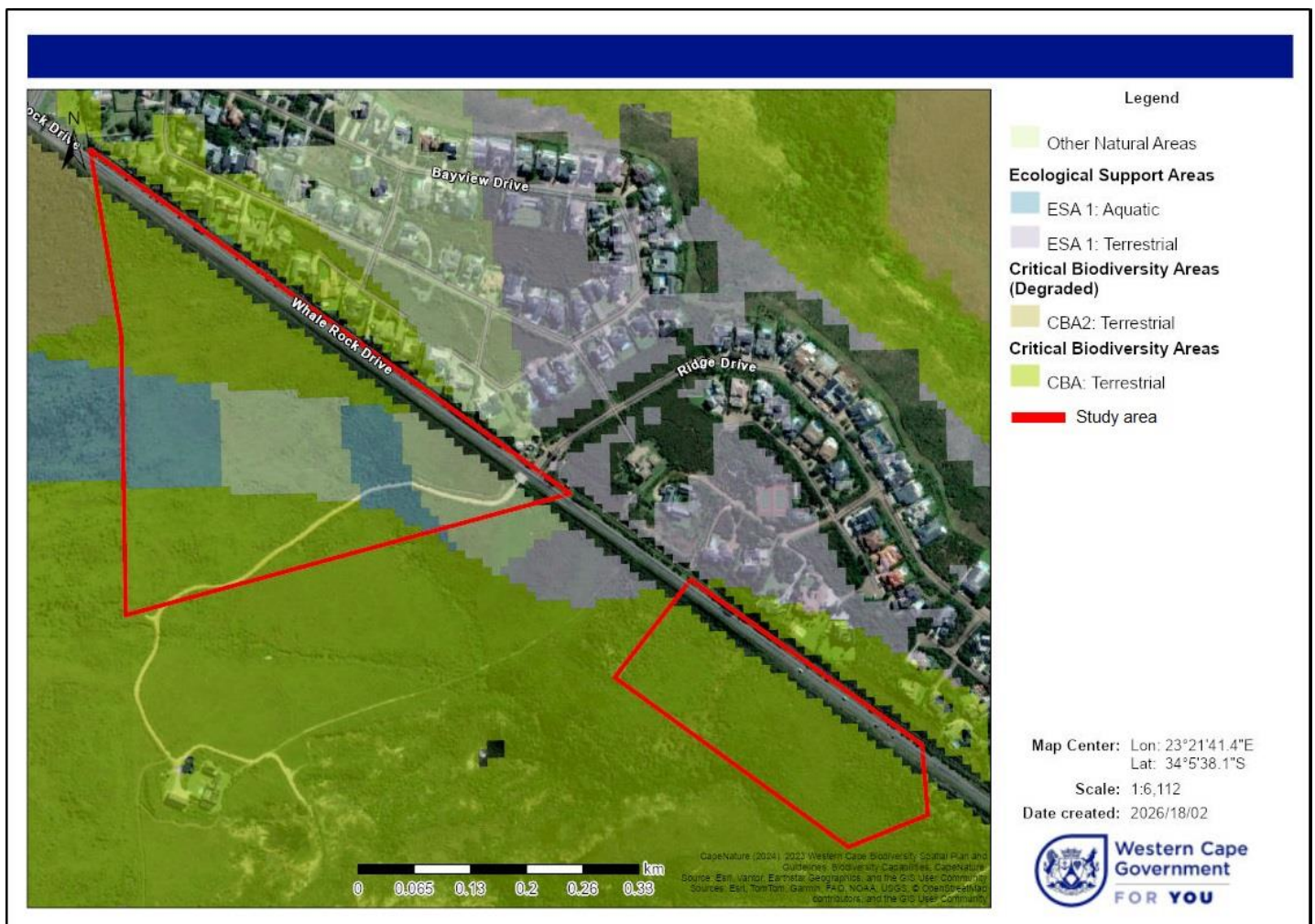


Figure 7 Spatial location of Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs) overlapping with the study area (information sourced from Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).

4.4 Freshwater features

The most notable freshwater features pertain to a south-east flowing tributary of a non-perennial stream centreline which transects the eastern part of the residential footprint. This tributary flows into a non-perennial stream which runs along the southern edge of the museum footprint (**Figure 8**). To this end, an aquatic assessment of the study area was performed by Fordham (2026). The proposed project footprints therefore follow placement outside of notable aquatic features (i.e., drainage lines), inclusive of buffer zones (**Figure 9**). To this end, the proposed project footprints exclude and buffer any sensitive aquatic zones and intersect no notable aquatic habitats.

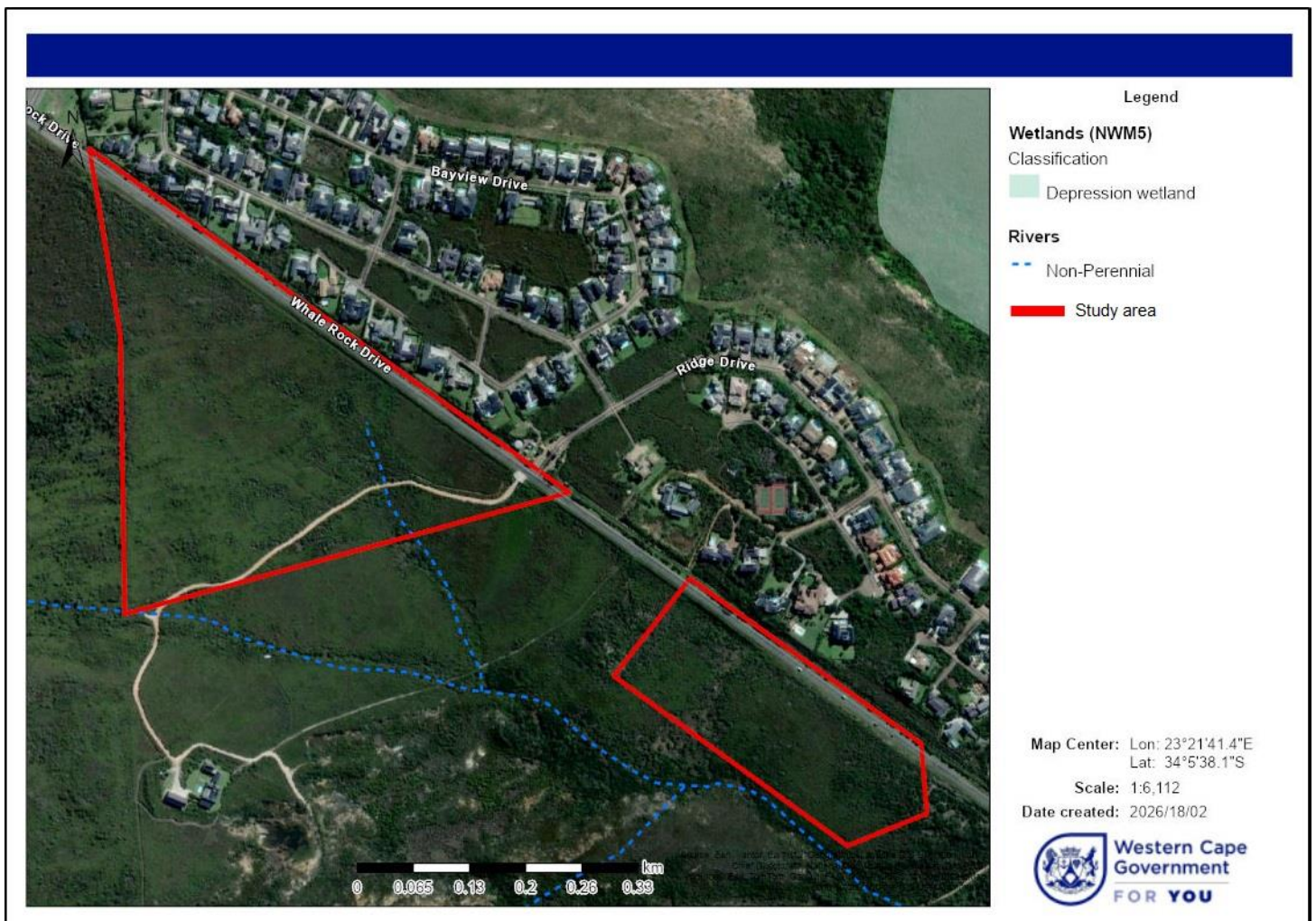


Figure 8 Distribution of freshwater features relative to the study area (map generated in Cape Farm Mapper version 3.0, Western Cape Department of Agriculture).

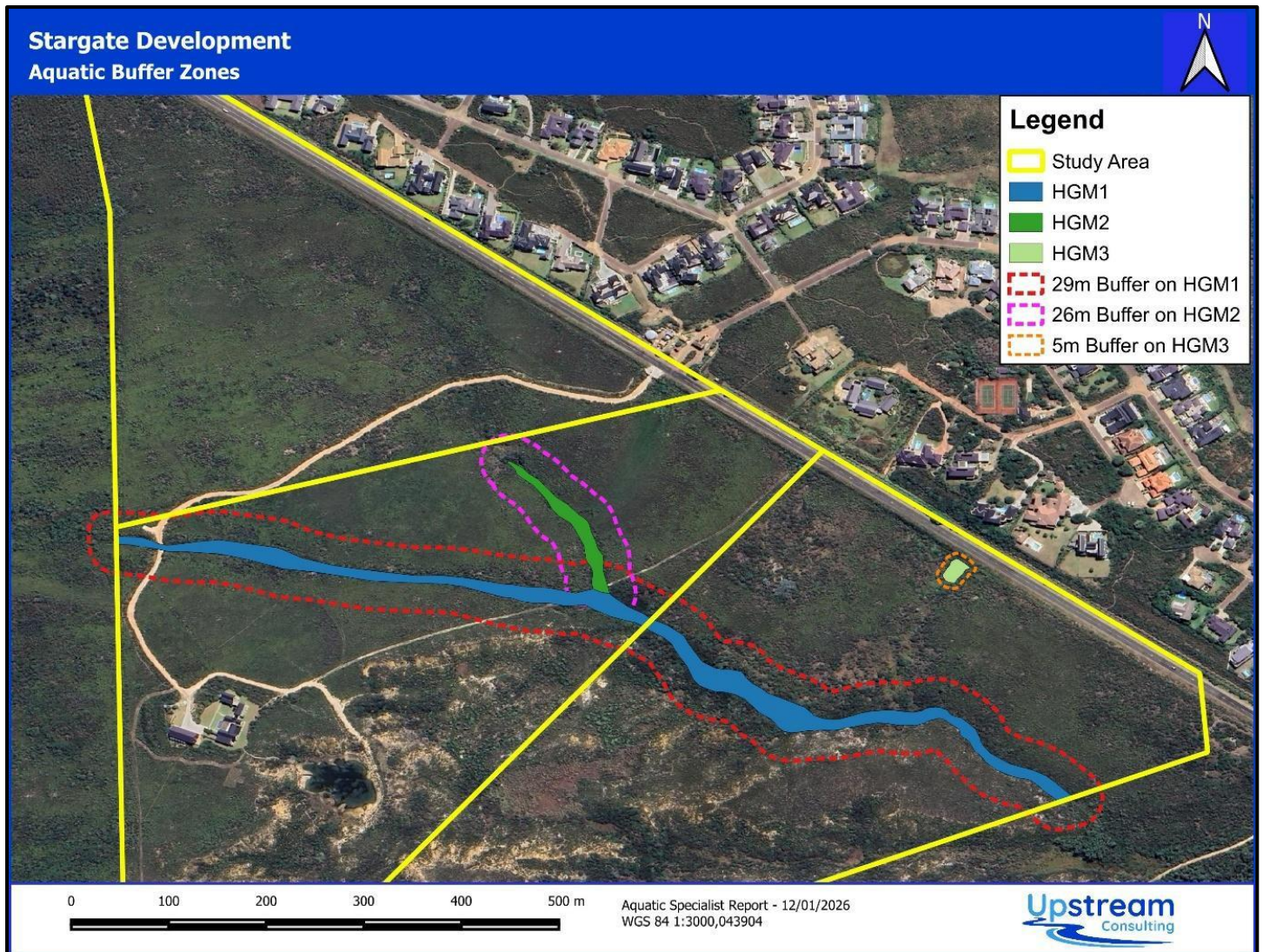


Figure 9 Mapped freshwater features, inclusive of buffer zones, over the study area (as per the aquatic specialist assessment, Fordham, 2026).

5. Study methodology

5.1 Study aims

This study represents an assessment of the terrestrial faunal and avifaunal diversity and abundances, -habitat composition, ecosystem dynamics and potential occurrence of mammal, amphibian, avifaunal and invertebrate SCC within the study area. As such, the aims of this investigation were to:

- 1.) Assess, define and create a spatial rendering of available faunal habitats across the study area based on information gathered during the field survey as well as through a desktop assessment using the latest satellite imagery,
- 2.) compile a complete faunal desktop species list (including mammals, amphibians, avifauna and butterflies) for the broader study area landscape based on a thorough desktop assessment so as to assess the presence of any of the listed SCC (**Table 1**) as well as any additional SCC within these faunal groups,
- 3.) compile a faunal species list (including mammals, avifauna and butterflies) within the study area through field surveying so as to assess the possibility of occurrence of the SCC retrieved in the desktop assessment (based on appropriate sampling methods, as well as the presence of suitable habitat for these species), or any additional SCC which are present, and
- 4.) generate spatial occurrence maps for the recovered faunal species within the study area to assess the spatial extent of areas supporting higher levels of diversity, and SCC subpopulations and habitats which may be of conservation concern.

5.2 Desktop assessment

To assess the possible occurrence of the listed (**Table 1**) as well as any additional mammal, amphibian, avifaunal and butterfly SCC, a desktop assessment was performed to create representative desktop species lists for

these faunal groups. Given the general lack of observations on grasshoppers, the presence or absence of Yellow-winged Agile Grasshopper was assessed based on suitable on-site habitat for the species (Section 9).

5.2.1 Mammals

The desktop species list for mammals (**Appendix A**) was constructed with reference to the distributional data available in Skinner and Chimimba (2005). For specific records of mammals which have been previously noted in the study area landscape, the observational records available on the iNaturalist (www.iNaturalist.org) platform were also included.

5.2.2 Amphibians

The desktop species list for amphibians (**Appendix B**) was constructed with reference to the distributional data available in Du Preez and Carruthers (2009). For specific records of amphibians which have been previously noted in the study area landscape, the observational records available on the iNaturalist (www.iNaturalist.org) platform were also included.

5.2.3 Avifauna

The desktop avifaunal species list for the study area landscape was generated by referring to the species records of the South African Bird Atlas Project 2 (SABAP2, <https://sabap2.birdmap.africa/>). The study area overlaps with one well-represented pentad (3405_2320) and to create the avifaunal desktop species list, the species observed in this pentad was included along with the total number of observations and latest date that the species was recorded (**Appendix C**).

5.2.4 Butterflies

The desktop species list for butterfly species (**Appendix D**) was constructed with reference to the observational records available on the iNaturalist (www.iNaturalist.org) platform for the broader study area landscape.

5.3 Field survey

The study area was surveyed on foot over a single day on the 16th of February 2026, during the Summer season. Weather conditions during the surveying period were characterised by relatively warm daily temperatures, no cloud cover and low (no) wind conditions.

Surveying included unconstrained point sampling through search meanders, as well active searching under debris. All tracks surveyed were recorded by GPS (Garmin eTrex® 10, Garmin International Inc, USA) and are represented in **Figure 10**.

Terrestrial faunal species (mammals) were identified by direct visual observation, or by their tracks, burrows, remains or scat. Avifaunal species were identified by visual observation, using a 180x zoom lens, or by auditory means. Finally, butterfly species were identified and photographed from less than one meter away. All observations were recorded by GPS and the species or evidence of species' presence or activity were photographed using a digital camera (Canon PowerShot SX430 IS, Canon Inc, USA). A species list for all fauna recorded within the study area is given in **Appendix E**.

Given relatively optimal weather conditions, terrestrial faunal and avifaunal species' activity was observed to be high over the surveying period, thereby resulting in 76 recorded observations across the two sites (**Figure 11, Appendix C**) relating to one observation per every 0.2 hectares of study area (the combined size of the proposed project footprints is 18.6 hectares in extent). During surveying, faunal habitats were broadly identified in the field, and thereafter delineated through a desktop assessment using satellite imagery (CapeFarmMapper Version 3.0, Western Cape Department of Agriculture).

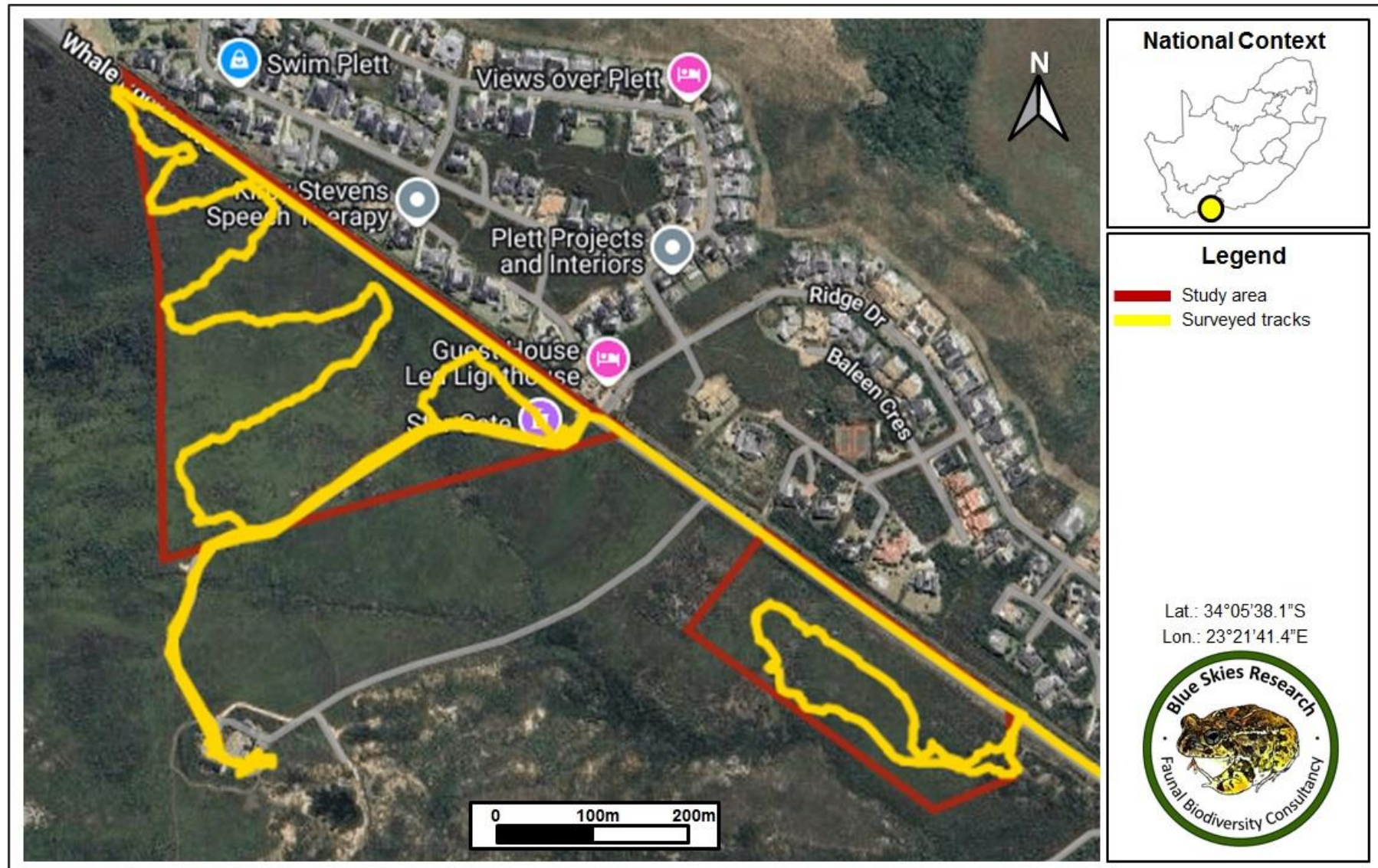


Figure 10 Spatial tracks recorded by GPS for all the search meanders across the study area over the surveying period.

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13 Dennelaan, Stilbaai, 6674

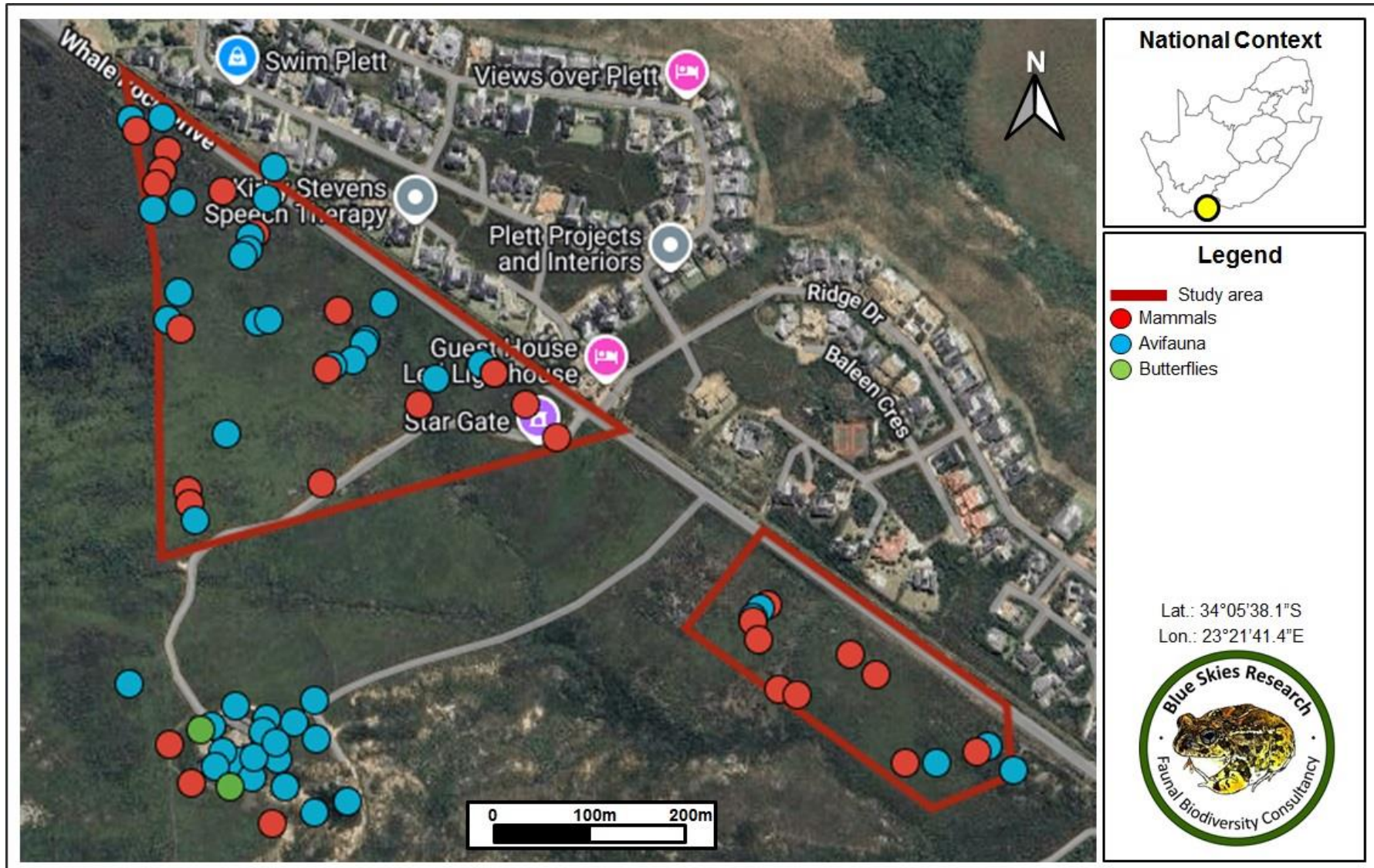


Figure 11 Spatial locations of all the faunal observations across the study area over the surveying period.

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13 Dennelaan, Stilbaai, 6674

6. Assumptions and limitations

Weather conditions during the surveying period along with a relatively limited spatial extent of the sites were optimal for detecting a representative indication of fauna on the sites. Even so, it is possible that the species list for the site may not be complete given the cryptic nature of many small species (especially fossorial species). It is further possible that the surveying period did not correspond to the activity period of some species. Taken together therefore, the current rendering of the faunal composition within the study area only partly reflects the true faunal species richness of, and faunal abundances on the site. Even so, the inclusion and consideration of SCC was further based on a thorough desktop assessment for the included faunal groups (mammals, amphibians, avifauna and butterflies; **Appendices A to D**) and further takes account the habitat composition of the sites meaning that the majority of possibly occurring SCC within the considered faunal groups were included in the current assessment (Section 9).

7. Faunal habitat types within the study area

Structurally, the study area (both residential and museum footprints) is comprised of a single broadly identified habitat type based on habitat composition and habitat integrity (**Figure 12, Table 2**). The sites are characterised by medium to high and dense Fynbos shrubland on sloped soils, with the botanical assessment (Vlok 2009, updated 2025) indicating that these areas are of a lower botanical sensitivity (biodiversity decimated to a point where the land serves little point of conserving) due to previous severe transformation (agricultural use and mining) and proliferation of dense alien vegetation (mostly *Acacia* species over several fire intervals). With regards to the latter, the proponent has made substantial efforts in clearing alien invasive plant species (AIPs) and increasing vegetation quality.

Vegetation units over the sites (especially the residential footprint) therefore do not represent pristine vegetation but rather secondary regrowth on fallow land and following recent fire intervals. As with other dense areas of Fynbos regrowth, the sites support only a relatively low number of common terrestrial faunal and avifaunal

species (Section 8). This is not unexpected as Fynbos areas (even ones in a pristine state) frequently exhibit a low diversity of vertebrate species given the difficulty of faunal movement within and among dense stands, nutrient-poor ecosystems and mostly arid microhabitats (aquatic areas are excluded and buffered from the proposed development footprints, as per recommendation of the aquatic specialist). To this end, the terrestrial faunal and avifaunal SCC considered in the current assessment are unlikely to occur within the respective footprints because the available habitats lack ecologically suitability and therefore fall outside of their habitat preferences (Section 9). Considering current biophysical attributes, the respective project footprints may therefore be considered of a “Low” sensitivity from botanical, aquatic and faunal perspectives.

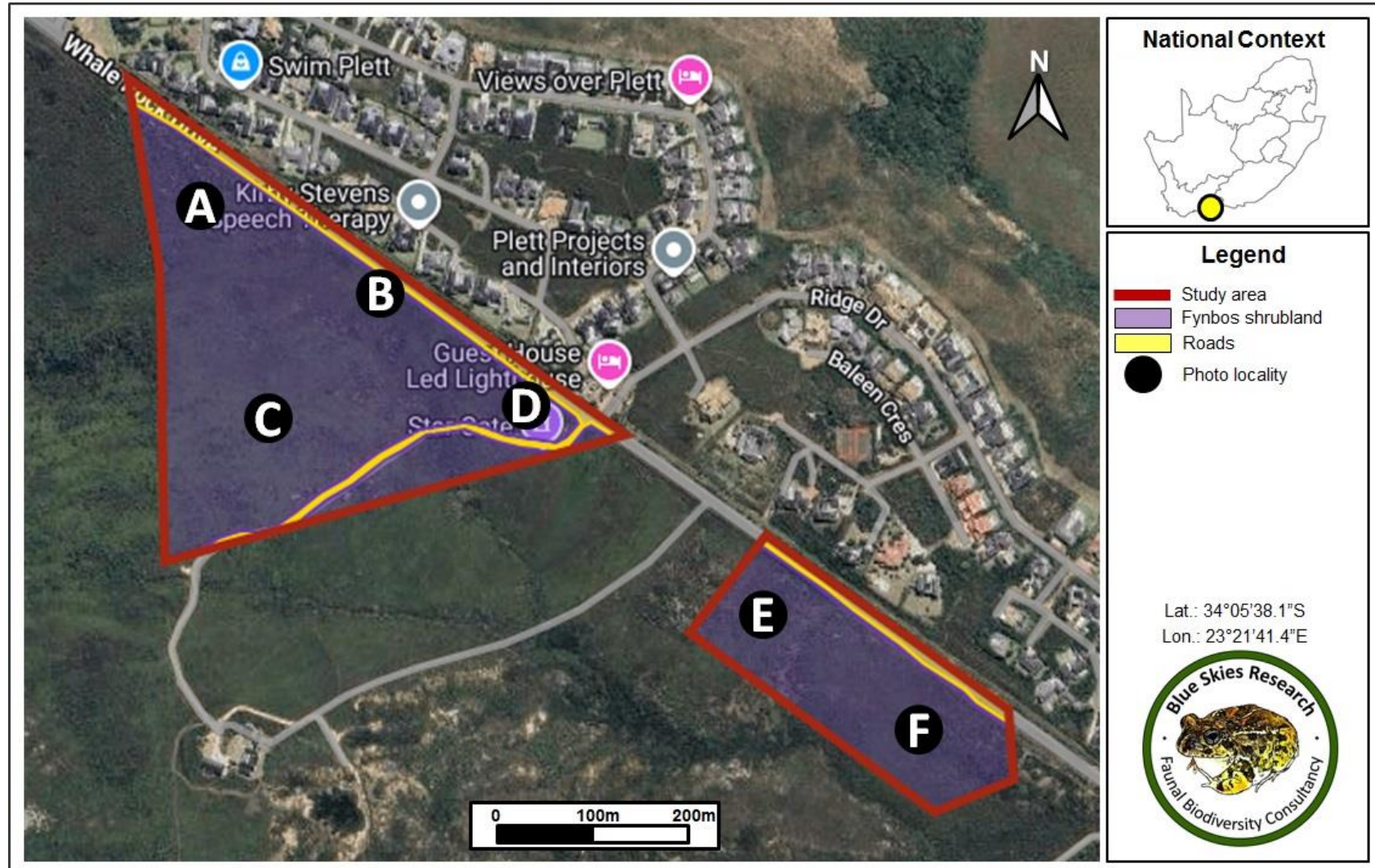




Figure 12 A broad indication of the spatial extent of habitat types in the study area. Photo localities (A to F) correspond to the habitat photos in Table 2.

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Table 2 Habitat locations, habitat descriptions and visual representations of the single habitat type within the study area. Location designations (A to F) correspond to the photo locations in Figure 12.

Location	Habitat description	Photo 1	Photo 2
<p>A -34.09162, 23.35718</p> <p>B -34.09247, 23.35929</p>	<p>Fynbos shrubland</p> <p>The sites are characterised by medium to high and dense Fynbos shrubland on sloped soils which are of a lower botanical sensitivity due to previous severe transformation. These vegetation units (especially the residential footprint) therefore represent secondary regrowth on fallow land and following recent fire intervals.</p>		

C
-34.09367,
23.35796



D
-34.09355,
23.36094



E
-34.09556,
23.36376



F
-34.09669,
23.36553



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13 Dennelaan, Stilbaai, 6674

8. Faunal and avifaunal composition within the study area

8.1 Mammals

8.1.1 Desktop assessment

The distributions of 65 mammal species overlap with the study area landscape (**Appendix A**). Among these, 58 species are currently listed as “Least Concern” by the IUCN (IUCN, 2021), with the remaining seven species representing mammal SCC. These mammal SCC include the following:

1. The Duthie's Golden Mole (*Chlorotalpa duthieae*) classified as “Vulnerable”,
2. Fynbos Golden Mole (*Amblysomus corriae*) classified as “Near-Threatened”,
3. Leopard (*Panthera pardus*) classified as “Vulnerable”,
4. African Clawless Otter (*Aonyx capensis*) classified as “Near-Threatened”,
5. Grey Rhebok (*Pelea capreolus*) classified as “Near-Threatened”,
6. Long-tailed Forest Shrew (*Myosorex longicaudatus*) classified as “Endangered”, and
7. White-tailed Rat (*Mystromys albicaudatus*) classified as “Vulnerable” by the IUCN.

From the observational records available on the iNaturalist (www.iNaturalist.org) platform, 12 mammal species have been confirmed in the study area landscape (**Appendix A**). Among these, 11 species are currently listed as “Least Concern” with the African Clawless Otter (*Aonyx capensis*) representing a mammal SCC.

8.1.2 Field survey

Seven mammal species were recorded within the study area (**Figures 13 and 14**), all of which are currently classified as “Least concern” by the IUCN (**Appendix C**). Most notable is the presence of significant digging activity by Cape Porcupine (*Hystrix africaeaustralis*) within the dense stands of Fynbos. Given the significant impact of

this species, it is likely that geophytes have been decimated in the local area, thereby decreasing the overall botanical richness of the site.

Other mammal species include at least two Cape Grysbok (*Raphicerus melanotis*) which are present within the respective project footprints. A few tunnel systems of the Cape Golden Mole (*Chrysochloris asiatica*) was also noted and given the dense nature of soils, at least one small colony of the African Mole-rat (*Cryptomys hottentotus*) is present within the residential footprint. With regards to rodent (prey) activity, only a few individuals of the Four-striped Grass Mouse (*Rhabdomys pumilio*) are present in the southern extent of the museum footprint where suitable pioneer grassland is available towards the southern drainage line. Finally, one old and disused burrow of the Aardvark (*Orycteropus afer*) was observed in the residential footprint, however this species is unlikely to still be present on the site given a too dense habitat structure. In addition, a troop of Chacma Baboon (*Papio ursinus*) is present on the property but is confined mostly to the open parts of the site towards the existing farm dwelling and artificial dam area.

Taken together, mammal diversity on the sites appears relatively low with only a few habitat generalist species being present. This low diversity and low densities is typical of a Fynbos ecosystem and follows from the dense nature of the Fynbos shrubland habitats which offer little in the way of suitable habitat for mammal species while also precluding significant faunal movement through the area.



Figure 13 Photographic evidence of the different mammal species recorded in the study area. A) Tunnel (arrowed) of the Cape Golden Mole (*Chrysochloris asiatica*). B) Track of the Cape Grysbok (*Raphicerus melanotis*). C) Chacma Baboon (*Papio ursinus*). D) Mounds of the African Mole-rat (*Cryptomys hottentotus*). E) Feeding hole of the Cape Porcupine (*Hystrix africaeaustralis*). F) Runs (arrowed) of the Four-striped Grass Mouse (*Rhabdomys pumilio*). G) Burrow of the Aardvark (*Orycteropus afer*).

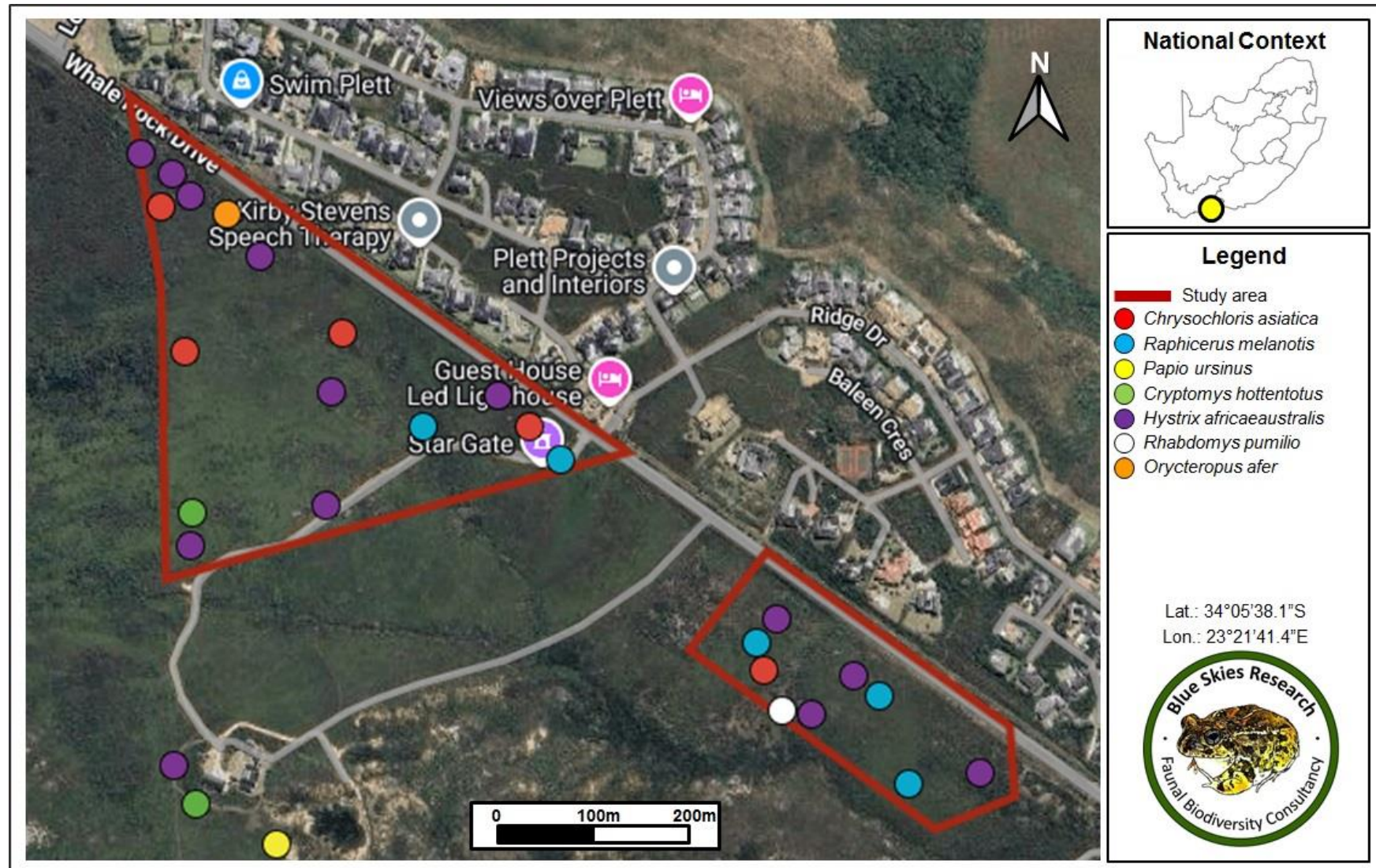


Figure 14 Spatial locations of the different mammal species recorded within the study area.

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13 Dennelaan, Stilbaai, 6674

8.2 Amphibians

8.2.1 Desktop assessment

The distributions of 16 amphibian species overlap with the study area landscape (**Appendix B**). Among these, 15 species are currently listed as “Least Concern”, with one, the Knysna Leaf-folding Frog (*Afrivalus knysnae*), classified as “Endangered” by the IUCN and therefore representing an amphibian SCC.

From the observational records available on the iNaturalist (www.iNaturalist.org) platform, four amphibian species have been confirmed in the study area landscape, all of which are currently listed as “Least Concern” by the IUCN (**Appendix B**).

8.2.2 Field survey

Given a general lack of permanently moist microhabitats or open freshwater zones (e.g., ponds, dams or wetlands), no amphibian species were recorded over the respective project footprints during the field survey. Although an artificial dam is located in the south-west of the property (near the existing farm dwelling), water quality here appears relatively poor due to high levels of dissolved minerals. In addition, although temporary aquatic conditions may exist within drainage lines on the property through wetter times of the year, these zones are excluded and buffered from the proposed development footprints by adequate setbacks.

It is therefore expected that amphibian species are unlikely to utilise the project footprints although common “Least concern” species such as the Raucous Toad (*Sclerophrys capensis*), Clicking Stream Frog (*Strongylopus grayii*), Painted Reed Frog (*Hyperolius marmoratus*) and Bronze Caco (*Cacosternum nanum*) may be present during wetter times of the year as these species exhibit tolerance of lower quality water conditions while also making use of ephemeral moist areas.

8.3 Avifauna

8.3.1 Desktop assessment

According to the SABAP2 records, 218 bird species have been recorded from the pentad overlapping the study area with 203 species classified as “Least Concern” by the IUCN, and 15 species which constitute avifaunal SCC (**Appendix C**). These avifaunal SCC includes the:

1. Verreaux's Eagle (*Aquila verreauxii*) classified as “Least Concern”,
2. Forest Buzzard (*Buteo trizonatus*) classified as “Near-Threatened”,
3. African Marsh Harrier (*Circus ranivorus*) classified as “Least Concern”,
4. Caspian Tern (*Hydroprogne caspia*) classified as “Least Concern”,
5. Denham's Bustard (*Neotis denhami*) classified as “Near-Threatened”
6. Knysna Warbler (*Bradypterus sylvaticus*) classified as “Vulnerable”,
7. Knysna Woodpecker (*Campethera notata*) classified as “Near-Threatened”,
8. Ground Woodpecker (*Geocolaptes olivaceus*) classified as “Near-Threatened”,
9. Shy Albatross (*Thalassarche cauta*) classified as “Near-Threatened”,
10. White-chinned Petrel (*Procellaria aequinoctialis*) classified as “Vulnerable”,
11. Sooty Shearwater (*Ardenna grisea*) classified as “Near-Threatened”,
12. Northern Rockhopper Penguin (*Eudyptes moseleyi*) classified as “Endangered”,
13. African Penguin (*Spheniscus demersus*) classified as “Endangered”,
14. Cape Cormorant (*Phalacrocorax capensis*) classified as “Endangered”, and
15. Cape Gannet (*Morus capensis*) classified as “Endangered” by the IUCN.

Because the overlapped pentad includes the coastal shelf, a notable number of these avifaunal SCC display habitat preferences for coastal platforms, marine or estuarine conditions or freshwater areas. Because such conditions are not present on (or within the immediate vicinity of) the site, these species are not further considered in the current assessment. These species include the:

1. Sooty Shearwater (*Ardenna grisea*),
2. Shy Albatross (*Thalassarche cauta*),
3. White-chinned Petrel (*Procellaria aequinoctialis*),
4. Northern Rockhopper Penguin (*Eudyptes moseleyi*)
5. African Penguin (*Spheniscus demersus*),
6. Cape Cormorant (*Phalacrocorax capensis*), and
7. Cape Gannet (*Morus capensis*).

8.3.2 Field survey

In total, 27 bird species were recorded within study area (**Figures 15 and 16**), all of which are currently classified as “Least concern” by the IUCN (**Appendix C**).

Avifaunal species constitute relatively common insectivorous, granivorous and nectivorous species within the broader landscape which transiently traverse the sites.

The proposed footprints themselves are largely devoid of avifauna with only a few common Fynbos species having transient associations to these areas. This is due to the dense nature of habitats allowing for little foraging opportunities. In contrast, avifaunal diversity clusters around the existing farm dwelling where gardens provide suitable shrubs and small trees for perching as well as clear visibility when foraging for invertebrates. Similarly, the existing artificial dam harbours two freshwater-associated species, but is too small and with a too poor water quality to support a more diverse freshwater avifauna. The study area also displays a notable lack of raptor species due to the dense nature of Fynbos habitats and a lack of terrestrial prey items.

Overall, avifaunal diversity is indicative of a typical Fynbos assemblage with only a few species appearing as transient over the proposed project footprints. Indeed, these species are not confined to natural areas and are frequently also encountered in residential gardens such as the adjacent Whale Rock residential area.



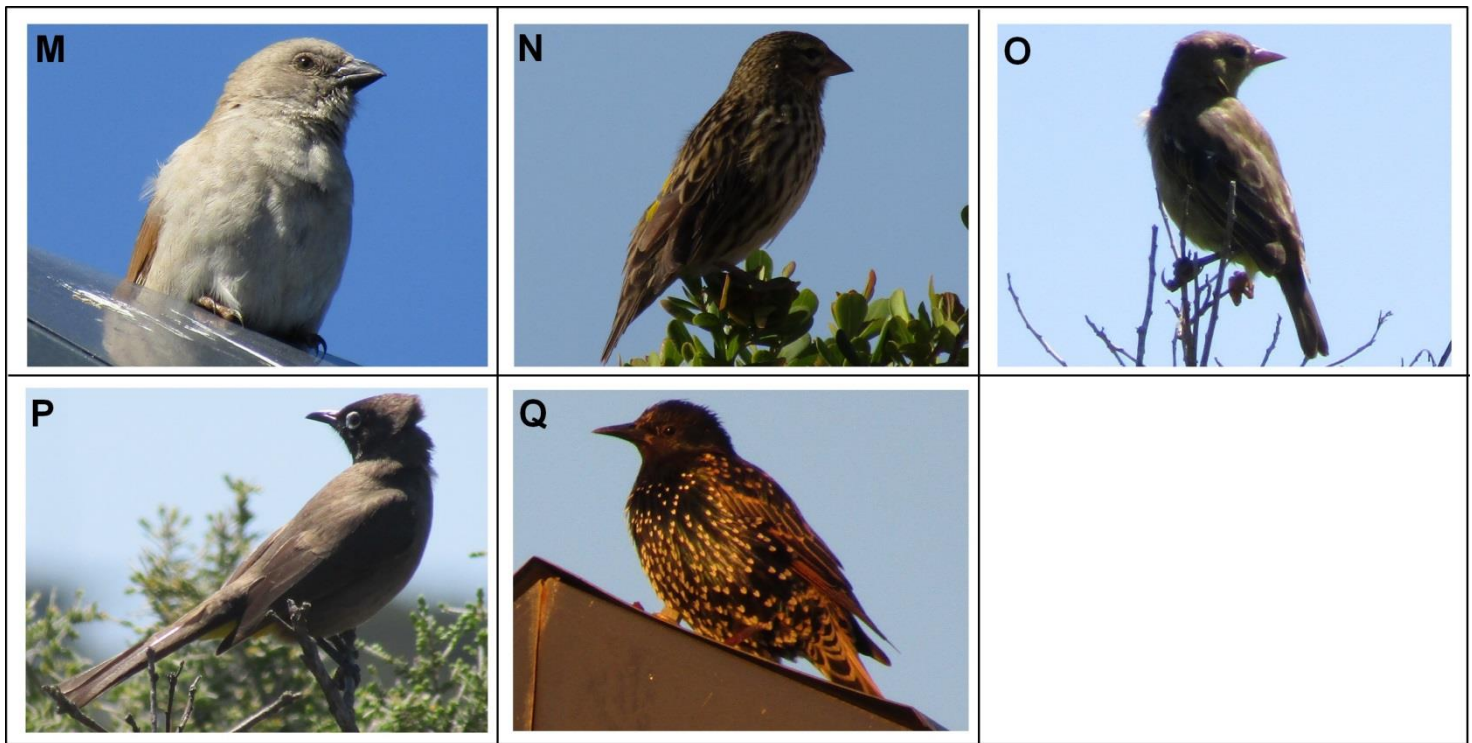


Figure 15 Photographic evidence of different avifaunal species recorded in the study area.

A) Yellow-billed Duck (*Anas undulata*). B) Speckled Pigeon (*Columba guinea*). C) Red-knobbed Coot (*Fulica cristata*). D) Neddicky (*Cisticola fulvicapilla*). E) Karoo Prinia (*Prinia maculosa*). F) Cape Siskin (*Crithagra totta*). G) Greater Striped Swallow (*Cecropis cucullata*). H) Southern Boubou (*Laniarius ferrugineus*). I) Cape Wagtail (*Motacilla capensis*). J) Cape Robin-Chat (*Cossypha caffra*). K) Fiscal Flycatcher (*Melaenornis silens*). L) Southern Double-collared Sunbird (*Cinnyris chalybeus*).

M) Southern Grey-headed Sparrow (*Passer diffusus*). N) Yellow Bishop (*Euplectes capensis*). O) Cape Weaver (*Ploceus capensis*). P) Cape Bulbul (*Pycnonotus capensis*). Q) Common Starling (*Sturnus vulgaris*).

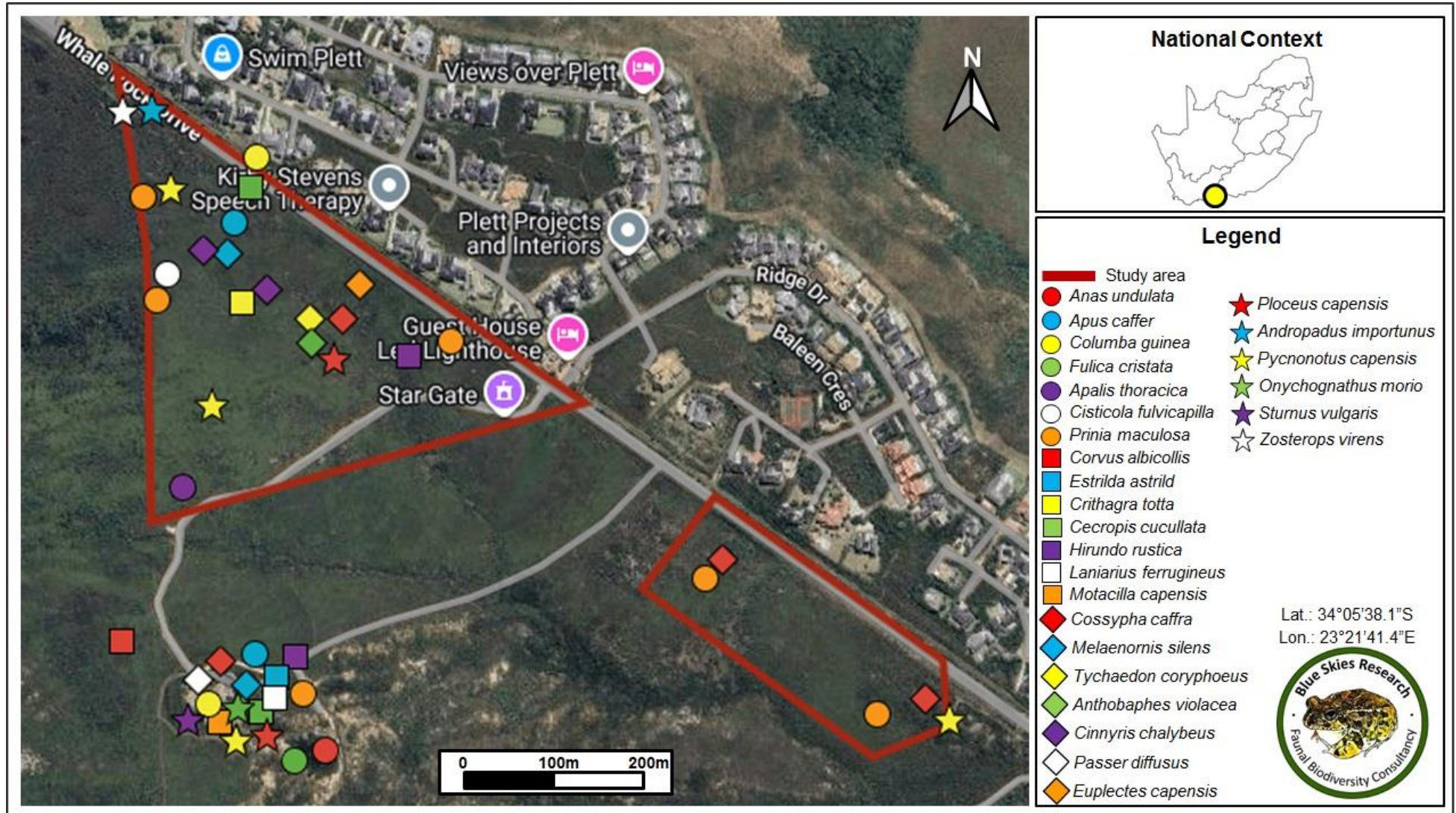


Figure 16 Spatial locations of the different avifaunal species recorded within the study area.

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13 Dennelaan, Stilbaai, 6674

8.4 Butterflies

8.4.1 Desktop assessment

From the observational records available on the iNaturalist (www.iNaturalist.org) platform, 35 butterfly species have been confirmed in the study area landscape (**Appendix A**). All of these species are currently listed as “Least Concern” by the IUCN.

8.4.2 Field survey

Only two butterfly species were recorded within the study area landscape (**Figures 17 and 18; Appendix C**), both of which are currently classified as “Least concern” by the IUCN. Given the dense nature of the Fynbos shrubland habitats over the proposed footprints, these areas are devoid of butterfly species and it is expected that a similar situation will characterise other seasons of the year. In contrast, the gardens and open ground around the existing farm dwelling harbours the two observed species which is typical for butterfly species which generally prefer more open areas (for sunning and flight activity).



Figure 17 Photographic evidence of one of the different butterfly species recorded in the study area. A) Almeida Copper (*Aloeides almeida*).

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

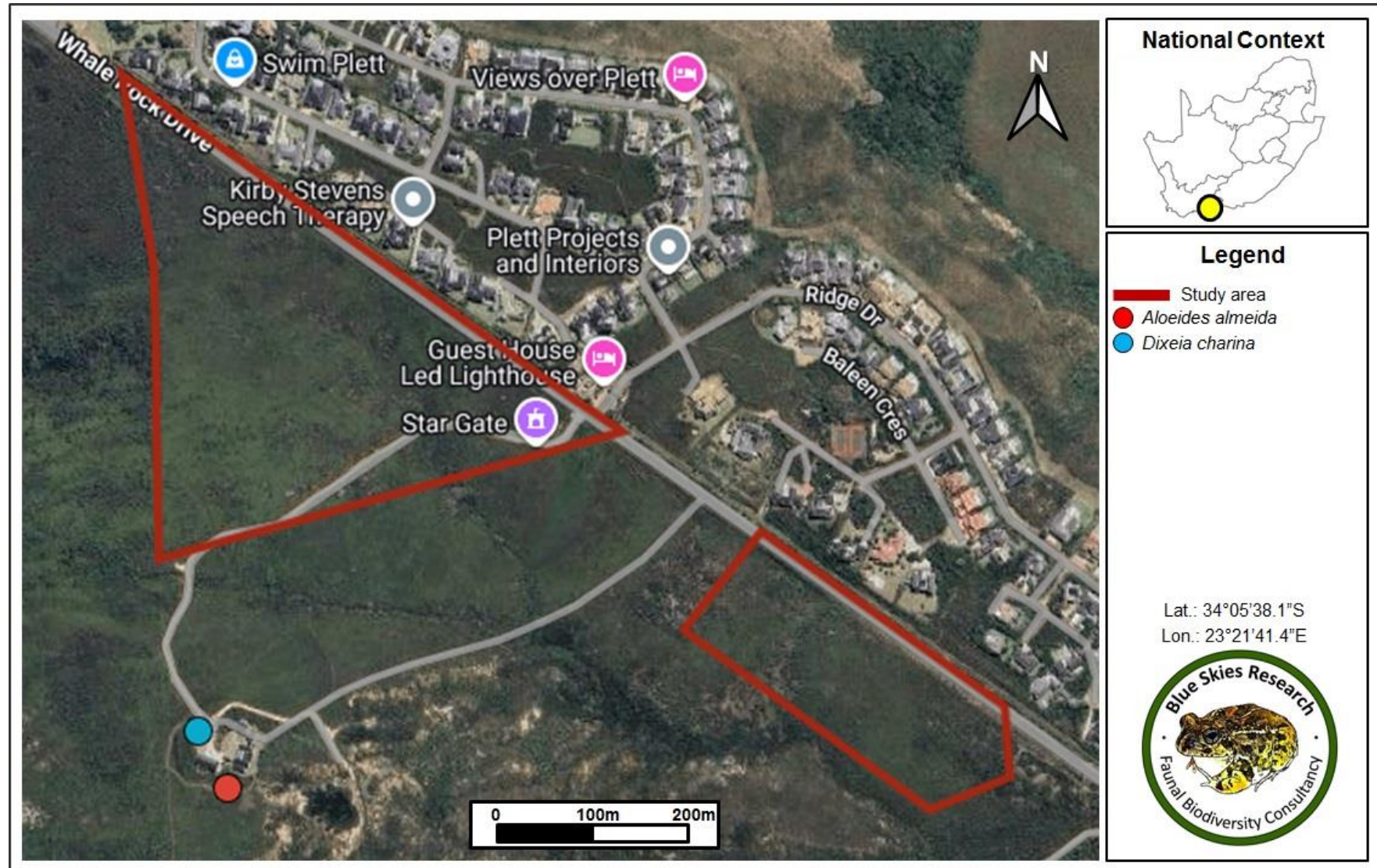


Figure 18 Spatial locations of the different butterfly species recorded within the study area.

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

8.5 Faunal and avifaunal diversity within the study area

Overall, the study area exhibits a typical Fynbos assemblage of terrestrial fauna and avifauna comprising relatively common species of “Least Concern. These species show few permanent associations to the respective project footprints (i.e., most species are highly vagile and show only transient movement over the sites) which is not unexpected for a Fynbos ecosystem characterised by dense stand of medium to high Fynbos shrubland, nutrient-poor and mostly arid microhabitats. Faunal diversity over the respective sites is therefore highly representative of that found in the broader landscape. Indeed, both sites are indicative of the connectivity to larger surrounding natural areas west and south, but show an abrupt end at the Whale Rock residential area and Whale Rock Drive precluding terrestrial faunal movement. Also notable is a lack of vertebrate predator-prey dynamics following from a lack of terrestrial prey items (e.g., rodents). Ecosystem dynamics in the proposed development footprints therefore appear somewhat altered.

Taken together, the proposed development footprints harbour no unique faunal habitats, intersect areas of identified lower botanical sensitivity (Vlok, 2009, updated 2026) and exclude and buffer mapped aquatic areas (drainage lines). The sites are further not ecologically different from broader Fynbos areas in the surrounding landscape and therefore only act as temporary sinks for transient faunal diversity with few (and small) permanent faunal subpopulations.

9. Species of Conservation Concern

Along with the six (two mammal, one amphibian, seven avifaunal and two invertebrate) SCC listed in the DFFE Screening Tool (**Table 1**), the potential occurrence of 10 other (six mammal and four avifaunal) SCC within the study area was assessed (**Table 3**), given their recovery in the desktop assessment. The probability of occurrence of each specific SCC within the study area was assessed based on the following criteria:

Confirmed - The species was confirmed as present within the study area during the field survey.

High - The species was not confirmed as present the study area during the field survey but has been recorded in the broader landscape (mammals, amphibians and butterflies). In the case of avifauna, the species was recorded in the overlapped SABAP2 pentads recently (less than 2 years ago) and in high number (>10 times) and is therefore likely to also occur in the study area, given suitable habitat characteristics.

Medium - The species was not confirmed as present within the study area during the field survey, and has not been recorded in the broader landscape (mammals, amphibians and butterflies). In the case of avifauna, the species has been recorded a number of times (<10 times) in the overlapped SABAP2 pentads recently (less than 2 years ago). Suitable habitat for the species is also present in the study area.

Low - No suitable habitat for the species is present in the study area. Furthermore, in the case of avifauna, the species has been recorded a low number of times (<3 times) or more than five years ago in the overlapped pentads.

None of the terrestrial faunal (mammals, amphibians and butterflies) or avifaunal SCC considered in the current assessment are likely to occur within any of the two development footprints. This follows from both the general scarcity scarcity in the broader landscape and a lack of suitable on-site habitats. Due to the biophysical attributes of the area therefore, the site may also be considered of a “Low” sensitivity from a terrestrial faunal and avifaunal perspective.

Table 3 Probability of occurrence of specific SCC in the study area. For each species, the taxonomic Family, scientific name and common name is shown, along with its current classification under the IUCN Red List of Threatened Species (IUCN, 2021). In addition, the species' preferred habitat and the probability that the species occurs within the study area is given, along with a justification for listing this probability.

Family	Species	Common name	Status	Habitat	Probability of occurrence in the study area	Justification of probability
Mammals						
Sensitive Species 8	<i>Sensitive Species 8</i>	<i>Sensitive Species 8</i>	-	-	Low	Although a record of this species was logged near Sanctuary Beach around 1.5km north of the site (www.iNaturalist.org), these are tracks of the Cape Grysbok rather than the focal species (i.e., a misidentification). This species is a forest and thicket specialist and has been confirmed by the author along the Dieprivier forested areas north of Plettenberg Bay. Because the study area does not contain any similar suitable forest and thicket habitats, it is highly unlikely that Sensitive Species 8 will be present on the sites.
Chrysochloridae	<i>Chlorotalpa duthieae</i>	Duthie's Golden Mole	Vulnerable	The species occurs on alluvial sands and sandy loams in Southern Cape Afrotropical forests (especially coastal platform and scarp forest patches) in the Fynbos and Moist Savanna biomes (Bronner, 2015). The species also thrives in cultivated areas and gardens.	Low	Although no records of this species was logged near the site (www.iNaturalist.org), this species was confirmed by the author along the forested environments of the Dieprivier and Bitou River areas to the north of Plettenberg Bay. This species is a forest and thicket specialist where it occurs in loamy (and often sandy) soils with a significant incidence of moist leaf litter, and among the roots of large forest trees where it forages on invertebrates (J.H. Visser, pers. obs.). Because the study area does not contain any such suitable habitats but rather pertains to relatively arid stands of dense Fynbos, it is highly unlikely that this species will be present on the sites.
Chrysochloridae	<i>Amblysomus corriae</i>	Fynbos Golden Mole	Near-Threatened	The species prefers sandy soils and soft loams in Mountain Fynbos, Grassy Fynbos and Renosterveld of South West Cape (Bronner and Mynhardt, 2015). Also in Afrotropical forest and southern African moist savanna along the southern Cape coast. The species furthermore thrives in gardens, cultivated lands, golf courses and livestock paddocks, and is also present in exotic plantations, but	Low	Only two records for this species occur to the north in the Plettenberg Bay area (www.iNaturalist.org), however the site itself represents denser soils which do not meet requirements of the soft and sandy or loamy soils required by this species. In addition, the site represents dense stands of medium to high

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

				apparently at lower densities (Bronner, 2013).		Fynbos shrubland and not the open savannah-type habitat known to be utilised by this species along the south Coast. It is therefore highly unlikely that this species will be present on the sites.
Bovidae	<i>Pelea capreolus</i>	Grey Rhebok	Near-Threatened	The species is associated with the rocky hills of mountain fynbos. They are predominantly browsers, often feeding on ground-hugging forbs, and largely water independent, obtaining most of their water requirements from their food (Avenant 2013). Forbs constitute the majority of their diet, especially the flowers and leaves of the plants (Esser 1973, Rowe-Rowe 1983a, Beukes 1988). They require good grass cover within their home ranges for shelter and to hide from predators, but often use steep open areas with little cover when feeding. In the Western Cape, they are often observed on agricultural lands (Radloff 2008, C. Birss pers. obs. 2016).	Low	All records of this species are north of the escarpment a large distance away from the study area (www.iNaturalist.org). This species prefers mountainous terrain or open Fynbos / Renosterveld areas and does not occur within or near dense stands of medium to tall vegetation such as that present on the sites. It is highly unlikely that this species will be present on or near the sites.
Canidae	<i>Panthera pardus</i>	Leopard	Vulnerable	The species occurs in the widest range of habitats among any of the Old World Cats, including the larger part of Africa and Asia (Nowell and Jackson 1996). Generally, Leopards prefer medium-sized ungulate prey (10- 40 kgs) where available (Hayward et al. 2006). They have a highly varied diet, however, feeding on insects, reptiles, birds and small mammals up to large ungulates.	Low	Although three records for this species exists west of the Plettenberg Bay area, their spatial locations are poorly geo-referenced (two are located in the ocean) and the provided evidence (all three are photographs of scat) are inconclusive as these likely pertain to scat of the Caracal (www.iNaturalist.org). It is possible that the species may occur in the broader Plettenberg Bay area, however it is unlikely to occur within the study area given a too dense habitat structure (dense stands of medium to high Fynbos) and a general lack of prey items on the two considered sites (with the exception of two resident Cape Grysbok).
Mustelidae	<i>Aonyx capensis</i>	African Clawless Otter	Near-Threatened	The species occupies aquatic freshwater areas and is seldom found far from water. It may occur in many seasonal or episodic rivers provided suitable-sized pools persist (Nel and Somers, 2007, Somers and Nel, 2013).	Low	The species has been confirmed a number of times along the coastal margins of the Robberg Reserve as well as on the coast and near rivers and estuaries around Plettenberg Bay (www.iNaturalist.org). Because this is a primarily aquatic species, however, it is highly unlikely to occur on any of the two sites given a complete lack of freshwater features in the form of standing water.
Soricidae	<i>Myosorex longicaudatus</i>	Long-tailed Forest Shrew	Endangered	The species is found in forests, forests edges, fynbos and boggy grassland, and depends on moist microhabitats (typically above the 800 mm isohyet). It is restricted to pristine primary habitat that has not been degraded (Baxter et al. 2020).	Low	The only records for this species are around George, pertaining to moist (wetland type) areas (www.iNaturalist.org). Indeed, this species relies on moist and pristine habitats and is therefore highly unlikely to occur on the sites given a lack of moist microhabitats (natural wetlands or vleis) and the arid nature of the dense stands of Fynbos.

Nesomyidae	<i>Mystromys albicaudatus</i>	White-tailed Rat	Vulnerable	The species' habitat requirements are not well known, but it appears associated with calcrete soils within grasslands. The species can occur in disturbed areas (heavily grazed, D. MacFadyen pers. obs.) and in sparse grasslands (Kuyler, 2000; Kaiser, 2006; Avenant and Cavallini, 2007; Avenant and Schulze, 2012; Morwe 2013), but does not occur in transformed habitat (croplands, fallow fields, or old fields). In the Blaauwberg Conservation Area (BCA), Western Cape Province it may occur in Dune Thicket on sloped clay soils.	Low	Records for this species are primarily inland (central South Africa, www.iNaturalist.org) with the species also having habitat requirements (grassland and sloped calcrete soils) which represent habitat no found on or near the sites. It is therefore highly unlikely that this species will be present.
Amphibians						
Hyperoliidae	<i>Africalus knysnae</i>	Knysna Leaf-folding Frog	Endangered	The species occurs in a coastal mosaic of vegetation types, including mountain fynbos heathland and forest. It breeds in small dams and shallow semi-permanent water with much emergent vegetation, and even in well vegetated ornamental garden ponds. It is suspected that this species requires high water quality for breeding.	Low	Numerous records for this species exist around the George and Nature's Valley areas, but the two records near the Plettenberg Bay area have poor geo-referencing as they occur within the ocean. Notwithstanding, the species shows a presence for high water quality and open water conditions with much emergent vegetation (e.g., reeds) which represents habitat not present on the sites. It is therefore highly unlikely that this species will occur on the sites.
Avifauna						
Accipitridae	<i>Aquila verreauxii</i>	Verreaux's Eagle	Least Concern	The species occupies remote, mountainous, rocky areas, as well as savannah and semi-desert, anywhere that rock hyraxes occur in substantial numbers (Ferguson-Lees and Christie, 2001) More than 60% of its prey are rock hyraxes but it will occasionally also take other mammals, birds, tortoises and rarely, other reptiles.	Low	The species has been recorded only twice in the study area landscape more than 15 years ago (December 2009, Appendix C). The study area is also devoid of any mountainous terrain, rocky areas or Rock Hyrax colonies. Given a lack of suitable habitat along with the scarcity of this species in the surrounding landscape it is therefore highly unlikely that this species will be present within or near the sites.
Accipitridae	<i>Buteo trizonatus</i>	Forest Buzzard	Near-Threatened	This species inhabits native temperate forests from sea level up to 1,000 m, and rarely to 1,500 m (Ferguson-Lees and Christie 2001). It can also be found in plantations, though usually near to areas of native forest (Ferguson-Lees and Christie 2001).	Low	The species has been recorded a high number of times (42 times) in the study area landscape recently (December 2025, Appendix C). Even so, the study area is devoid of the forested environments (or even large trees) preferred by this species and it is unlikely to occur on or near the sites.
Accipitridae	<i>Circus ranivorus</i>	African Marsh Harrier	Least Concern	The species breeds in wetlands, foraging primarily over reeds and lake margins (Harrison <i>et al.</i> 1997). Its diet consists largely of small mammals, particularly striped mouse <i>Rhabdomys pumilio</i> (Kemp and Dean, 1988).	Low	The species has been recorded only four times in the area landscape more than six years ago (December 2019, Appendix C). Because the site is devoid of the wetland habitats with associated large reedbeds preferred by this species, it is highly unlikely to occur on or near the sites.

Accipitridae	Black Harrier	<i>Circus maurus</i>	Endangered	<p>The species occurs in coastal and montane Fynbos, highland grasslands, Karoo subdesert scrub, open plains with low shrubs and croplands (Curtis <i>et al.</i> 2004). In the Western Cape of South Africa it is most abundant in coastal and montane fynbos (Curtis <i>et al.</i> 2004), and loose colonies may aggregate around wetland areas. The Black Harrier prefers open ground with low vegetation for hunting, where it feeds mainly on small mammals, especially <i>Otomys</i> and <i>Rhabdomys</i> species, although its diet may also include birds and reptiles (Garcia-Heras <i>et al.</i> 2017). The main diet of the Black Harrier however constitutes the Four-striped Grass Mouse, <i>Rhabdomys pumilio</i> (Garcia-Heras <i>et al.</i> 2017). The species breeds close to coastal and upland marshes (damp sites, near vleis, marshes or streams are preferred for breeding), but may also nest in montane habitats, preferring south-facing slopes (Brown <i>et al.</i> 1982; Curtis <i>et al.</i> 2004). Nests are built on the ground in tall vegetation such as shrubs or reeds (Brown <i>et al.</i> 1982, Curtis <i>et al.</i> 2004). The species does not breed in transformed and cultivated lands, although it may forage in these environments (Curtis <i>et al.</i> 2004).</p>	Low	<p>The species has never been recorded in the study area landscape with the sites further being of a too dense nature and with too low densities of the Four-striped Grass Mouse to allow for the occurrence of the species which primarily hunts over low shrubland or grassland in areas with extensive rodent activity (J.H. Visser, pers. obs.). It is therefore highly unlikely to be present on or near the sites.</p>
Accipitridae	<i>Stephanoaetus coronatus</i>	Crowned Eagle	Near-Threatened	<p>The species inhabits forest, woodland, savanna and shrubland, as well as some modified habitats, such as plantations and secondary growth (Ferguson-Lees and Christie, 2001), and can persist in small forest fragments including urban greenspace forests (Dowsett-Lemaire and Dowsett, 2006, McPherson <i>et al.</i> 2016a). It shows high resilience to heavy deforestation and degradation in some areas (F. Dowsett-Lemaire in litt. 2012), although such changes are assumed to cause local declines in population density. The use of exotic invasive trees (especially <i>Eucalyptus</i> and <i>Pinus</i> spp.) for nesting permits persistence in degraded and mosaic landscapes (McPherson <i>et al.</i> 2016a). It shows dietary plasticity and can feed on a diversity of prey (although maybe almost entirely mammals, Swatridge <i>et al.</i> 2014) according to habitat type, which may allow it to persist in certain areas.</p>	Low	<p>The species has never been recorded in the study area landscape with the study area further devoid of the forested or savannah type environments preferred by this species. It is therefore unlikely to occur on the sites.</p>
Heliornithidae	<i>Podica senegalensis</i>	African Finfoot	Least Concern	<p>The species occurs in forest and wooded savanna along permanent streams (del Hoyo <i>et al.</i> 1996) with thick growths of <i>Syzygium guineense</i>, along secluded reaches of thickly wooded rivers (Urban <i>et al.</i> 1986), on the edges of pools, lakes and dams with well-vegetated banks (particularly with reeds and overhanging branches) (Urban <i>et al.</i> 1986, del Hoyo <i>et al.</i> 1996), on the edges of dense papyrus beds far from the shore (Urban <i>et al.</i> 1986), in mangrove swamps (Urban <i>et al.</i> 1986, del Hoyo <i>et al.</i> 1996), creeks (Urban <i>et al.</i> 1986) and in flooded forest (del</p>	Low	<p>The species has never been recorded in the study area landscape with the study area further devoid perennial wetland / stream / river habitat and much emergent vegetation required by this species. It is therefore highly unlikely to occur on or near the sites.</p>

				Hoyo et al. 1996). It is rarely found away from shoreline vegetation and generally avoids stagnant or fast-flowing water (Urban et al. 1986).		
Laridae	<i>Hydroprogne caspia</i>	Caspian Tern	Least Concern	The breeding, passage and wintering habitats of this species are similar, although during the winter it is largely confined to the coast (Shuford and Craig 2002). It frequents sheltered sea coasts, estuaries, inlets, bays, harbours, coastal lagoons, saltmarshes and salt pans, also occurring inland on fresh or saline wetlands including large lakes, inland seas, large rivers, creeks, floodlands, reservoirs and sewage ponds (Flint et al. 1984, Martin and Randall 1987, Richards 1990, Higgins and Davies 1996, del Hoyo et al. 1996, Snow and Perrins 1998).	Low	The species has been recorded only three times in the area landscape albeit recently (May 2025, Appendix C). Because the study area is devoid of the open water conditions preferred by this species, it is highly unlikely to occur on or near the site.
Otididae	<i>Neotis denhami</i>	Denham's Bustard	Near-Threatened	The species inhabits grasslands, grassy <i>Acacia</i> -studded dunes, fairly dense shrubland, light woodland, farmland, crops, dried marsh and arid scrub plains, also grass-covered ironstone pans and burnt savanna woodland in Sierra Leone and high rainfall sour grassveld, planted pastures and cereal croplands in fynbos in South Africa (del Hoyo et al. 1996). It feeds on insects, small vertebrates and plant material (Collar, 1996).	Low	The species has been recorded only once in the study area landscape more than 14 years ago (January 2012, Appendix C). In addition, the sites represent dense stands of medium to high Fynbos with almost no open conditions, as is required by this species. It is therefore highly unlikely that this species will occur on or near the sites.
Locustellidae	<i>Bradypterus sylvaticus</i>	Knysna Warbler	Vulnerable	The species occurs in thick, tangled vegetation along the banks of watercourses, or covering drainage lines in fynbos forest patches, or on the edges of afro-montane forest. It breeds in dense understorey vegetation (Pryke et al. 2010).	Low	The species has been recorded only twice in the study area landscape, albeit recently (December 2025, Appendix C). Although of a dense nature, the sites do not represent the typical thicket profile preferred by this species (i.e., tangled and woody vegetation, J.H. Visser, pers. obs.). It is therefore highly unlikely that this species will be present on the sites.
Picidae	<i>Campethera notata</i>	Knysna Woodpecker	Near-Threatened	The species is confined to coastal areas of forest, woodland, dense bush, Euphorbia scrub, or open country with large trees.	Low	The species has been recorded six times in the study area landscape more than seven years ago (January 2019, Appendix C). In addition, this woodland / forest specialist prefers large woody trees which are not present in the dense Fynbos stands of the site. It is therefore highly unlikely that this species will be present on or near the sites.
Picidae	<i>Geocolaptes olivaceus</i>	Ground Woodpecker	Near-Threatened	It occurs on rocky slopes, mostly in areas dominated by grass and shrubs; including road cuttings or derelict buildings (Hockey et al. 2005). It is mainly sedentary but there is some suggestion that it could be an altitudinal migrant, and individuals may wander away from mountainous areas in the non-breeding season (Hockey et al. 2005).	Low	The species has been recorded six times in the study area landscape recently (December 2025, Appendix C). Even so, this species prefers open areas and embankments (mostly of a clay nature) and avoids dense vegetation such as the Fynbos stands present on the sites. It is therefore highly unlikely that this species will be present on the sites.

Invertebrates						
Lycaenidae	<i>Aloeides thyra orientis</i>	Red Russet	Endangered	It occurs in a variety of habitats, including the sea-shore, sandy scrub-covered ground (e.g. coastal fynbos on flat sandy ground (either naturally occurring or from anthropogenic disturbances such as footpaths or unsurfaced track) between 40 m to 240 m above sea level) and at high altitudes in mountains. It also penetrates into parts of the Karoo. Larval host plants for <i>Aloeides thyra</i> are not differentiated between subspecies, and so the larval host plants for this taxon are assumed to include <i>Aspalathus acuminata</i> , <i>A. tulbaghensis</i> , <i>A. cymbiformis</i> and <i>A. laricifolia</i> (see e.g. Henning et al. 2009, Mecenero et al. 2013, Williams 2016).	Low	The nearest records for this species are around the Knysna area which appears to represent the most eastern limit of the species' distribution (www.iNaturalist.org). In addition, the species prefers more open habitat conditions (as is common among most butterflies) and is highly unlikely to occur within the dense stands of medium to high Fynbos present on the sites.
Acrididae	<i>Aneuryphymus montanus</i>	Yellow-winged Agile Grasshopper	Vulnerable	The species is associated with fynbos vegetation, where it has been collected "amongst partly burnt stands of evergreen Sclerophyll in rocky foothills" (Brown 1960). It prefers south-facing cool slopes (Kinvig 2005).	Low	The only known records for this species pertain to those logged by the author in the mountainous areas of Swellendam and Bot River (www.iNaturalist.org). This is a primarily montane species which prefers a low shrubland layer (J.H. Visser, pers. obs.), and / or recently burnt and open Shlerophyll, as the IUCN website suggests. Because this habitat is not present is on the sites, it is highly unlikely that this species will occur here.

10. Evaluation of Site Ecological Importance (SEI)

10.1 Evaluating SEI for habitats in the study area

Evaluation of the Site Ecological Importance (SEI) for the habitats in the study area was performed following the methods and criteria outlined in the Species Environmental Assessment Guideline (SANBI, 2020). Given the low probability of the site harbouring any terrestrial faunal or avifaunal SCC (Section 9), SEI calculation was performed for all faunal groups combined. In short, SEI is a function of the Biodiversity Importance (BI) of the receptor (e.g., SCC, the vegetation/faunal community or habitat type present on the site) and its resilience to impacts (Receptor Resilience, RR) as follows: $SEI = BI + RR$. Biodiversity Importance (BI) is in turn a function of Conservation Importance (CI) and the Functional Integrity (FI) of the receptor as follows: $BI = CI + FI$.

To calculate the Conservation Importance (CI) and Functional Integrity (FI) of each habitat within the study area, the criteria outlined in **Table 4** and **Table 5** were respectively used.

According to the Species Environmental Assessment Guideline, Conservation Importance (CI) may be defined as follows:

Conservation Importance (CI): *“The importance of a site for supporting biodiversity features of conservation concern present, e.g. populations of IUCN threatened and Near Threatened species (CR, EN, VU and NT), Rare species, range-restricted species, globally significant populations of congregatory species, and areas of threatened ecosystem types, through predominantly natural processes.”*

Table 4 Conservation importance (CI) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Conservation Importance (CI)	Fulfilling Criteria
Very high	Confirmed or highly likely occurrence of CR, EN, VU or Extremely Rare or Critically Rare species that have a global EOO of < 10 km ² .
	Any area of natural habitat of a CR ecosystem type or large area (> 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type. Globally significant populations of congregatory species (> 10% of global population).
High	Confirmed or highly likely occurrence of CR, EN, VU species that have a global EOO of > 10 km ² . IUCN threatened species (CR, EN, VU) must be listed under any criterion other than A. If listed as threatened only under Criterion A, include if there are less than 10 locations or < 10 000 mature individuals remaining.
	Small area (> 0.01% but < 0.1% of the total ecosystem type extent) of natural habitat of EN ecosystem type or large area (> 0.1%) of natural habitat of VU ecosystem type. Presence of Rare species. Globally significant populations of congregatory species (> 1% but < 10% of global population).
Medium	Confirmed or highly likely occurrence of populations of NT species, threatened species (CR, EN, VU) listed under Criterion A only and which have more than 10 locations or more than 10 000 mature individuals.
	Any area of natural habitat of threatened ecosystem type with status of VU. Presence of range-restricted species. > 50% of receptor contains natural habitat with potential to support SCC.
Low	No confirmed or highly likely populations of SCC.
	No confirmed or highly likely populations of range-restricted species. < 50% of receptor contains natural habitat with limited potential to support SCC.
Very low	No confirmed and highly unlikely populations of SCC.
	No confirmed and highly unlikely populations of range-restricted species. No natural habitat remaining.

According to the guideline, Functional Integrity (FI) is defined as:

Functional integrity (FI): *“The receptors’ current ability to maintain the structure and functions that define it, compared to its known or predicted state under ideal conditions. Simply stated, FI is: ‘A measure of the ecological condition of the impact receptor as determined by its remaining intact and functional area, its connectivity to other natural areas and the degree of current persistent ecological impacts.’”*

Table 5 Functional integrity (FI) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Functional Integrity (FI)	Fulfilling Criteria
Very high	<p>Very large (> 100 ha) intact area for any conservation status of ecosystem type or > 5 ha for CR ecosystem types.</p> <p>High habitat connectivity serving as functional ecological corridors, limited road network between intact habitat patches.</p> <p>No or minimal current negative ecological impacts with no signs of major past disturbance (e.g. ploughing).</p>
High	<p>Large (> 20 ha but < 100 ha) intact area for any conservation status of ecosystem type or > 10 ha for EN ecosystem types.</p> <p>Good habitat connectivity with potentially functional ecological corridors and a regularly used road network between intact habitat patches.</p> <p>Only minor current negative ecological impacts (e.g. few livestock utilising area) with no signs of major past disturbance (e.g. ploughing) and good rehabilitation potential.</p>
Medium	<p>Medium (> 5 ha but < 20 ha) semi-intact area for any conservation status of ecosystem type or > 20 ha for VU ecosystem types.</p> <p>Only narrow corridors of good habitat connectivity or larger areas of poor habitat connectivity and a busy used road network between intact habitat patches.</p> <p>Mostly minor current negative ecological impacts with some major impacts (e.g. established population of alien and invasive flora) and a few signs of minor past disturbance. Moderate rehabilitation potential.</p>
Low	<p>Small (> 1 ha but < 5 ha) area.</p> <p>Almost no habitat connectivity but migrations still possible across some modified or degraded natural habitat and a very busy used road network surrounds the area. Low rehabilitation potential.</p> <p>Several minor and major current negative ecological impacts.</p>
Very low	<p>Very small (< 1 ha) area.</p> <p>No habitat connectivity except for flying species or flora with wind-dispersed seeds.</p> <p>Several major current negative ecological impacts.</p>

Based on assessments of CI and FI for habitats within the study area, the Biodiversity Importance (BI) of each habitat was calculated using the matrix in **Table 6** (based on the formula: $BI = CI + FI$). As Biodiversity Importance (BI) is a function of Conservation Importance (CI) and the Functional Integrity (FI) of a receptor, BI can be derived from a simple matrix of CI and FI as follows:

Table 6 Matrix for calculating Biodiversity Importance (BI) (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Biodiversity Importance (BI)		Conservation Importance (CI)				
		Very high	High	Medium	Low	Very low
Functional Integrity (FI)	Very high	Very high	Very high	High	Medium	Low
	High	Very high	High	Medium	Medium	Low
	Medium	High	Medium	Medium	Low	Very low
	Low	Medium	Medium	Low	Low	Very low
	Very low	Medium	Low	Very low	Very low	Very low

Finally, the Receptor Resilience for each habitat was evaluated following the criteria listed in **Table 7**. According to the Species Assessment Guidelines, Receptor resilience (RR) may be defined as follows:

Receptor resilience (RR): “*The intrinsic capacity of the receptor to resist major damage from disturbance and/or to recover to its original state with limited or no human intervention.*”

Table 7 Receptor Resilience (RR) criteria (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Receptor Resilience (RR)	Fulfilling Criteria
Very high	Habitat that can recover rapidly (~ less than 5 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a very high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a very high likelihood of returning to a site once the disturbance or impact has been removed.
High	Habitat that can recover relatively quickly (~ 5–10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a high likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a high likelihood of returning to a site once the disturbance or impact has been removed.
Medium	Will recover slowly (~ more than 10 years) to restore > 75% of the original species composition and functionality of the receptor functionality, or species that have a moderate likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a moderate likelihood of returning to a site once the disturbance or impact has been removed.
Low	Habitat that is unlikely to be able to recover fully after a relatively long period: > 15 years required to restore ~ less than 50% of the original species composition and functionality of the receptor functionality, or species that have a low likelihood of remaining at a site even when a disturbance or impact is occurring, or species that have a low likelihood of returning to a site once the disturbance or impact has been removed.
Very low	Habitat that is unable to recover from major impacts, or species that are unlikely to remain at a site even when a disturbance or impact is occurring, or species that are unlikely to return to a site once the disturbance or impact has been removed.

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Taken together, the Site Ecological Importance (SEI) was calculated for each habitat within the study area using the formula: $SEI = BI + RR$, and following the matrix outlined in **Table 8**. The interpretation of the development actions allowed for each SEI category are outlined in **Table 9**.

Table 8 Matrix for calculating Site Ecological Importance (SEI) (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Site Ecological Importance (SEI)		Biodiversity Importance (BI)				
		Very high	High	Medium	Low	Very low
Receptor Resilience (RR)	Very high	Very high	Very high	High	Medium	Low
	High	Very high	Very high	High	Medium	Very low
	Medium	Very high	High	Medium	Low	Very low
	Low	High	Medium	Low	Very low	Very low
	Very low	Medium	Low	Very low	Very low	Very low

Table 9 Guidelines for interpreting SEI in the context of the proposed development activities (table adapted from the Species Environmental Assessment Guideline, SANBI, 2020).

Site Ecological Importance (SEI)	Interpretation in relation to proposed development activities
Very high	Avoidance mitigation – no destructive development activities should be considered. Offset mitigation not acceptable/not possible (i.e. last remaining populations of species, last remaining good condition patches of ecosystems/unique species assemblages). Destructive impacts for species/ecosystems where persistence target remains.
High	Avoidance mitigation wherever possible. Minimisation mitigation – changes to project infrastructure design to limit the amount of habitat impacted; limited development activities of low impact acceptable. Offset mitigation may be required for high impact activities.
Medium	Minimisation and restoration mitigation – development activities of medium impact acceptable followed by appropriate restoration activities.
Low	Minimisation and restoration mitigation – development activities of medium to high impact acceptable followed by appropriate restoration activities.
Very low	Minimisation mitigation – development activities of medium to high impact acceptable and restoration activities may not be required.

10.2 SEI of habitats in the study area

The SEI results for habitats within the study area are given in **Table 10** with the spatial representation for each habitat and its concomitant SEI category portrayed in **Figure 19**. Given biophysical attributes, neither of the proposed development footprints are likely to support any subpopulations of terrestrial faunal or avifaunal SCC (Section 9). Furthermore, constituent habitats represents mostly secondary regrowth of vegetation (of low conservation value - see Vlok, 2009, updated 2026) over areas historically affected by agricultural use and mining. These habitats harbour only a common terrestrial faunal and avifaunal diversity of mostly highly vagile and non-resident Fynbos species which are highly likely to return to the immediate surrounding areas (and even the site itself) once any disturbance has ceased. To this end, all habitats in the two proposed blocks are retrieved as having a “Very low” SEI. Minimisation mitigation is acceptable for these habitats, allowing for development activities of medium to high impact without restoration activities being required (**Table 9**).

Table 11 Evaluation of SEI for habitats within the study area. BI = Biodiversity Importance, RR = Receptor Resilience.

Habitat type	Conservation Importance	Functional Integrity	Receptor Resilience	Site Ecological Importance
Remnant Fynbos	Very low - No confirmed subpopulations of, or likely suitable habitat for any terrestrial faunal or avifaunal SCC.	Medium - Medium area (>5ha but <20ha) of Fynbos vegetation with a few minor current impacts (some regrowth of AIPs), but major signs of past disturbance in the form of a lower botanical sensitivity (biodiversity decimated to a point where the land serves little point of conserving) due to previous severe transformation (agricultural use and mining) and proliferation of dense alien vegetation (mostly <i>Acacia</i> species over several fire intervals).	Very high - This habitat represents mostly secondary regrowth of vegetation over areas historically affected by agricultural use and mining. In addition, the sites harbour common terrestrial faunal and avifaunal diversity of mostly highly vagile and non-resident Fynbos species which are highly likely to return to the immediate surrounding areas and even the site itself once any disturbance has ceased within a short period of time (less than 5 years).	Very low - BI = Very low; RR = Very high

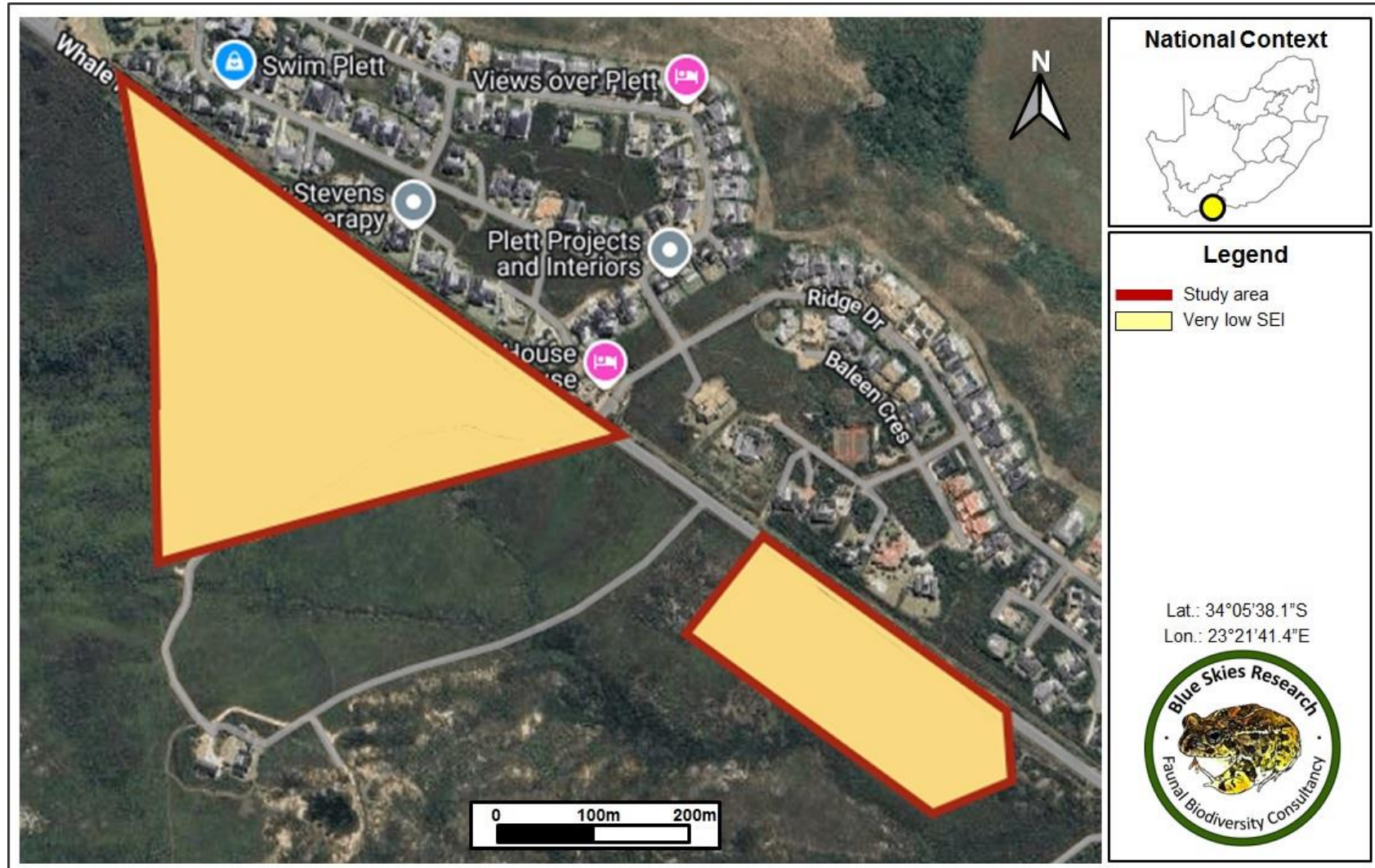


Figure 19 Spatial representation of the SEI of habitats within the study area.

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13 Dennelaan, Stilbaai, 6674

11. Current impacts, project-related impacts, and mitigation measures and impact management actions

11.1 Current impacts

Current impacts within the study area include the following:

- Vegetation units in the proposed project footprints are of a lower botanical sensitivity due to previous transformation (agricultural use and mining) and proliferation of dense alien vegetation (mostly *Acacia* species over several fire intervals, Vlok 2009, updated 2025).
- The sites support only a relatively low number of common “Least Concern” terrestrial faunal and avifaunal species with only a low number of individuals showing permanent associations, and the majority only having transient associations.
- Both sites are bordered by residential areas (Whale Rock) and a road (Whale Rock Drive) to the north-east from where noise and vibration are evident.

11.2 Proposed development

The proposed development aims to establish a Sectional Title Retirement Complex (residential development) on Portion 59 and archaeological museum with tourist facilities (museum footprint) on a part of portion 62, Brakkloof 443.

The Sectional Title Retirement Complex (residential footprint) will consist of about 120 semi-attached units of approximately 300m² each (combined total of 36 000m²), as well as associated roads and driveways (~25 000m²) and infrastructure (clubhouse, gatehouse, parking, electrical and water storage of ~6 000m²; **Figure 20**). To this end, around 6.7 hectares (around 50%) of the total 13.3 hectare Portion 59 will be developed, with the remainder being managed as green belts (maintained in a near-natural state) of around 18m among housing units. The intention is also to extract water from an existing borehole on the site (subject to the confirmation of water quality and quantity) which will be stored and redistributed to residential units.

A Private Bio Sewage Waste Wastewater Treatment Plant is proposed to accommodate the expected sewer demand.

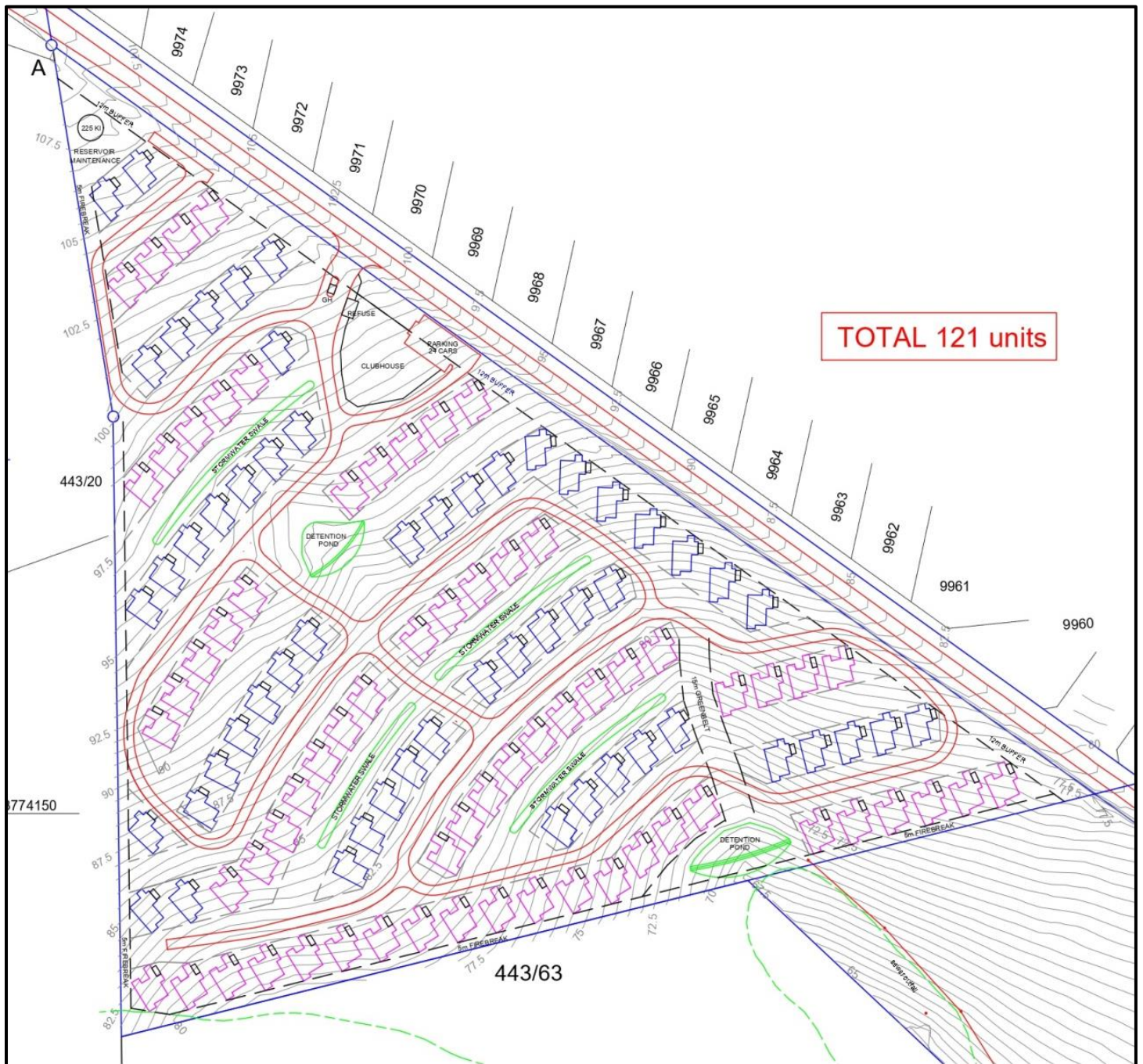


Figure 20 Site development plan (SDP) of the proposed Sectional Title Retirement Complex over the residential footprint.

The footprint of the archaeological museum (museum footprint) is expected to also include an amphitheatre and a limited number of tourist accommodation units (**Figure**

21). Several parking zones will also be established at the north-eastern end (along Whale Rock Drive) to accommodate visitor parking as well as tourist parking for visitors to the nearby Robberg Reserve.

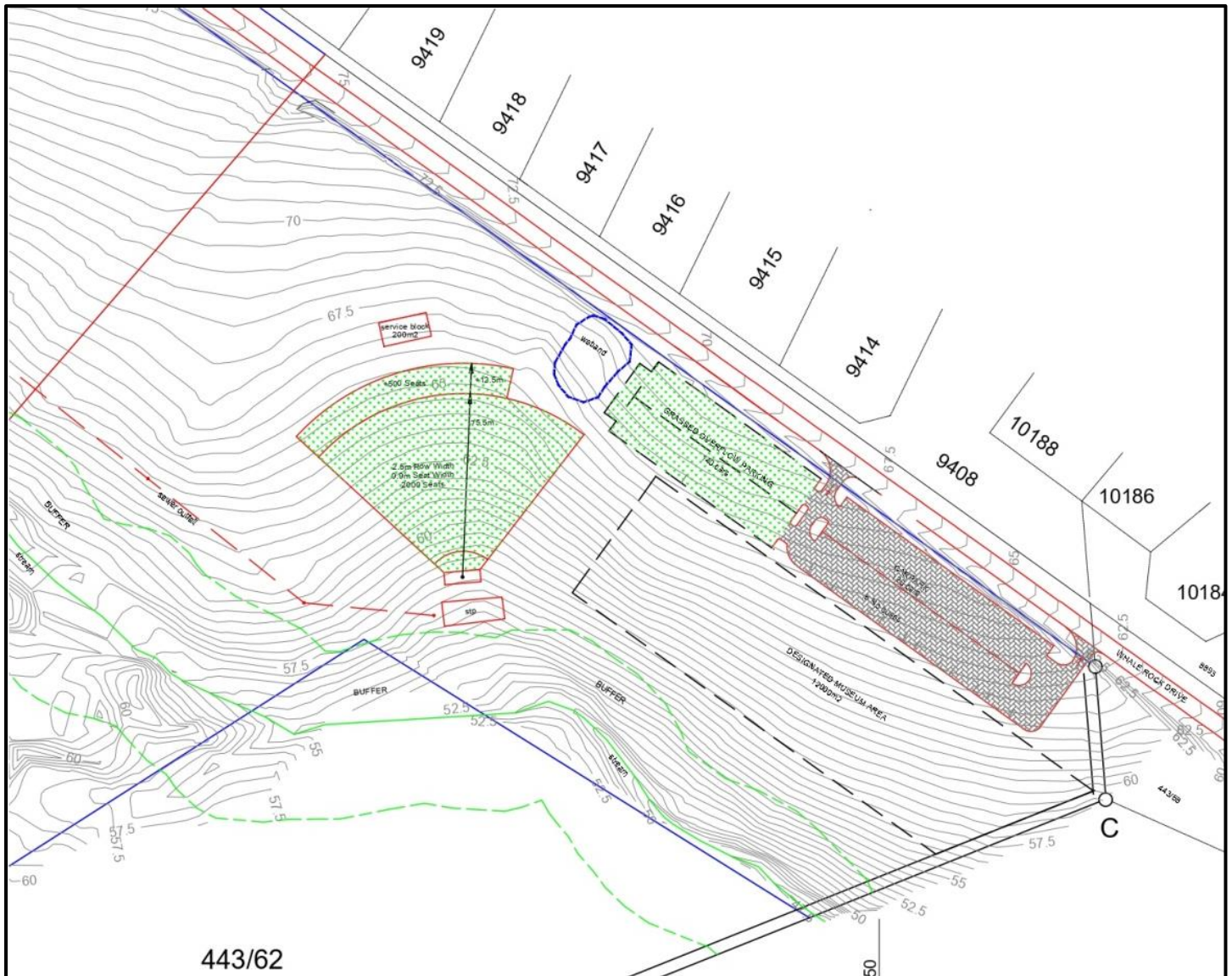


Figure 21 Site development plan (SDP) of the proposed archaeological museum, amphitheatre and parking zones over the museum footprint.

Finally, the remainder of Portion 62 and Portion 63 (excluding the existing farm dwelling and associated infrastructure) will be rezoned from Agriculture 1 to Open Space III (Nature Conservation Area) (**Figure 22**). These areas are intended for incorporation into the Robberg Coastal Corridor.

11.3 Anticipated project impacts

Owing to the nature of the proposed development, planned development activities will include:

- Clearing of the vegetation,
- establishment of contractor laydown areas,
- soil preparation,
- installation of roads and services (water supply lines and bulk sewerage lines), and
- construction of buildings and infrastructure (residential buildings, clubhouse, gatehouse, museum, tourist accommodation and parking areas).

Direct impacts from these activities are expected to include:

- The destruction and loss of habitat,
- direct mortality or displacement of fauna,
- vibration and noise through machinery and people, and
- introduction of dispersal barriers to faunal movement within the landscape.

During the operational phase, impacts from the newly developed residential and museum footprints (i.e., edge effects) are expected to include:

- Vibration and noise from vehicles and people, and
- predation on the resident fauna by domestic dogs and cats.

Impacts during the operational phase may likely result in habitat degradation of remaining habitat areas adjacent to the development footprint if not adequately managed over the long term.

11.4 Impacts

11.4.1 Destruction and loss of habitats

The proposed project footprints represent a typical Fynbos ecosystem characterised by dense stand of medium to high Fynbos shrubland, albeit in a secondary state and of low botanical sensitivity due to historical land use (Vlok, 2009, updated 2026; Section 7). Furthermore, the footprints are excluded and buffered from sensitive aquatic areas. To this end, terrestrial faunal and avifaunal diversity in this terrestrial area is highly representative of that found in the broader landscape (a typical Fynbos assemblage). Furthermore, these species are all currently classified as “Least Concern” and of a highly vagile nature with most showing only transient associations to the respective footprints (Section 8). Given biophysical characteristics, the proposed footprints are also unlikely to support any subpopulations of terrestrial faunal and avifaunal SCC (Section 9), and are retained as “Low” SEI (Section 10).

The loss of habitat over the proposed footprints is therefore unlikely to have severe impacts on terrestrial faunal and avifaunal subpopulation dynamics in the local or broader landscape. This impact is further reduced as the residential development intends to include 18m greenbelt zones among sections of housing units, thereby reducing habitat loss over this footprint to 50% (i.e., restricting habitat loss to 6.7 hectares out of the 13.3 hectare portion). It is expected that some ecosystem functioning will be retained in these green belts, especially in providing refuge for the resident terrestrial fauna (burrowing species such as the Cape Golden Mole (*Chrysochloris asiatica*) and African Mole-rat (*Cryptomys hottentotus*) as well as avifauna traversing the site. **Habitat loss** over these footprints is therefore expected to be of a “**Low**” **significance** to the receiving environment, not affecting broader faunal subpopulations or ecosystem dynamics in the surrounding landscape.

It should also be noted that the remainder of Portion 62 and Portion 63 (excluding the existing farm dwelling and associated infrastructure) will be incorporated into the Robberg Coastal Corridor. Through retaining these areas in a natural state (as is the case currently where the proponent has made considerable effort in eradicating AIPs), ecosystem function is likely to be improved thereby offering an offset to the

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habitat lost over the two development footprints. **Conservation of these undeveloped parts** are therefore expected to lead to a **positive impact** in the surrounding natural landscape.

11.4.2 Direct mortality of, or displacement of fauna

Both proposed footprints harbour a common terrestrial faunal and avifaunal profile comprising mostly vagile species (mammals and avifauna) with only transient associations and which are able to move away from any disturbance of their own accord. Even so, a low number of less vagile species (e.g., the Cape Golden Mole and African Mole-rat) are present which will likely suffer mortality during soil preparation activities. Notably, population sizes for these species over the sites are highly restricted (only a few individuals) and these species are all classified as “Least Concern” with wide distributions, both in South Africa and in the wider landscape. Loss of these parts of their subpopulations is not expected to impact on either their conservation statuses, or their genetic diversity patterns at local, regional or national scales. This impact is further reduced as the residential development intends to include 18m greenbelt zones among sections of housing units (only about 50% of the 13.3 hectare residential footprint will be developed) which will result in a proportion of these species being retained.

With regards to faunal displacement, both sites are connected to large natural areas of a similar habitat type to the west and south. Indeed, these parts will be incorporated into the Robberg Coastal Corridor and therefore act as conservation areas. Faunal communities in the respective affected footprints are therefore expected to move unrestricted into these parts of the landscape at the onset of any disturbance. **Direct mortality of, or displacement of fauna** is therefore expected to be of a “**Low**” **significance** to the receiving environment.

Although no specific search and rescue procedures are advocated for the pre-construction phase, every effort should be made to save and relocate any mammal, reptile, amphibian, bird, or invertebrate that cannot flee of its own accord, encountered during site preparation (i.e., to avoid and minimise the direct mortality of

faunal species). These animals should be relocated to a suitable habitat area immediately outside the project footprint, but under no circumstance to an area further away.

11.4.3 Noise and vibration through machinery and people (construction phase)

Noise and vibration through machinery and people are an unavoidable impact during the construction phase and will also lead to the displacement of fauna. As noted, both sites harbour a terrestrial faunal and avifaunal profile comprising mostly transient and vagile species which are able to move away from any disturbance of their own accord. These displaced species are expected to move freely into similar habitats adjoining the project footprint. This impact is therefore expected to be of a **“Low” significance** to the receiving environment.

11.3.4 Introduction of dispersal barriers to faunal movement within the landscape

Through development of the two respective footprints, barriers to faunal movement may be created in the local landscape. This is especially notable since the sites are located just north of the Robberg Coastal Corridor. Currently, (terrestrial) faunal movement is observable within both sites, but is abruptly precluded along the north-eastern edge due to the presence of the Whale Rock residential area and Whale Rock Drive (i.e., current urban edge). To this end, the sites do not currently serve a highly important function in the Robberg Coastal Corridor as faunal dispersal is likely rather facilitated through natural areas towards the eastern Robberg Peninsula (Robberg Nature Reserve).

Even so, the remainder of Portion 62 and Portion 63 (excluding the existing farm dwelling and associated infrastructure) is earmarked for incorporation into the Robberg Coastal Corridor, thereby adding much-needed land for conservation purposes, and allowing for faunal movement to continue over these parts of the property. As such, normal forms of faunal dispersal are expected to continue in the areas intended for conservation. Because the site do not play pivotal roles in broader dispersal patterns in the Plettenberg Bay landscape, and considering that

large parts of the property are earmarked for conservation under the Robberg Coastal Corridor, the introduction of dispersal barriers is expected to be of an **“Insignificant”** nature to the receiving environment.

11.4.5 Vibration and noise through machinery and people (operational phase)

As with the construction phase, noise and vibration through machinery and people are an unavoidable impact during the operational phase. This impact may also lead to the temporary displacement of fauna in adjacent natural areas. Currently the resident fauna on the sites appear relatively unperturbed by levels of daily disturbance from adjacent residential areas and roads, and a similar situation is expected post development of the proposed footprints. In addition, should displacement of fauna still take place, the species will be able to move unrestricted into similar habitats adjoining the project footprint which will be incorporated into the Robberg Coastal Corridor and therefore act as conservation areas. Vibration and noise during the operational phase is therefore expected to be **“Insignificant”** to the receiving environment

11.4.6 Predation on the resident fauna by domestic dogs and cats

With development of new residential areas, keeping of pets (dogs and cats) is inevitable. These domestic animals, especially cats, pose a major risk to smaller Fynbos fauna through significant predation. It is therefore recommended that the proposed development footprints (but especially the residential footprint) be fenced using ClearVu fencing prior to the onset of the operational phase to preclude movement of these domestic animals into adjacent natural areas.

12. Conclusion

12.1 Listed sensitivity in the DFFE Screening Tool Report

The results from this report represent a more site-specific and finer-grained rendering of the site sensitivity than is represented in the DFFE Screening Tool Report (**Figure 1**, Section 3). Both proposed development sites comprise terrestrial habitats with mostly secondary regrowth of vegetation (of low conservation value - see Vlok, 2009, updated 2026) over areas historically affected by agricultural use, mining and AIPs. These areas also harbour only a common terrestrial faunal and avifaunal diversity of mostly highly vagile and non-resident Fynbos species and are not likely to support any subpopulations of terrestrial faunal or avifaunal SCC (Section 9). This confirms the site sensitivity of “Low” for both sites from a terrestrial faunal or avifaunal perspective (Section 10).

12.2 Overlap with Critical Biodiversity Areas (CBAs) and Ecological Support Areas (ESAs)

Currently the larger parts of the residential footprint (northern and southern sections) and entire museum footprint overlap with terrestrial CBA1 owing to the mapped presence of “Critically Endangered” Knysna Sand Fynbos (Subsection 4.3). With regards to botanical sensitivity, both proposed footprints were retrieved as low conservation value due to mostly secondary regrowth of vegetation over areas historically affected by agricultural use, mining and AIPs (Vlok, 2009, updated 2026).

From a terrestrial faunal and avifaunal perspective, both footprints are also unlikely to support any SCC and harbour only a common faunal diversity of mostly highly vagile and non-resident Fynbos species. From a terrestrial faunal and avifaunal perspective, the sites fail to meet the criteria of a CBA1 as they do not exist in a pristine natural condition and harbour no special habitats, highly functional ecosystem dynamics or ecological processes. Their development is therefore highly unlikely to affect biodiversity patterns on local, regional or national scales.

Similarly, the central section of the residential footprint is mapped as a mixture of aquatic ESA1 (owing to the presence of a Surface Water Source / Water Course) and Other Natural Areas (ONAs). According to the aquatic specialist assessment, the site does not overlap with any notable watercourses or surface water areas (Fordham, 2026) and cannot therefore be regarded as an aquatic ESA1. Following the ground-truthing phase therefore, neither of the proposed project footprints overlap with any significant biodiversity features pertaining to fauna, flora or freshwater areas.

12.3 Conclusion

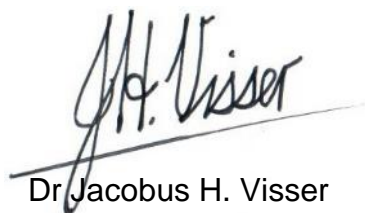
Current faunal composition and ecological conditions over the two proposed development areas point to a typical Fynbos ecosystem with a lower faunal diversity and mostly transient species associations. Indeed, this lower sensitivity from a terrestrial faunal and avifaunal perspective is in line with the site sensitivities retrieved by the botanical and aquatic assessments. Following these considerations, impacts from the proposed development on faunal diversity in the area is likely to be minimal, not resulting in any severe loss or degradation of ecological processes or biodiversity patterns. This is especially important given the proximity of the Robberg Coastal Corridor, for which the proponent has dedicated a significant portion of land to be put under conservation. In addition, development planning also includes the use of extensive greenbelt zones among housing units, thereby retaining ecological processes in the proposed development to some degree. The current development and proposed layouts is therefore supported from a terrestrial faunal and avifaunal sensitivity perspective.

13. Conditions to which this statement is subjected

The content of this report is based on the author's best scientific and professional knowledge as well as available information. Since environmental impact studies deal with dynamic natural systems, additional information may come to light at a later stage which is not listed in this report. As such, the conclusions and

recommendations made in this report are done in good faith based on information gathered at the time of the investigation.

This report must not be altered or added to without the prior written consent of the author. This also refers to electronic copies of the report, which are supplied for the purposes of inclusion as part of other reports, including main reports. Similarly, any recommendations, statements or conclusions drawn from or based on this report must make reference to this report. If these form part of a main report relating to this investigation or report, this report must be included in its entirety as an appendix or separate section to the main report.

A handwritten signature in black ink, appearing to read 'J.H. Visser', is written over a horizontal line.

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Appendix A

Appendix A Desktop species list of the mammal species which have a distribution overlapping with the study area (constructed with reference to Skinner and Chimimba, 2005). Species in bold have been previously recorded within the study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species.

Mammals Desktop Species List					
Order	Family	Species	Common name	Status	
Afrosoricida	Chrysochloridae	<i>Chrysochloris asiatica</i>	Cape Golden Mole	Least Concern	
		<i>Chlorotalpa duthieae</i>	Duthie's Golden Mole	Vulnerable	
		<i>Amblysomus corriae</i>	Fynbos Golden Mole	Near-Threatened	
Carnivora	Canidae	<i>Amblysomus hottentotus</i>	Hottentot Golden Mole	Least Concern	
		<i>Canis mesomelas</i>	Black-backed Jackal	Least Concern	
		<i>Vulpes chama</i>	Cape Fox	Least Concern	
	Felidae	<i>Caracal caracal</i>	Caracal	Least Concern	
		<i>Felis silvestris</i>	African Wild Cat	Least Concern	
		<i>Leptailurus serval</i>	Serval	Least Concern	
		<i>Panthera pardus</i>	Leopard	Vulnerable	
	Hyaenidae	<i>Proteles cristata</i>	Aardwolf	Least Concern	
	Herpestidae	<i>Atilax paludinosus</i>	Marsh Mongoose	Least Concern	
		<i>Cynictis penicillata</i>	Yellow Mongoose	Least Concern	
		<i>Herpestes ichneumon</i>	Egyptian Mongoose	Least Concern	
			<i>Herpestes pulverulentus</i>	Cape grey Mongoose	Least Concern
	Mustelidae	<i>Aonyx capensis</i>	African Clawless Otter	Near-Threatened	
<i>Ictonyx striatus</i>		Zorilla	Least Concern		
<i>Mellivora capensis</i>		Honey Badger	Least Concern		
<i>Poecilogale albinucha</i>		African Striped Weasel	Least Concern		
Viverridae	<i>Genetta genetta</i>	Common Genet	Least Concern		
	<i>Genetta tigrina</i>	Cape Genet	Least Concern		
Cetartiodactyla	Bovidae	<i>Oreotragus oreotragus</i>	Klipspringer	Least Concern	
		<i>Pelea capreolus</i>	Grey Rhebok	Near-Threatened	
		<i>Philantomba monticola</i>	Blue Duiker	Least Concern	
		<i>Raphicerus campestris</i>	Steenbok	Least Concern	
		<i>Raphicerus melanotis</i>	Cape Grysbok	Least Concern	
		<i>Sylvicapra grimmia</i>	Common Duiker	Least Concern	
		<i>Tragelaphus scriptus</i>	Southern Bushbuck	Least Concern	
	Suidae	<i>Potamochoerus larvatus</i>	Bushpig	Least Concern	
Chiroptera	Molossidae	<i>Tadarida aegyptiaca</i>	Egyptian Free-tailed Bat	Least Concern	
	Nycteridae	<i>Nycteris thebaica</i>	Cape Long-eared Bat	Least Concern	
	Pteropodidae	<i>Epomophorus wahlbergi</i>	Wahlberg's Epauletted Fruit Bat	Least Concern	

		<i>Rousettus aegyptiacus</i>	Egyptian Fruit Bat	Least Concern
	Rhinolophidae	<i>Rhinolophus capensis</i>	Cape Horseshoe Bat	Least Concern
		<i>Rhinolophus clivosus</i>	Geoffroy's Horseshoe Bat	Least Concern
	Vespertilionidae	<i>Myotis tricolor</i>	Temminck's Hairy Bat	Least Concern
		<i>Neoromicia capensis</i>	Cape Bat	Least Concern
Eulipotyphla	Soricidae	<i>Crocidura cyanea</i>	Reddish-grey Musk Shrew	Least Concern
		<i>Crocidura flavescens</i>	Greater Red Musk Shrew	Least Concern
		<i>Myosorex longicaudatus</i>	Long-tailed Forest Shrew	Endangered
		<i>Myosorex varius</i>	Forest Shrew	Least Concern
		<i>Suncus infinitesimus</i>	Least Dwarf Shrew	Least Concern
		<i>Suncus varilla</i>	Lesser Dwarf Shrew	Least Concern
Hyracoidea	Procaviidae	<i>Procavia capensis</i>	Rock Hyrax	Least Concern
Lagomorpha	Leporidae	<i>Lepus saxatilis</i>	Cape Scrub Hare	Least Concern
		<i>Pronolagus saundersiae</i>	Hewitt's Red Rock Hare	Least Concern
Primates	Cercopithecidae	<i>Chlorocebus pygerythrus</i>	Vervet Monkey	Least Concern
		<i>Papio ursinus</i>	Chacma Baboon	Least Concern
Rodentia	Bathyergidae	<i>Cryptomys hottentotus</i>	African Mole-rat	Least Concern
		<i>Georchus capensis</i>	Cape Mole-rat	Least Concern
	Gliridae	<i>Graphiurus murinus</i>	Woodland Dormouse	Least Concern
	Hystriidae	<i>Hystrix africae australis</i>	Cape Porcupine	Least Concern
	Muridae	<i>Acomys subspinosus</i>	Cape Spiny Mouse	Least Concern
		<i>Gerbillurus paeba</i>	Hairy-footed Gerbil	Least Concern
		<i>Micaelamys namaquensis</i>	Namaqua Rock Rat	Least Concern
		<i>Mus minutoides</i>	Pygmy Mouse	Least Concern
		<i>Myomyscus verreauxii</i>	Verreaux's Mouse	Least Concern
		<i>Otomys irroratus</i>	Southern African Vlei Rat	Least Concern
		<i>Rhabdomys pumilio</i>	Four-striped Grass Mouse	Least Concern
	Nesomyidae	<i>Dendromus melanotis</i>	Grey Climbing Mouse	Least Concern
		<i>Dendromus mesomelas</i>	Brant's Climbing Mouse	Least Concern
		<i>Mystromys albicaudatus</i>	White-tailed Rat	Vulnerable
		<i>Saccostomus campestris</i>	Pouched Mouse	Least Concern
		<i>Steatomys krebsii</i>	Krebs' Fat Mouse	Least Concern
Tubulidentata	Orycteropodidae	<i>Orycteropus afer</i>	Aardvark	Least Concern

Appendix B

Appendix B Desktop species list of the amphibian species which have a distribution overlapping with the study area (constructed with reference to Preez and Carruthers, 2009). Species in bold have been previously recorded within the study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species.

Amphibians Desktop Species List				
Order	Family	Species	Common name	Status
Anura	Brevicipitidae	<i>Breviceps fuscus</i>	Plain Rain Frog	Least Concern
	Bufonidae	<i>Sclerophrys capensis</i>	Raucous Toad	Least Concern
		<i>Sclerophrys pardalis</i>	Eastern Leopard Toad	Least Concern
		<i>Vandijkophrynus angusticeps</i>	Cape Sand Toad	Least Concern
	Hyperoliidae	<i>Afixalus knysnae</i>	Knysna Leaf-folding Frog	Endangered
		<i>Hyperolius horstockii</i>	Horstock's Reed Frog	Least Concern
		<i>Hyperolius marmoratus</i>	Painted Reed Frog	Least Concern
		<i>Semnodactylus wealii</i>	Rattling Frog	Least Concern
	Pipidae	<i>Xenopus laevis</i>	African Clawed Frog	Least Concern
	Pyxicephalidae	<i>Amietia delalandii</i>	Delalande's River Frog	Least Concern
		<i>Amietia fuscigula</i>	Dark-throated River Frog	Least Concern
		<i>Cacosternum boettgeri</i>	Boettger's Dainty Frog	Least Concern
		<i>Cacosternum nanum</i>	Bronze Caco	Least Concern
		<i>Strongylopus fasciatus</i>	Striped Stream Frog	Least Concern
		<i>Strongylopus grayii</i>	Clicking Stream Frog	Least Concern
		<i>Tomopterna delalandii</i>	Cape Sand Frog	Least Concern

Appendix C

Appendix C Desktop species list of the avifaunal species which have been recorded in the pentad (3405_2320) which overlaps the study area (the South African Bird Atlas Project 2, <https://sabap2.birdmap.africa/>). To create this species list, the species observed in this pentad was included, noting the total number of observations and the latest date the species was recorded (both shown). Furthermore, for each, the common group name, common species name, genus and species is shown. Species in bold represent avifaunal species of conservation concern (SCC).

Avifauna Desktop Species List					
Common group	Common species	Genus	Species	# observations	Latest record
	Bokmakierie	<i>Telophorus</i>	<i>zeylonus</i>	29	2026/01/28
	Hamerkop	<i>Scopus</i>	<i>umbretta</i>	1	2025/12/04
	Neddicky	<i>Cisticola</i>	<i>fulvicapilla</i>	228	2026/02/08
Albatross	Shy	<i>Thalassarche</i>	<i>cauta</i>	1	2023/04/29
Apalis	Bar-throated	<i>Apalis</i>	<i>thoracica</i>	267	2026/02/08
Barbet	Black-collared	<i>Lybius</i>	<i>torquatus</i>	19	2025/12/04
Batis	Cape	<i>Batis</i>	<i>capensis</i>	49	2025/12/04
Bishop	Yellow	<i>Euplectes</i>	<i>capensis</i>	83	2026/01/28
Bittern	Little	<i>Ixobrychus</i>	<i>minutus</i>	3	2020/11/24
Boubou	Southern	<i>Laniarius</i>	<i>ferrugineus</i>	230	2026/02/08
Brownbul	Terrestrial	<i>Phyllastrephus</i>	<i>terrestris</i>	49	2025/12/06
Bulbul	Cape	<i>Pycnonotus</i>	<i>capensis</i>	293	2026/02/08
Bunting	Cape	<i>Emberiza</i>	<i>capensis</i>	2	2012/09/21
Bushshrike	Olive	<i>Chlorophoneus</i>	<i>olivaceus</i>	66	2025/12/06
Bustard	Denham's	<i>Neotis</i>	<i>denhami</i>	1	2012/01/06
Buzzard	Common	<i>Buteo</i>	<i>buteo</i>	24	2025/12/04
Buzzard	Forest	<i>Buteo</i>	<i>trizonatus</i>	42	2025/12/27

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Buzzard	Jackal	<i>Buteo</i>	<i>rufofuscus</i>	47	2025/12/04
Camaroptera	Green-backed	<i>Camaroptera</i>	<i>brachyura brachyura</i>	5	2024/11/08
Canary	Brimstone	<i>Crithagra</i>	<i>sulphurata</i>	98	2026/01/28
Canary	Cape	<i>Serinus</i>	<i>canicollis</i>	97	2025/12/04
Canary	Forest	<i>Crithagra</i>	<i>scotops</i>	44	2025/12/04
Canary	Yellow	<i>Crithagra</i>	<i>flaviventris</i>	4	2023/01/12
Chat	Familiar	<i>Oenanthe</i>	<i>familiaris</i>	1	2007/11/07
Cisticola	Grey-backed	<i>Cisticola</i>	<i>subruficapilla</i>	9	2026/01/28
Cisticola	Lazy	<i>Cisticola</i>	<i>aberrans</i>	1	2024/12/29
Cisticola	Levaillant's	<i>Cisticola</i>	<i>tinniens</i>	26	2025/12/12
Coot	Red-knobbed	<i>Fulica</i>	<i>cristata</i>	32	2025/12/06
Cormorant	Cape	<i>Phalacrocorax</i>	<i>capensis</i>	164	2026/02/08
Cormorant	Reed	<i>Microcarbo</i>	<i>africanus</i>	24	2025/12/04
Cormorant	White-breasted	<i>Phalacrocorax</i>	<i>lucidus</i>	201	2026/02/08
Coucal	Burchell's	<i>Centropus</i>	<i>burchellii</i>	77	2025/12/06
Crake	Black	<i>Zaporina</i>	<i>flavirostra</i>	26	2025/12/04
Crombec	Long-billed	<i>Sylvietta</i>	<i>rufescens</i>	2	2017/04/14
Crow	Cape	<i>Corvus</i>	<i>capensis</i>	26	2025/09/07
Crow	Pied	<i>Corvus</i>	<i>albus</i>	102	2026/01/28
Cuckoo	African Emerald	<i>Chrysococcyx</i>	<i>cupreus</i>	3	2013/07/12
Cuckoo	Black	<i>Cuculus</i>	<i>clamosus</i>	3	2023/11/06
Cuckoo	Diederik	<i>Chrysococcyx</i>	<i>caprius</i>	49	2025/12/31
Cuckoo	Klaas's	<i>Chrysococcyx</i>	<i>klaas</i>	17	2025/10/18
Cuckoo	Red-chested	<i>Cuculus</i>	<i>solitarius</i>	4	2023/11/06
Cuckooshrike	Grey	<i>Coracina</i>	<i>caesia</i>	3	2013/08/25
Darter	African	<i>Anhinga</i>	<i>rufa</i>	4	2022/06/28
Dove	Laughing	<i>Spilopelia</i>	<i>senegalensis</i>	104	2026/01/28
Dove	Lemon	<i>Columba</i>	<i>larvata</i>	17	2016/03/22
Dove	Namaqua	<i>Oena</i>	<i>capensis</i>	2	2020/11/24

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Dove	Red-eyed	<i>Streptopelia</i>	<i>semitorquata</i>	181	2026/01/28
Dove	Ring-necked	<i>Streptopelia</i>	<i>capicola</i>	204	2026/01/28
Dove	Rock	<i>Columba</i>	<i>livia</i>	7	2024/12/24
Dove	Tambourine	<i>Turtur</i>	<i>tympanistris</i>	12	2016/01/09
Drongo	Fork-tailed	<i>Dicrurus</i>	<i>adsimilis</i>	149	2025/12/06
Duck	African Black	<i>Anas</i>	<i>sparsa</i>	2	2014/02/18
Duck	White-backed	<i>Thalassornis</i>	<i>leuconotus</i>	1	2025/12/04
Duck	White-faced Whistling	<i>Dendrocygna</i>	<i>viduata</i>	11	2025/09/09
Duck	Yellow-billed	<i>Anas</i>	<i>undulata</i>	33	2025/12/04
Eagle	Long-crested	<i>Lophaetus</i>	<i>occipitalis</i>	1	2020/12/25
Eagle	Verreaux's	<i>Aquila</i>	<i>verreauxii</i>	2	2009/12/05
Eagle-Owl	Spotted	<i>Bubo</i>	<i>africanus</i>	8	2025/12/04
Egret	Intermediate [x]	<i>Ardea</i>	<i>intermedia</i>	1	2020/12/25
Egret	Little	<i>Egretta</i>	<i>garzetta</i>	10	2025/12/04
Egret	Western Cattle	<i>Bubulcus</i>	<i>ibis</i>	31	2026/01/09
Falcon	Peregrine	<i>Falco</i>	<i>peregrinus</i>	7	2025/10/18
Fiscal	Southern	<i>Lanius</i>	<i>collaris</i>	154	2026/01/28
Fish Eagle	African	<i>Haliaeetus</i>	<i>vocifer</i>	4	2021/01/16
Flufftail	Buff-spotted	<i>Sarothrura</i>	<i>elegans</i>	5	2025/12/04
Flycatcher	African Dusky	<i>Muscicapa</i>	<i>adusta</i>	46	2025/09/20
Flycatcher	African Paradise	<i>Terpsiphone</i>	<i>viridis</i>	30	2025/12/04
Flycatcher	Blue-mantled Crested	<i>Trochocercus</i>	<i>cyanomelas</i>	8	2025/12/04
Flycatcher	Fiscal	<i>Melaenornis</i>	<i>silens</i>	225	2026/01/28
Frigatebird	Lesser	<i>Fregata</i>	<i>ariel</i>	1	2024/02/06
Gannet	Cape	<i>Morus</i>	<i>capensis</i>	79	2026/01/09
Goose	Egyptian	<i>Alopochen</i>	<i>aegyptiaca</i>	119	2025/12/06
Goose	Spur-winged	<i>Plectropterus</i>	<i>gambensis</i>	3	2025/12/04
Goshawk	African	<i>Accipiter</i>	<i>tachiro</i>	4	2023/10/25
Goshawk	Pale Chanting	<i>Melierax</i>	<i>canorus</i>	1	2018/07/24

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Grassbird	Cape	<i>Sphenoeacus</i>	<i> afer</i>	74	2026/02/08
Grebe	Little	<i>Tachybaptus</i>	<i> ruficollis</i>	13	2025/12/04
Greenbul	Sombre	<i>Andropadus</i>	<i> importunus</i>	274	2026/02/08
Guineafowl	Helmeted	<i>Numida</i>	<i> meleagris</i>	149	2026/02/08
Gull	Grey-headed	<i>Chroicocephalus</i>	<i> cirrocephalus</i>	4	2022/07/17
Gull	Hartlaub's	<i>Chroicocephalus</i>	<i> hartlaubii</i>	1	2022/11/15
Gull	Kelp	<i>Larus</i>	<i> dominicanus</i>	312	2026/02/08
Harrier	African Marsh	Circus	 ranivorus	4	2019/12/24
Harrier-Hawk	African	<i>Polyboroides</i>	<i> typus</i>	4	2020/03/05
Heron	Black-headed	<i>Ardea</i>	<i> melanocephala</i>	34	2025/12/06
Heron	Grey	<i>Ardea</i>	<i> cinerea</i>	14	2025/10/18
Heron	Purple	<i>Ardea</i>	<i> purpurea</i>	5	2020/09/17
Honeybird	Brown-backed	<i>Prodotiscus</i>	<i> regulus</i>	3	2025/12/04
Honeyguide	Lesser	<i>Indicator</i>	<i> minor</i>	1	2008/10/10
Honeyguide	Scaly-throated	<i>Indicator</i>	<i> variegatus</i>	2	2020/09/17
Hoopoe	African	<i>Upupa</i>	<i> africana</i>	16	2025/12/06
Ibis	African Sacred	<i>Threskiornis</i>	<i> aethiopicus</i>	79	2025/12/31
Ibis	Hadada	<i>Bostrychia</i>	<i> hagedash</i>	156	2026/01/28
Jaeger	Parasitic	<i>Stercorarius</i>	<i> parasiticus</i>	1	2018/03/31
Kestrel	Rock	<i>Falco</i>	<i> rupicolus</i>	131	2026/01/09
Kingfisher	Brown-hooded	<i>Halcyon</i>	<i> albiventris</i>	22	2023/11/17
Kingfisher	Giant	<i>Megaceryle</i>	<i> maxima</i>	2	2012/08/21
Kingfisher	Malachite	<i>Corythornis</i>	<i> cristatus</i>	3	2025/12/04
Kingfisher	Pied	<i>Ceryle</i>	<i> rudis</i>	3	2017/10/06
Kite	Black-winged	<i>Elanus</i>	<i> caeruleus</i>	39	2024/03/28
Kite	Yellow-billed	<i>Milvus</i>	<i> aegyptius</i>	3	2023/10/07
Lapwing	Black-winged	<i>Vanellus</i>	<i> melanopterus</i>	10	2021/10/13
Lapwing	Blacksmith	<i>Vanellus</i>	<i> armatus</i>	31	2025/12/04
Lapwing	Crowned	<i>Vanellus</i>	<i> coronatus</i>	29	2025/11/20

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Longclaw	Cape	<i>Macronyx</i>	<i>capensis</i>	12	2025/12/04
Martin	Banded	<i>Neophedina</i>	<i>cincta</i>	1	2015/05/11
Martin	Brown-throated	<i>Riparia</i>	<i>paludicola</i>	10	2025/12/12
Martin	Rock	<i>Ptyonoprogne</i>	<i>fuligula</i>	144	2026/02/08
Moorhen	Common	<i>Gallinula</i>	<i>chloropus</i>	29	2025/12/06
Mousebird	Red-faced	<i>Urocolius</i>	<i>indicus</i>	35	2025/12/06
Mousebird	Speckled	<i>Colius</i>	<i>striatus</i>	233	2026/02/08
Nightjar	Fiery-necked	<i>Caprimulgus</i>	<i>pectoralis</i>	22	2025/10/04
Openbill	African	<i>Anastomus</i>	<i>lamelligerus</i>	1	2009/12/25
Oriole	Black-headed	<i>Oriolus</i>	<i>larvatus</i>	56	2025/11/25
Osprey	Western	<i>Pandion</i>	<i>haliaetus</i>	2	2015/06/10
Owl	Western Barn	<i>Tyto</i>	<i>alba</i>	2	2023/04/15
Oystercatcher	African	<i>Haematopus</i>	<i>moquini</i>	189	2026/02/08
Penguin	African	<i>Spheniscus</i>	<i>demersus</i>	5	2025/10/18
Petrel	White-chinned	<i>Procellaria</i>	<i>aequinoctialis</i>	5	2025/12/04
Pigeon	African Green	<i>Treron</i>	<i>calvus</i>	1	2025/01/18
Pigeon	African Olive	<i>Columba</i>	<i>arquatrix</i>	9	2021/05/29
Pigeon	Speckled	<i>Columba</i>	<i>guinea</i>	223	2026/01/28
Pipit	African	<i>Anthus</i>	<i>cinnamomeus</i>	7	2021/10/13
Pipit	Nicholson's	<i>Anthus</i>	<i>nicholsoni</i>	1	2012/07/09
Pipit	Plain-backed	<i>Anthus</i>	<i>leucophrys</i>	9	2025/12/04
Plover	Common Ringed	<i>Charadrius</i>	<i>hiaticula</i>	1	2014/04/17
Plover	Three-banded	<i>Charadrius</i>	<i>tricoloris</i>	1	2025/12/04
Plover	White-fronted	<i>Charadrius</i>	<i>marginatus</i>	18	2026/01/09
Prinia	Karoo	<i>Prinia</i>	<i>maculosa</i>	264	2026/02/08
Puffback	Black-backed	<i>Dryoscopus</i>	<i>cubla</i>	15	2022/10/29
Rail	African	<i>Rallus</i>	<i>caerulescens</i>	1	2020/12/16
Raven	White-necked	<i>Corvus</i>	<i>albicollis</i>	169	2026/01/28
Red Bishop	Southern	<i>Euplectes</i>	<i>orix</i>	33	2025/12/27

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Robin-Chat	Cape	<i>Cossypha</i>	<i>caffra</i>	274	2026/02/08
Robin-Chat	Chorister	<i>Cossypha</i>	<i>dichroa</i>	21	2025/12/04
Rock-Thrush	Cape	<i>Monticola</i>	<i>rupestris</i>	132	2026/02/08
Rockhopper Penguin	Northern	<i>Eudypetes</i>	<i>moseleyi</i>	4	2023/01/24
Sandpiper	Common	<i>Actitis</i>	<i>hypoleucos</i>	1	2014/04/18
Saw-wing	Black	<i>Psalidoprocne</i>	<i>pristoptera</i>	90	2026/01/28
Scrub Robin	Karoo	<i>Cercotrichas</i>	<i>coryphoeus</i>	4	2026/01/28
Scrub Robin	White-browed	<i>Cercotrichas</i>	<i>leucophrys</i>	3	2018/01/01
Seedeater	Streaky-headed	<i>Crithagra</i>	<i>gularis</i>	144	2025/12/06
Shearwater	Sooty	<i>Ardenna</i>	<i>grisea</i>	2	2021/10/13
Sheathbill	Snowy	<i>Chionis</i>	<i>albus</i>	3	2022/10/04
Shoveler	Cape	<i>Anas</i>	<i>smithii</i>	4	2016/03/22
Siskin	Cape	<i>Crithagra</i>	<i>totta</i>	74	2025/12/04
Skua	Subantarctic	<i>Stercorarius</i>	<i>antarcticus</i>	4	2023/03/02
Snipe	African	<i>Gallinago</i>	<i>nigripennis</i>	1	2025/12/04
Sparrow	Cape	<i>Passer</i>	<i>melanurus</i>	5	2023/12/26
Sparrow	House	<i>Passer</i>	<i>domesticus</i>	56	2025/12/04
Sparrow	Southern Grey-headed	<i>Passer</i>	<i>diffusus</i>	118	2025/12/06
Sparrowhawk	Black	<i>Accipiter</i>	<i>melanoleucus</i>	14	2025/12/04
Sparrowhawk	Little	<i>Accipiter</i>	<i>minullus</i>	1	2022/04/30
Sparrowhawk	Rufous-breasted	<i>Accipiter</i>	<i>rufiventris</i>	1	2025/09/24
Spoonbill	African	<i>Platalea</i>	<i>alba</i>	2	2025/12/04
Spurfowl	Cape	<i>Pternistis</i>	<i>capensis</i>	3	2026/01/28
Spurfowl	Red-necked	<i>Pternistis</i>	<i>afer</i>	97	2026/01/28
Starling	Black-bellied	<i>Notopholia</i>	<i>corrusca</i>	14	2025/09/19
Starling	Cape	<i>Lamprotornis</i>	<i>nitens</i>	3	2025/12/04
Starling	Common	<i>Sturnus</i>	<i>vulgaris</i>	203	2026/01/09
Starling	Red-winged	<i>Onychognathus</i>	<i>morio</i>	309	2026/02/08
Starling	Wattled	<i>Creatophora</i>	<i>cinerea</i>	1	2023/01/10

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Stilt	Black-winged	<i>Himantopus</i>	<i>himantopus</i>	1	2017/10/06
Stint	Little	<i>Calidris</i>	<i>minuta</i>	1	2019/11/26
Stonechat	African	<i>Saxicola</i>	<i>torquatus</i>	37	2025/12/04
Sugarbird	Cape	<i>Promerops</i>	<i>cafer</i>	91	2025/12/27
Sunbird	Amethyst	<i>Chalcomitra</i>	<i>amethystina</i>	134	2025/12/04
Sunbird	Collared	<i>Hedydipna</i>	<i>collaris</i>	19	2025/12/06
Sunbird	Dusky	<i>Cinnyris</i>	<i>fuscus</i>	2	2017/07/21
Sunbird	Greater Double-collared	<i>Cinnyris</i>	<i>afer</i>	190	2026/02/08
Sunbird	Grey	<i>Cyanomitra</i>	<i>veroxii</i>	25	2025/12/04
Sunbird	Malachite	<i>Nectarinia</i>	<i>famosa</i>	115	2026/02/08
Sunbird	Orange-breasted	<i>Anthobaphes</i>	<i>violacea</i>	173	2026/02/08
Sunbird	Southern Double-collared	<i>Cinnyris</i>	<i>chalybeus</i>	188	2026/01/28
Swallow	Barn	<i>Hirundo</i>	<i>rustica</i>	96	2026/02/08
Swallow	Greater Striped	<i>Cecropis</i>	<i>cucullata</i>	118	2026/01/09
Swallow	Lesser Striped	<i>Cecropis</i>	<i>abyssinica</i>	2	2025/10/18
Swallow	Pearl-breasted	<i>Hirundo</i>	<i>dimidiata</i>	1	2022/06/28
Swallow	White-throated	<i>Hirundo</i>	<i>albigularis</i>	11	2026/01/28
Swift	African Black	<i>Apus</i>	<i>barbatus</i>	117	2026/02/08
Swift	African Palm	<i>Cypsiurus</i>	<i>parvus</i>	6	2025/12/04
Swift	Alpine	<i>Tachymarptis</i>	<i>melba</i>	26	2025/12/04
Swift	Common	<i>Apus</i>	<i>apus</i>	11	2025/12/12
Swift	Horus	<i>Apus</i>	<i>horus</i>	1	2011/11/08
Swift	Little	<i>Apus</i>	<i>affinis</i>	10	2024/12/07
Swift	White-rumped	<i>Apus</i>	<i>caffer</i>	87	2026/01/28
Tchagra	Southern	<i>Tchagra</i>	<i>tchagra</i>	125	2026/01/28
Teal	Cape	<i>Anas</i>	<i>capensis</i>	1	2014/02/18
Teal	Red-billed	<i>Anas</i>	<i>erythrorhyncha</i>	3	2025/12/04
Tern	Caspian	<i>Hydroprogne</i>	<i>caspia</i>	3	2025/05/10
Tern	Common	<i>Sterna</i>	<i>hirundo</i>	15	2026/01/09

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Tern	Greater Crested	<i>Thalasseus</i>	<i>bergii</i>	89	2026/01/28
Tern	Sandwich	<i>Thalasseus</i>	<i>sandvicensis</i>	26	2026/01/09
Tern	Whiskered	<i>Chlidonias</i>	<i>hybrida</i>	1	2021/12/30
Thick-knee	Spotted	<i>Burhinus</i>	<i>capensis</i>	9	2025/12/04
Thick-knee	Water	<i>Burhinus</i>	<i>vermiculatus</i>	1	2026/01/28
Thrush	Olive	<i>Turdus</i>	<i>olivaceus</i>	63	2025/12/04
Trogon	Narina	<i>Apaloderma</i>	<i>narina</i>	1	2016/02/10
Turaco	Knysna	<i>Tauraco</i>	<i>corythaix</i>	66	2025/12/04
Wagtail	African Pied	<i>Motacilla</i>	<i>aguimp</i>	1	2021/01/16
Wagtail	Cape	<i>Motacilla</i>	<i>capensis</i>	206	2026/02/08
Warbler	Knysna	<i>Bradypterus</i>	<i>sylvaticus</i>	2	2025/12/04
Warbler	Lesser Swamp	<i>Acrocephalus</i>	<i>gracilirostris</i>	29	2025/12/12
Warbler	Little Rush	<i>Bradypterus</i>	<i>baboecala</i>	31	2025/12/06
Warbler	Victorin's	<i>Cryptillas</i>	<i>victorini</i>	10	2016/12/28
Warbler	Willow	<i>Phylloscopus</i>	<i>trochilus</i>	1	2020/11/24
Warbler	Yellow-throated Woodland	<i>Phylloscopus</i>	<i>ruficapilla</i>	2	2017/04/14
Waxbill	Common	<i>Estrilda</i>	<i>astrild</i>	83	2026/02/08
Waxbill	Swee	<i>Coccopygia</i>	<i>melanotis</i>	30	2025/12/04
Weaver	Cape	<i>Ploceus</i>	<i>capensis</i>	215	2026/02/08
Whimbrel	Eurasian	<i>Numenius</i>	<i>phaeopus</i>	4	2025/01/26
White-eye	Cape	<i>Zosterops</i>	<i>virens</i>	218	2026/02/08
Whydah	Pin-tailed	<i>Vidua</i>	<i>macroura</i>	94	2025/12/04
Wood Hoopoe	Green	<i>Phoeniculus</i>	<i>purpureus</i>	4	2025/10/04
Woodpecker	Cardinal	<i>Dendropicos</i>	<i>fuscescens</i>	19	2025/12/06
Woodpecker	Ground	<i>Geocolaptes</i>	<i>olivaceus</i>	6	2025/12/04
Woodpecker	Knysna	<i>Campethera</i>	<i>notata</i>	6	2019/01/23
Woodpecker	Olive	<i>Dendropicos</i>	<i>griseocephalus</i>	37	2025/12/06

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Appendix D

Appendix D Desktop species list of the reptile species which have been previously recorded within the broader study area landscape (iNaturalist, www.iNaturalist.org). For each species, the taxonomic Order, Family, species binomial name and common name is shown, along with the current IUCN Red List classification of the species.

Butterflies Desktop Species List					
Order	Family	Species	Common name	IUCN status	
Lepidoptera	Hesperiidae	<i>Metisella metis</i>	Western Gold-spotted Sylph	Least Concern	
		<i>Spialia spio</i>	Mountain Sandman	Least Concern	
	Lycaenidae	<i>Anthene amarah</i>	Black-striped Hairtail	Least Concern	
		<i>Anthene definita</i>	Common Hairtail	Least Concern	
		<i>Cacyreus marshalli</i>	Common Geranium Bronze	Least Concern	
		<i>Lampides boeticus</i>	Long-tailed Blue	Least Concern	
		<i>Leptotes pirithous</i>	Common Zebra Blue	Least Concern	
		<i>Myrina silenus</i>	Common Figtree Blue	Least Concern	
		<i>Tarucus thespis</i>	Vivid Dotted Blue	Least Concern	
		<i>Zizeeria knysna</i>	African Grass Blue	Least Concern	
		Nymphalidae	<i>Acraea neobule</i>	Wandering Donkey Acraea	Least Concern
			<i>Bicyclus safitza</i>	Black-haired Bush Brown	Least Concern
	<i>Cassionympha cassius</i>		Rainforest Brown	Least Concern	
	<i>Charaxes varanes</i>		Common Pearl Charaxes	Least Concern	
	<i>Cymothoe alcimeda</i>		Battling Glider	Least Concern	
	<i>Dira clytus</i>		Cape Autumn Widow	Least Concern	
	<i>Hypolimnas misippus</i>		Danaid Eggfly	Least Concern	
	<i>Junonia hierta</i>		Yellow Pansy	Least Concern	
	<i>Junonia oenone</i>		Dark Blue Pansy	Least Concern	
	<i>Junonia orithya</i>		Blue Pansy	Least Concern	
	<i>Phalanta eurytis</i>		Forest Leopard	Least Concern	
	<i>Precis archesia</i>		Garden Commodore	Least Concern	
	<i>Vanessa cardui</i>		Painted Lady	Least Concern	
	Papilionidae	<i>Papilio dardanus</i>	Flying Handkerchief	Least Concern	
		<i>Papilio demodocus</i>	Citrus Swallowtail	Least Concern	
		<i>Papilio nireus</i>	Narrow Green-banded Swallowtail	Least Concern	
	Pieridae	<i>Belenois zochalia</i>	Forest Caper White	Least Concern	
		<i>Catopsilia florella</i>	African Migrant	Least Concern	
		<i>Colotis euipe</i>	Round-winged Orange Tip	Least Concern	
		<i>Eurema brigitta</i>	Broad-bordered Grass Yellow	Least Concern	
		<i>Mylothris agathina</i>	Eastern Dotted Border	Least Concern	
		<i>Pieris brassicae</i>	Large White	Least Concern	
		<i>Pseudanaphaeis gidica</i>	African Veinded White	Least Concern	
<i>Pontia helice</i>		Southern Meadow White	Least Concern		
<i>Dixeia charina</i>		African Small White	Least Concern		

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

Appendix E

Appendix E Species list of the faunal species recovered within the study area during the field survey. For each, the taxonomic Order, Family, species binomial name and species common name are shown, along with the current IUCN Red List classification of the species, and the number of records of the species during the surveying period.

Mammals					
Order	Family	Species	Common name	Status	No. observations
Afrosoricida	Chrysochloridae	<i>Chrysochloris asiatica</i>	Cape Golden Mole	Least Concern	5
Artiodactyla	Bovidae	<i>Raphicerus melanotis</i>	Cape Grysbok	Least Concern	5
Primates	Cercopithecidae	<i>Papio ursinus</i>	Chacma Baboon	Least Concern	1
Rodentia	Bathyergidae	<i>Cryptomys hottentotus</i>	African Mole-rat	Least Concern	2
	Hystricidae	<i>Hystrix africaeaustralis</i>	Cape Porcupine	Least Concern	14
	Muridae	<i>Rhabdomys pumilio</i>	Four-striped Grass Mouse	Least Concern	1
Tubulidentata	Orycteropodidae	<i>Orycteropus afer</i>	Aardvark	Least Concern	1
Avifauna					
Order	Family	Species	Common name	Status	No. observations
Anseriformes	Anatidae	<i>Anas undulata</i>	Yellow-billed Duck	Least Concern	1
Caprimulgiformes	Apodidae	<i>Apus caffer</i>	White-rumped Swift	Least Concern	1
Columbiformes	Columbidae	<i>Columba guinea</i>	Speckled Pigeon	Least Concern	2
Gruiformes	Rallidae	<i>Fulica cristata</i>	Red-knobbed Coot	Least Concern	1
Passeriformes	Cisticolidae	<i>Apalis thoracica</i>	Bar-throated Apalis	Least Concern	1
		<i>Cisticola fulvicapilla</i>	Neddicky	Least Concern	1
		<i>Prinia maculosa</i>	Karoo Prinia	Least Concern	6
Corvidae	Corvidae	<i>Corvus albicollis</i>	White-necked Raven	Least Concern	1
	Estrildidae	<i>Estrilda astrild</i>	Common Waxbill	Least Concern	1
	Fringillidae	<i>Crithagra totta</i>	Cape Siskin	Least Concern	1
	Hirundinidae	<i>Cecropis cucullata</i>	Greater Striped Swallow	Least Concern	2

CELL: (083) 453 7916 E-MAIL: BlueSkiesResearch01@gmail.com

13 Dennelaan, Stilbaai, 6674

		<i>Hirundo rustica</i>	Barn Swallow	Least Concern	2
	Malaconotidae	<i>Laniarius ferrugineus</i>	Southern Boubou	Least Concern	1
	Motacillidae	<i>Motacilla capensis</i>	Cape Wagtail	Least Concern	1
	Muscicapidae	<i>Cossypha caffra</i>	Cape Robin-Chat	Least Concern	4
		<i>Melaenornis silens</i>	Fiscal Flycatcher	Least Concern	2
		<i>Tychaedon coryphoeus</i>	Karoo Scrub Robin	Least Concern	1
	Nectariniidae	<i>Anthobaphes violacea</i>	Orange-breasted Sunbird	Least Concern	1
		<i>Cinnyris chalybeus</i>	Southern Double-collared Sunbird	Least Concern	2
	Passeridae	<i>Passer diffusus</i>	Southern Grey-headed Sparrow	Least Concern	1
	Ploceidae	<i>Euplectes capensis</i>	Yellow Bishop	Least Concern	2
		<i>Ploceus capensis</i>	Cape Weaver	Least Concern	2
	Pycnonotidae	<i>Andropadus importunus</i>	Sombre Greenbul	Least Concern	1
		<i>Pycnonotus capensis</i>	Cape Bulbul	Least Concern	4
	Sturnidae	<i>Onychognathus morio</i>	Red-winged Starling	Least Concern	1
		<i>Sturnus vulgaris</i>	Common Starling	Least Concern	1
	Zosteropidae	<i>Zosterops virens</i>	Cape White-eye	Least Concern	1
Butterflies					
Order	Family	Species	Common name	Status	No. observations
Lepidoptera	Lycaenidae	<i>Aloeides almeida</i>	Almeida Copper	Least Concern	1
	Pieridae	<i>Dixeia charina</i>	African Small White	Least Concern	1