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04 September 2024

**THE PROPOSED RESIDENTIAL DEVELOPMENT ON ERF 19374 (REMAINDER ERF 6182, ERF 6179, ERF 6156),
WITH STORMWATER OUTLET ON ERF 19001, GEORGE, WESTERN CAPE – LAYOUT AMENDMENT:
TERRESTRIAL BIODIVERSITY AND ANIMAL SPECIES COMPLIANCE STATEMENT – COMMENT**

Background

The Terrestrial Biodiversity and Animal Species Compliance Statement (dated 19 September 2022) assess the layout for the abovementioned project as shown in Figure 1. The previous application for Environmental Authorisation (EA) was withdrawn due to not being able to synchronise the Water Use Licence Application (WULA) and EA application. The layout has since been revised as presented in Figure 2. The proposed development footprint remains the same, however the number of residential units has been reduced from 77 to 70, while the 40 flats aspect has remained unchanged.

In addition, the site conditions have been altered slightly as the adjacent landowner is in the process of developing land to the south and has constructed a gravel road where there once was a vegetated two track road through the southern section of the site. All other aspects of the project remain unchanged. The revised layout is the preferred layout of the Applicant.

It is noted that the entire affected property, namely Remaining Extent of ERF 19374 (Remainder of ERF 6182, ERF 6179, ERF 6156) and ERF 19001 (stormwater outlet), underwent site sensitivity verification and assessment on the 6th of April 2022.

Specialist Comment on the Revised Layout

As assessed previously, the site is largely in a modified state due to previous land use practices and subsequent disturbances and displays a low sensitivity from a terrestrial biodiversity and faunal perspective. The perceived impacts will be low and will not change with the revised layout. As stated in the report, potential impacts on the Malgas River situated on the western boundary may be of concern if strict mitigation measures are not put in place, and all recommendations remain the same as indicated in the report. The revised layout appears to avoid this area sufficiently. Therefore, the conclusion remains that there is nothing that precludes the development of the proposed project. The revised layout is acceptable from a terrestrial biodiversity and faunal perspective.

I trust you will find the above in order. Please contact me should you have any queries.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Robyn Phillips', is written over a horizontal line.

Robyn Phillips

Terrestrial Ecologist for Cossypha Ecological



AREA SCHEDULE

Lot No.	Lot Area (sq ft)	Lot Type
E11 01	325.40	Type 3
E11 02	325.40	Type 3
E11 03	325.40	Type 3
E11 04	325.40	Type 3
E11 05	325.40	Type 3
E11 06	325.40	Type 3
E11 07	325.40	Type 3
E11 08	325.40	Type 3
E11 09	325.40	Type 3
E11 10	325.40	Type 3
E11 11	452.44	Type 1
E11 12	452.44	Type 1
E11 13	452.44	Type 1
E11 14	452.44	Type 1
E11 15	452.44	Type 1
E11 16	452.44	Type 1
E11 17	452.44	Type 1
E11 18	452.44	Type 1
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E11 49	452.44	Type 1
E11 50	452.44	Type 1

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REVISIONS

No.	Date	Description

Modified Drawing

Original Number and Revision History



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AR-Williams | LACAP Reg. PLOT 2000013

Project:

Client:

Project Description:

Urban Country Estate - SDP

Urban Country Estate, Heatherspark, Georgia

FOR INFORMATION

DRAWING TITLE:

PROPOSED SDP

Date: Project No.: Revision No.:

Drawn By: Scale:

Checked By: Date:

Figure 2: The revised layout

DECLARATION OF THE SPECIALIST

Note: Duplicate this section where there is more than one specialist.

I **Robyn Phillips**, as the appointed Specialist hereby declare/affirm the correctness of the information provided or to be provided as part of the application, and that:

- In terms of the general requirement to be independent:
 - other than fair remuneration for work performed in terms of this application, have no business, financial, personal or other interest in the development proposal or application and that there are no circumstances that may compromise my objectivity; or
 - am not independent, but another specialist (the "Review Specialist") that meets the general requirements set out in Regulation 13 of the NEMA EIA Regulations has been appointed to review my work (Note: a declaration by the review specialist must be submitted);
- In terms of the remainder of the general requirements for a specialist, have throughout this EIA process met all of the requirements;
- I have disclosed to the applicant, the EAP, the Review EAP (if applicable), the Department and I&APs all material information that has or may have the potential to influence the decision of the Department or the objectivity of any Report, plan or document prepared or to be prepared as part of the application; and
- I am aware that a false declaration is an offence in terms of Regulation 48 of the EIA Regulations.



Signature of the EAP: Specialist:

05 November 2024

Date:

Cossypha Ecological

Name of company (if applicable):

**Proposed Residential Development on ERF 19374 George,
George Local Municipality, Garden Route District, Western
Cape**

**Terrestrial Biodiversity & Terrestrial Animal Species
Compliance Statement**

Compiled for



By



Cossypha
Ecological

September 2022

REPORT PRODUCTION

Specialist	Role	Project Component	Qualifications and Professional Registration
Robyn Phillips	Terrestrial Ecologist	Ecological assessment of terrestrial biodiversity and fauna; Field work and report compilation	MSc (Zoology) UNP SACNASP: <i>Pr.Sci.Nat.</i> Reg. no.: 400401/12 Fields: Zoological and Ecological Years' Experience: 20, primary expertise in fauna and terrestrial biodiversity

Refer to **Appendix A** for an abridged CV of the specialist.

CONTACT INFORMATION

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SPECIALIST DECLARATION OF INDEPENDENCE

I, **Robyn Phillips**, in my capacity as a specialist consultant, hereby declare that I –

- Act as an independent consultant;
- Do not have any financial interest in the undertaking of the activity, other than remuneration for the work performed in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- Do not have and will not have vested interest in the proposed activity proceeding;
- Have no, and will not engage in, conflicting interests in the undertaking of the activity;
- Undertake to disclose, to the Competent Authority, any material information that has 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 National Environmental Management Act, 1998 (Act 107 of 1998);
- Will provide the Competent Authority with access to all information at my disposal regarding the application, whether such information is favourable to the applicant or not;
- As a registered member of the South African Council for Natural Scientific Professions, will undertake my profession in accordance with the Code of Conduct of the Council, as well as any other societies to which I am a member;
- Based on information provided to me by the project proponent and in addition to information obtained during the course of this study, have presented the results and conclusion within the associated document to the best of my professional ability;
- Reserve the right to modify aspects pertaining to the present investigation should additional information become available through ongoing research and/or further work in this field; and
- Undertake to have my work peer reviewed on a regular basis by a competent specialist in the field of study for which I am registered.



Robyn Phillips *Pr.Sci.Nat.*
Terrestrial Ecologist
SACNASP Reg. No. 400401/12

19 September 2022

Date

TABLE OF CONTENTS

Report Production	ii
Contact Information	ii
Specialist Declaration of Independence.....	ii
Table of Contents.....	iii
List of Figures.....	iv
Abbreviations	iv
1. Introduction and Project Description.....	1
2. The Study Area.....	1
2.1 Location	1
2.2 Land Uses of the Site and Surrounding Areas	1
3. Reporting Requirements	5
3.1 Site Sensitivity Verification	5
3.2 Terms of Reference	6
4. Methodology	7
4.1 Desktop Assessment	7
4.2 Field Survey	7
4.3 Assumptions and Limitations	7
5. Desktop Assessment Results	9
5.1 Terrestrial Biodiversity.....	9
5.1.1 Regional Vegetation.....	9
5.1.2 Fauna and Flora.....	9
5.1.3 Threatened Terrestrial Ecosystems	9
5.1.4 Western Cape Biodiversity Sector Plan	10
5.1.5 Protected Areas.....	10
5.1.6 National Freshwater Ecosystem Priority Areas.....	12
5.2 Historical Land Use of the Study Area	12
6. Field Survey Results	14
6.1 Site Description	14
6.2 Sample Point Descriptions.....	15
7. Summary and Recommendations	19
7.1 Summary	19
7.2 Impact Management.....	19
7.3 Conclusion	20

8. References.....	20
Appendices.....	21
APPENDIX A: Abridged CV of the Specialist.....	21

LIST OF FIGURES

Figure 1: Proposed development layout.....	2
Figure 2: Locality of the study area.....	3
Figure 3: Aerial overview of the study area and surrounds.....	4
Figure 4: Aerial view of the site with GPS track and location of sample points.....	8
Figure 5: The study area in relation to the WCBSP.....	11

ABBREVIATIONS

BA	Basic Assessment
CBA	Critical Biodiversity Area
DEA	Department of Environmental Affairs
DFFE	Department of Forestry, Fisheries and the Environment
EA	Environmental Authorisation
EAP	Environmental Assessment Practitioner
ECO	Environmental Control Officer
EIA	Environmental Impact Assessment
EMPr	Environmental Management Programme
EN	Endangered
ESA	Ecological Support Area
GIS	Geographic Information System
GN	General Notice
IAP	Invasive Alien Plants
IBA	Important Bird Area
IUCN	International Union for the Conservation of Nature
NEMA	National Environmental Management Act (Act 107 of 1998)
ONA	Other Natural Area
PA	Protected Area
QDGC	Quarter Degree Grid Cell
RLE	Red List of Ecosystems
SANBI	South African National Biodiversity Institute
SCC	Species of Conservation Concern
SWSA	Strategic Water Source Area
VU	Vulnerable

1. INTRODUCTION AND PROJECT DESCRIPTION

Sharples Environmental Services cc (SES) has been appointed as the independent Environmental Assessment Practitioner (EAP) to undertake the environmental process, in this case a Basic Assessment (BA), required for the application for an Environmental Authorisation (EA) for the proposed residential development of Erf 19374, George. The proposed development will comprise 94 housing units, internal roads, entrance gate, services such as water and sanitation, and open spaces (**Figure 1**).

As part of the BA process, the National Web-Based Environmental Screening Tool developed by the Department of Forestry, Fisheries and the Environment (DFFE), identified the need for Terrestrial Biodiversity and Animal Species Assessment / Compliance Statements for the proposed project. Cossypha Ecological was appointed to undertake the specialist study for the site in question.

2. THE STUDY AREA

2.1 LOCATION

The site is located between the residential areas of Blanco to the west and Heather Park to the south, and about 3 km northwest of George Central, within the George Local Municipality, Garden Route District, West Cape Province (**Figure 2**). The site falls within Quarter Degree Grid Cell (QDGC) 3322CD and lies between 33°56'37.28" and 33°56'55.47" south and 22°25'31.97" and 22°25'40.51" east. The site is relatively flat occurring between 230 m to 246 m above mean sea level (a.m.s.l). The site is approximately 5.64 ha in extent.

2.2 LAND USES OF THE SITE AND SURROUNDING AREAS

The site is situated within the urban surrounds of George. It is located on the east bank of the Malgas River and is surrounded by residential areas to the east, south, and west. The national road N9 borders the site to north, beyond which, lies commercial forestry plantations. The broader landscape to the east, south, and west comprises settlement, golf courses, and industry associated with George, while farmlands comprised of cultivated fields and pastures occur further to the west. The Outeniqua Mountains occur further to the north, with the Witfontein Nature Reserve situated approximately 2.4 km to the north of the site (**Figure 3**). The site is a vacant portion of land with no current anthropogenic land use, which has been cleared of vegetation at various intervals in the past and now comprises mostly of weedy and alien vegetation and is bordered by alien trees.



Figure 1: Proposed development layout

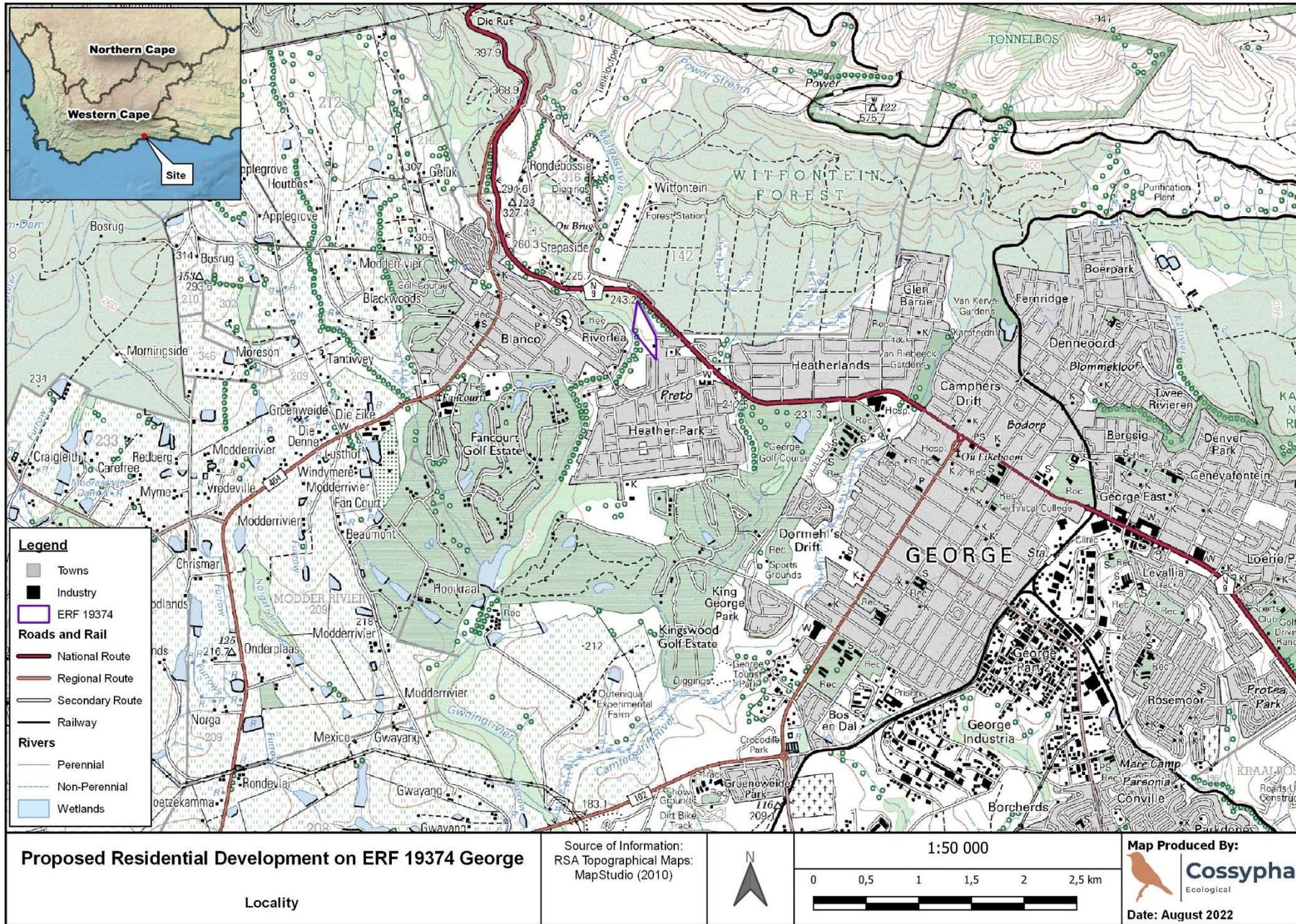


Figure 2: Locality of the study area

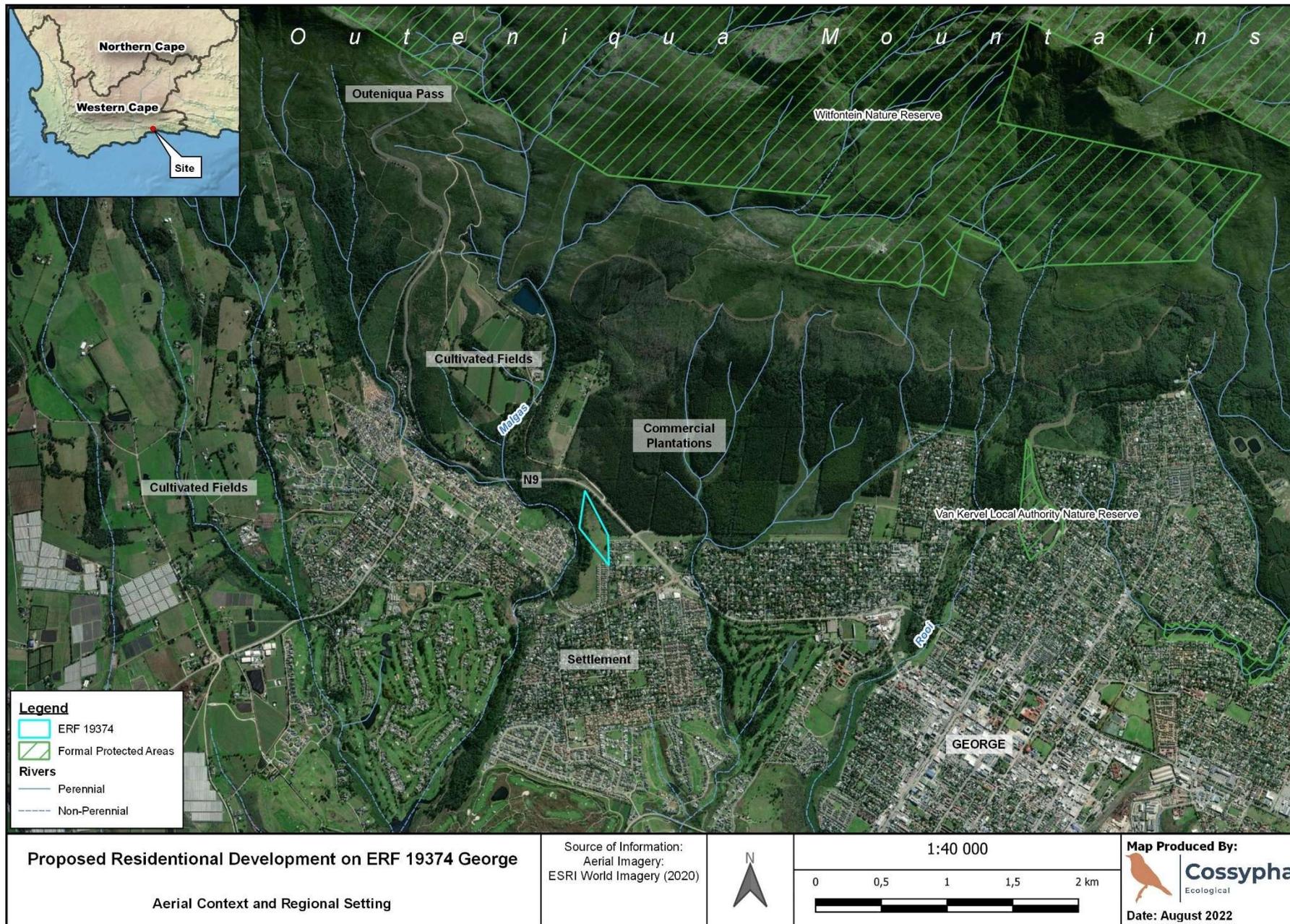


Figure 3: Aerial overview of the study area and surrounds

3. REPORTING REQUIREMENTS

A Screening Report for proposed site environmental sensitivity, as required by the EIA Regulations of 2014 (as amended in 2017) for an EA in terms of the National Environmental Management Act (Act 107 of 1998) (NEMA), was generated for the project using the National Web-Based Environmental Screening Tool on 28/03/2022. The report identified **High** sensitivity for the Animal Species theme due to the potential occurrence of the following species of conservation concern (SCC):

- Aves: African Marsh Harrier *Circus ranivorus* (EN)
- Aves: Knysna Warbler *Bradypterus sylvaticus* (Vulnerable (VU))

The report also identified **Medium** sensitivity for the potential occurrence of the following SCC:

- Invertebrate: Yellow-winged Agile Grasshopper *Aneuryphymus montanus* (VU)
- Amphibian: Knysna Banana Frog *Afrixalus knysnae* (EN)
- Aves: Denham's Bustard *Neotis denhami* (VU)
- Sensitive Species¹ 7 (VU sensitive mammal)

In addition, the report identified **Very High** sensitivity for the Terrestrial Biodiversity theme due to the study area falling within the following landscape biodiversity features:

- Critical Biodiversity Area (CBA) 1
- CBA 2
- Ecological Support Area (ESA) 2
- Strategic Water Source Area (SWSA)
- Critically Endangered Ecosystem

Therefore, a terrestrial biodiversity assessment and a faunal assessment are required for the project, which must be compiled in accordance with the requirements of the *Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes when Applying for EA* (GN R320 of 2020) and comply with the following gazetted protocols. These protocols replace the requirements of Appendix 6 of the EIA Regulations, 2014 (as amended) in terms of NEMA:

- Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal Species, published in GN 1150 of 30 October 2020; and
- Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity, published in GN 320 of 20 March 2020.

3.1 SITE SENSITIVITY VERIFICATION

According to the above-mentioned protocols, the current use of the land and the potential environmental sensitivity identified by the screening tool, of the site under consideration, must be confirmed by undertaking a site sensitivity verification prior to commencing with the specialist assessment. This will confirm the actual use of the land on the ground versus that which has been identified by the screening tool and the validity of the sensitivity rating assigned by the screening tool. This will confirm whether a full Specialist Assessment Report

¹ A SCC that is sensitive to the illegal harvesting trade. The actual name of the sensitive species may not appear in the final EIA report or in any of the specialist reports released into the public domain.

(applicable for **Very High** and **High** sensitivity sites) or a Compliance Statement (applicable for **Low** sensitivity sites) is required.

In the case of species assessments, because **Medium** sensitivity data represents suspected habitat for SCC based on occurrence records for these species collected prior to 2002 or is based on habitat suitability modelling, the presence or likely presence of the SCC identified by the screening tool must be investigated through a site inspection. Where SCC are found on the site or have been confirmed to be likely present by the specialist, a **Terrestrial Animal Species Specialist Assessment** must be compiled in accordance with the requirements specified for **Very High** and **High** sensitivity in the protocol. Where no SCC are found on the site or the presence is confirmed to be unlikely during the site inspection, a **Terrestrial Animal Species Compliance Statement** must be submitted.

For the site in question, a field inspection took place on the 6th of April 2022 where the site was inspected on foot. The season was late summer / early autumn and was deemed the appropriate time of year for the field survey. The site inspection revealed that the site and its immediate surroundings were in a disturbed state comprised mostly of alien vegetation, with little natural vegetation remaining. No animal SCC were observed on the site. This confirmed the ecological sensitivity for terrestrial biodiversity and fauna to be low (see further explanation in **Sections 5.2** and **6**). The following Report therefore comprises an investigation of the terrestrial fauna on the site in the form of a Compliance Statement in accordance with the Protocols for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Animal and Terrestrial Plant Species (GN 1150 of 2020) and written following the Species Environmental Assessment Guidelines for the implementation of the Terrestrial Fauna and Terrestrial Flora Species Protocols (SANBI, 2020).

Similarly due to the disturbed nature of the site, a Terrestrial Biodiversity Compliance Statement written in accordance with the Protocol for the Specialist Assessment and Minimum Report Content Requirements for Environmental Impacts on Terrestrial Biodiversity (GN 320 of 2020), is included in this report.

3.2 TERMS OF REFERENCE

The terms of reference for the assessments were as follows:

- Undertake a desktop assessment and field survey of the site to inform the assessment;
- Verify the site sensitivity for terrestrial biodiversity and faunal species;
- Determine the presence or likely presence of animal SCC;
- If any SCC are recorded, include evidence if possible, such as location and map points of where species are identified denoting them as high sensitivity areas within the site;
- Photographic record of the site characteristics, including potential habitats and/or sensitive areas;
- Compilation of a Terrestrial Animal Species Assessment or Compliance Statement following the Species Environmental Assessment Guidelines (SANBI, 2020), including a description of the baseline terrestrial biodiversity of the area;
- Compilation of a Terrestrial Biodiversity Assessment or Compliance Statement according to the relevant protocol; and
- Recommend impact management actions or any monitoring requirements for inclusion in the EMPr.

4. METHODOLOGY

The approach included a desktop assessment as well as a site visit. The methodology broadly entailed the following:

4.1 DESKTOP ASSESSMENT

The desktop assessment entailed the following:

- Review of available GIS layers relating to biodiversity conservation planning e.g. vegetation types, threatened ecosystems, relevant provincial spatial conservation or biodiversity plan, Important Bird Areas (IBAs), Protected Areas Database etc.;
- Review of all relevant literature including distribution data of fauna expected to occur on the site, as well as the conservation status of species; and
- Review of historical satellite imagery obtained from Google Earth © to ascertain historical land use of the study area.

4.2 FIELD SURVEY

The field investigation was undertaken on the 6th of April 2022 when terrestrial biodiversity and faunal elements within the study area were assessed. A daytime survey was conducted on foot by meandering through the site for approximately 4 hours. Changes in land cover, habitat, and vegetation were observed and any fauna present on site recorded. Photographs were taken at a series of sample points to illustrate the condition of vegetation, habitat, and representative areas of the site (see **Figure 4**). A total of 12 sample points were photographed and are described in the results section below. Coverage of the study area was deemed to be sufficient. Note that no sampling was conducted in the adjacent Malgas River.

During the field survey the following aspects pertaining to terrestrial biodiversity and fauna were assessed:

- Current land use of the site and immediate surrounds;
- Current ecological state of habitats on site;
- Presence of terrestrial faunal SCC, protected species, or suitable habitat for such species on site; and
- Significant landscape features, ecological corridors, and landscape connectivity.

4.3 ASSUMPTIONS AND LIMITATIONS

The following assumptions and limitations pertain to the current study:

- It is assumed that all third-party information used (e.g. GIS data and satellite imagery) was correct at the time of generating this report.
- The survey was restricted to a single day-time site visit conducted during one season (late summer / early autumn), and it is not considered necessary to perform an additional survey.
- No sampling was conducted in the adjacent Malgas River.
- The survey was conducted over approximately four hours during the morning.
- Findings, recommendations, and conclusions provided in this report are based on the author's best scientific and professional knowledge as well as information available at the time of compilation.

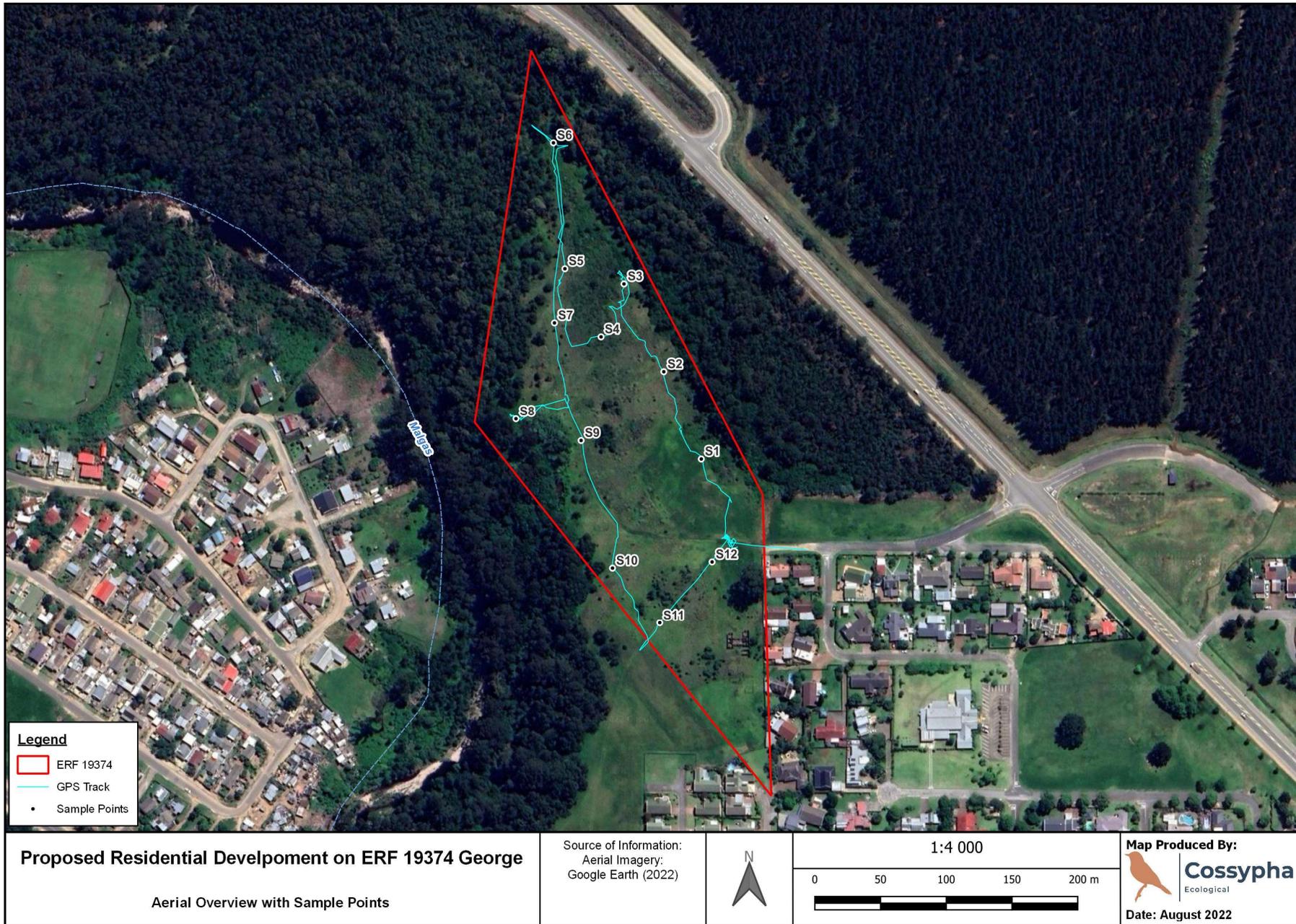


Figure 4: Aerial view of the site with GPS track and location of sample points

5. DESKTOP ASSESSMENT RESULTS

5.1 TERRESTRIAL BIODIVERSITY

5.1.1 REGIONAL VEGETATION

The study area is located within the Fynbos Biome, within the Eastern Fynbos-Renosterveld Bioregion. The site falls within the Garden Route Shale Fynbos vegetation type, which is classified as Endangered with less than 44% remaining (Mucina and Rutherford, 2006; SANBI, 2021). With a conservation target of 23%, only 5.7% of this vegetation type is conserved in statutory conservation areas and is therefore regarded as Poorly Protected. To date, more than 66% has been transformed mainly for plantations and cropland and degradation due to erosion, overgrazing and invasions by alien plants (SANBI, 2021).

5.1.2 FAUNA AND FLORA

Structurally, Garden Route Shale Fynbos vegetation is tall, dense, proteoid and ericaceous fynbos in wetter areas, and shrubby grassland fynbos in drier areas. The fynbos forms a mosaic with thicket and Afrotemperate forest, with the fynbos exposed to frequent fires and the thicket and forest confined to fire safe habitats. Plant species characteristic of the vegetation type include tall shrubs such as *Leucadendron eucalyptifolium*, *Protea aurea* subsp. *aurea*, *P. coronata*, *Leucospermum formosum*, *Metalasia densa*, and *Rhus lucida*, and low shrubs such as *Acmadenia alternifolia*, *Anthospermum aethiopicum*, *Cliffortia ruscifolia*, *Erica hispidula*, *Helichrysum cymosum*, *Leucadendron salignum*, *Pelargonium cordifolium*, *Phyllica axillaris*, *Psoralea monophylla*, and *Selago corymbosa*. Herbaceous, geophytic, and succulent species include *Helichrysum felinum*, *Pteridium aquilinum*, *Eriospermum vermiforme*, *Crassula orbicularis*, and *C. roggeveldii*, while graminoids include *Ischyrolepis sieberi*, *Aristida junciformis* subsp. *galpinii*, *Brachiaria serrata*, *Cymbopogon marginatus*, *Elegia juncea*, *Eragrostis capensis*, *Ischyrolepis gaudichaudiana*, *Restio triticeus*, *Themeda triandra*, and *Tristachya leucothrix* (Mucina and Rutherford, 2006). According to Bergwind (2022) none of the original fynbos vegetation remains on the site, with a very low probability of it ever being restored.

From a faunal perspective, species that are likely to inhabit the ecosystem comprise typical coastal foothills fynbos species as well as those adapted to forest / fynbos ecotone and thicket. This may include birds such as francolin, robins, apalis, flycatchers, cuckooshrike, boubou, sunbirds, warblers, and raptors such as goshawk and sparrowhawk. Mammals may include mongoose, genet, duiker, bushbuck, baboon, jackal, and many small mammals. Reptiles may include tortoises, chameleons, lizards and skinks, adders, and other snakes, while amphibians would include cacos, river, reed, and stream frogs associated with wet areas. In addition, many invertebrates and insect pollinators inhabit the ecosystem.

5.1.3 THREATENED TERRESTRIAL ECOSYSTEMS

According to the National List of Threatened Terrestrial Ecosystems (DEA, 2011), published in terms of Section 52 of the National Environmental Management Biodiversity Act, 2004 (Act 10 of 2004) (NEMBA), Garden Route Shale Fynbos is listed as a **Vulnerable** Ecosystem in terms of Section 52 of NEMBA (DEA, 2011) under criterion A1: Irreversible loss of natural habitat. Eight Red Data plant species falling in the categories Extinct (EX), Extinct in the Wild (EW), Critically Endangered (CR), Endangered (EN) and Vulnerable (VU), and three endemic plant species occur in the ecosystem.

According to the newly updated list based on the 2018 National Biodiversity Assessment (NBA; Skowno *et al.*, 2019), Garden Route Shale Fynbos has been assessed to be **Endangered** under criterion B1(i) due to the vegetation type being narrowly distributed with high rates of habitat loss in the past 28 years (from 1990 to 2018)

placing the ecosystem at risk of collapse (remaining extent > 44%) (SANBI, 2021). While the NEMBA list currently remains the official legislated National List of Ecosystems that are Threatened and in Need of Protection, gazetted in 2011 (DEA, 2011), the new list updated with the IUCN Red List of Ecosystems (RLE) assessment approach, will be gazetted soon (SANBI, 2021).

The botanical assessment conducted by Bergwind (2022) concluded that none of the original Garden Route Shale Fynbos vegetation exists on the site and there are no signs of it re-colonising.

5.1.4 WESTERN CAPE BIODIVERSITY SECTOR PLAN

According to the Western Cape Biodiversity Sector Plan (WCBSP), the central portion of the site is classified as Critical Biodiversity Area (CBA) 2 Terrestrial: Degraded, with the extreme western corner, which comes into proximity to the Malgas River, falling within an area classified as CBA1: Terrestrial. The Malgas River, which occurs just to the west of the site is classified as CBA1: Aquatic (**Figure 5**).

According to the WCBSP, CBA2: Degraded are sites in a degraded or secondary condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure. These should be maintained in a natural or near-natural state, with no further loss of habitat. Degraded areas should be rehabilitated. CBAs are sites in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure. These should be maintained in a natural or near-natural state, with no further loss of natural habitat, and only low-impact, biodiversity-sensitive land uses are appropriate.

A strip of the north-western boundary of the site falls within an area classified as Ecological Support Area (ESA) 2: Restore from plantation or high-density Invasive Alien Plants (IAP) due to the proximity to the Malgas River. ESAs are not essential for meeting biodiversity targets, but they play an important role in supporting the functioning of PAs or CBAs and are often vital for delivering ecosystem services. According to the WCBSP, they should be restored and/or managed to minimise impact on ecological processes and ecological infrastructure functioning, especially soil and water-related services, and to allow for faunal movement (Pool-Stanvliet *et al.*, 2017).

5.1.5 PROTECTED AREAS

In terms of Protected Areas (PA), the site falls within the Garden Route Biosphere Reserve and falls within the Transition Zones associated with the George urban area. The Transition Zone is usually the largest part of the biosphere reserve and is where the greatest development activity is allowed, promoting economic and human development that is socio-culturally and ecologically sustainable. The Core Zone comprises a strictly protected zone that contributes to the conservation of landscapes, ecosystems, species, and genetic diversity, while the Buffer Zone (usually surrounding the Core Zone) is managed to support the conservation objectives of the Core Zone (UNESCO, 2022).

Other PAs occurring in the vicinity include the Witfontein Nature Reserve ~2.4 km to the north of the site, and the Van Kervel Local Authority Nature Reserve, and the Katrivier Nature Reserve ~3 km and ~4.3 km to the east of the site respectively. The Outeniqua Mountains Important Bird Area (IBA) falls just to the north of the site and extends in a band ~140 km long and across the Outeniqua Mountains incorporating the Witfontein Nature Reserve, Garden Route National Park, and many other PAs in the region.

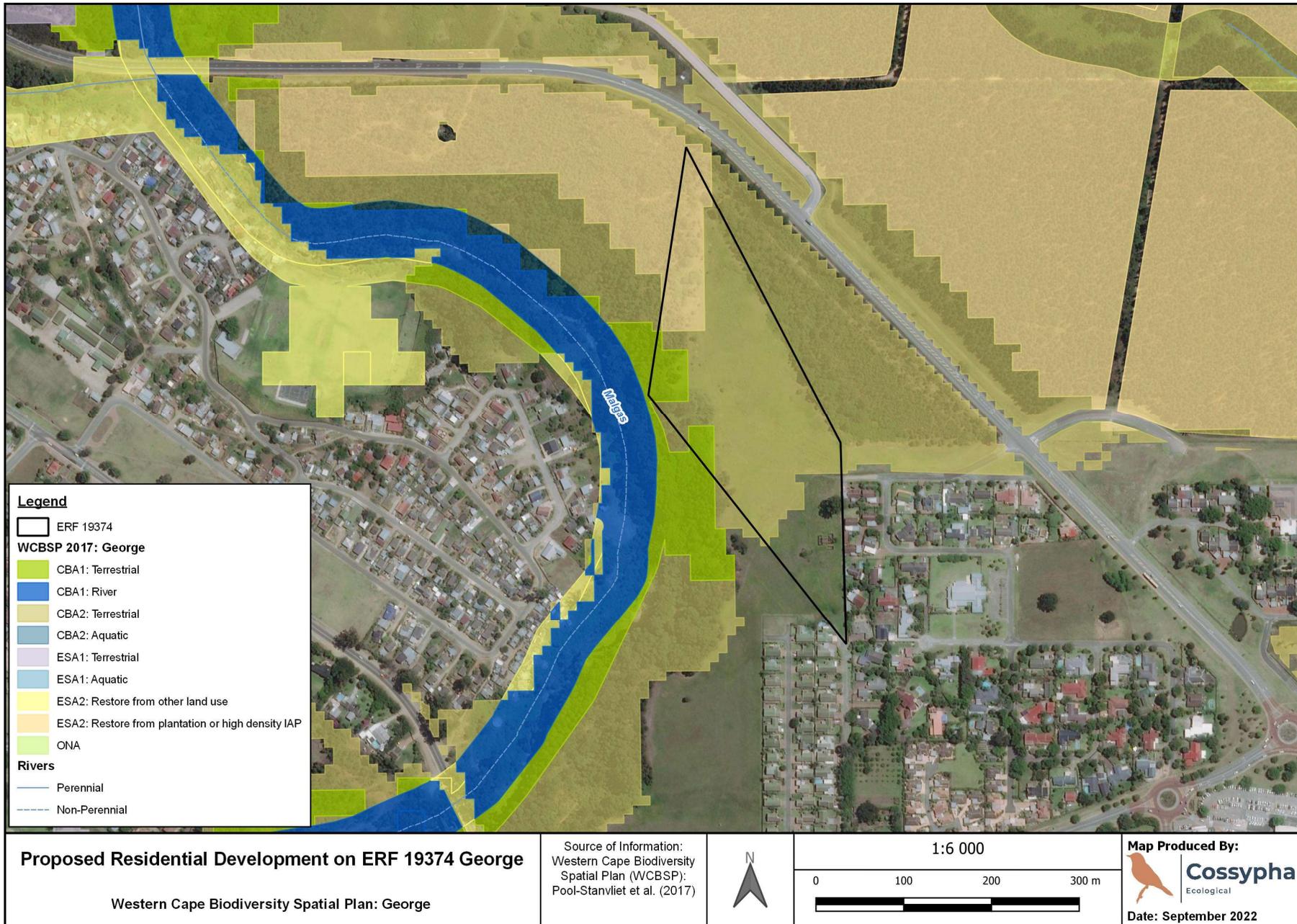


Figure 5: The study area in relation to the WCBSBP

5.1.6 NATIONAL FRESHWATER ECOSYSTEM PRIORITY AREAS

From a National Freshwater Ecosystem Priority Areas (NFEPA) perspective, the site falls within the George and Outeniqua Strategic Water Source Area (SWSA), which supplies George, Oudtshoorn, and the Garden Route area with water. The main rivers that flow from this SWSA include the Groot Brak River and Olifants River. The site falls within the Gouritz National Water Management Area (WMA) and within the Coastal Gouritz Sub-WMA. The site falls on the east bank of the Malgas River, and other NFEPA features that occur in the vicinity includes a non-perennial drainage line associated with the Rooi River situated approximately 390 m to the northeast (Nel *et al.*, 2011; FEN Consulting, 2022). No wetlands or drainage lines fall within the boundaries of the site (FEN Consulting, 2022).

5.2 HISTORICAL LAND USE OF THE STUDY AREA

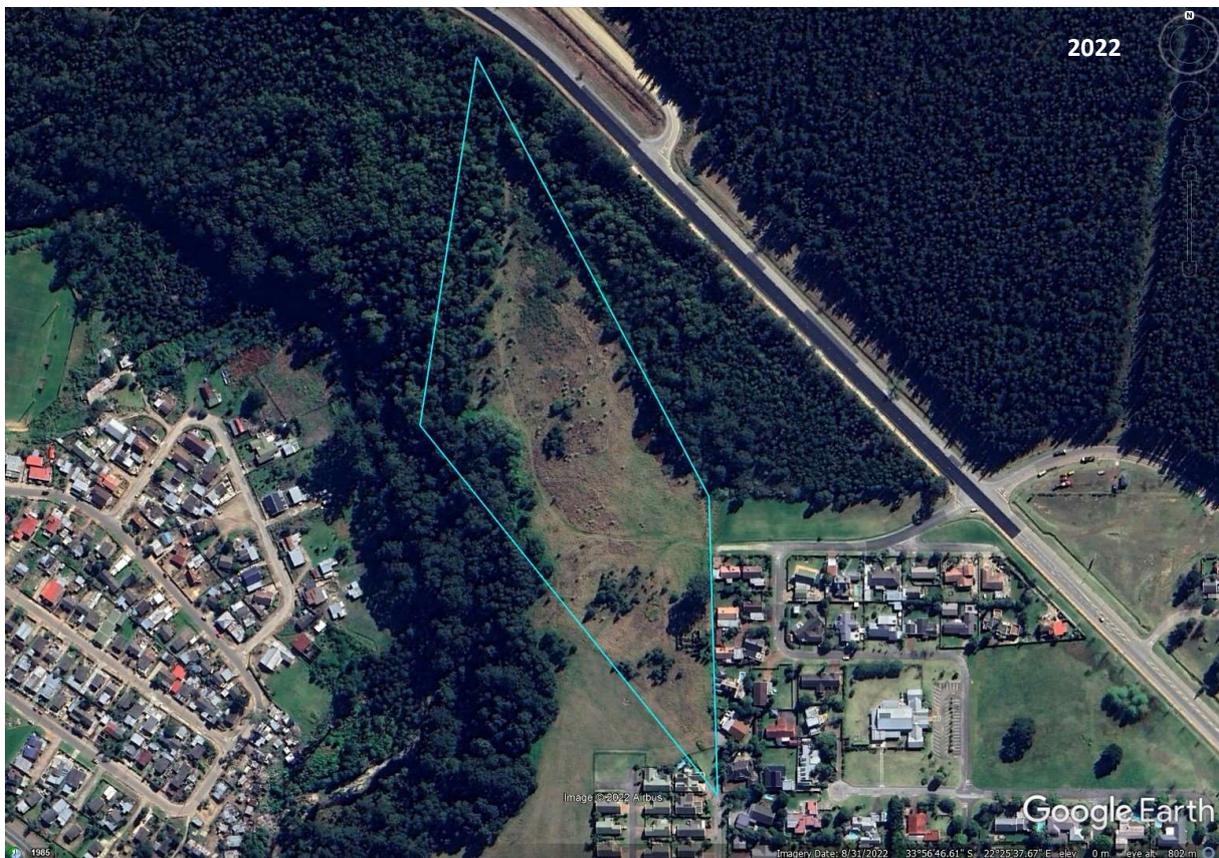
Historical aerial imagery (circa 1936) indicate that the site and surrounding area were under cultivation (FEN Consulting, 2022), and according to past satellite imagery (2003 – 2022, Google Earth ©), the site has undergone various disturbances where vegetation has been removed and the edges of the site infested with dense alien vegetation, most likely gums (*Eucalyptus* sp.), wattle (*Acacia mearnsii*), and pine (*Pinus* sp.). Refer to the images taken from Google Earth historical imagery from 2003 to 2022 below. The light blue outline refers to the site boundary.



Site and surroundings covered with alien trees in 2003, and cleared of vegetation in 2011



Site clearing / mowing in 2015 and 2019



The site in August 2022 covered with alien vegetation

6. FIELD SURVEY RESULTS

A general description of the status quo of the site is given below, with more details of each sample point provided in a table in the next section. The table also gives the likelihood of faunal SCC occurring at each point.

6.1 SITE DESCRIPTION

The study area is situated on flat, higher lying ground above the Malgas River that occurs just to the west of the site. The extreme western corner of the site drops down steeply to the river and should be avoided by the development. Otherwise, the site is surrounded by commercial plantations and the N9 road to the north, and residential areas of George to the west and south. The site and immediate surrounds are considered modified and disturbed with very little natural habitat remaining. As was found by the aquatic assessment (FEN Consulting, 2022), the Malgas River is highly infested with alien vegetation and in a degraded state.

The site is mostly comprised of a mix of alien and indigenous grasses with scattered shrubs and trees, most of which are also alien. Dense stands of alien trees such as *Eucalyptus* sp., *Pinus* sp. and *Acacia* sp. surround the site on all sides except the south where the site is bordered by residential development. Very little faunal activity was observed during the site visit. The only activity observed included small passerine birds such as sparrows, cisticolas, and waxbills. The habitat on the site is generally of poor quality and would provide cover for generalist small mammal, bird, and reptile species. The site is disturbed on a regular basis so it's highly unlikely that the available habitat would sustain any significant faunal populations, especially SCC.



Disturbed site (looking north) covered with mostly alien vegetation and surrounded by dense stands of alien trees

6.2 SAMPLE POINT DESCRIPTIONS

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
S1 06-Apr-22 33°56'47.30"S 22°25'38.69"E	Dense swaths of grass, alien scrub, and <i>Eucalyptus</i> trees along the eastern boundary of the site	Low		
S2 06-Apr-22 33°56'45.16"S 22°25'37.58"E	Disturbed vegetation, alien grasses, and <i>Eucalyptus</i> trees along the eastern boundary of the site	Low		
S3 06-Apr-22 33°56'43.02"S 22°25'36.40"E	Dense alien scrub	Low		

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
S4 06-Apr-22 33°56'44.31"S 22°25'35.72"E	Dense swaths of grass and alien scrub towards the centre of the site	Low		
S5 06-Apr-22 33°56'42.65"S 22°25'34.65"E	Alien trees in the northern corner of the site	Low		
S6 06-Apr-22 33°56'39.57"S 22°25'34.31"E	Alien trees in the northern corner of the site	Low		

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<p>S7 06-Apr-22 33°56'43.97"S 22°25'34.34"E</p>	<p>Alien trees on the western boundary of the site</p>	<p>Low</p>		
<p>S8 06-Apr-22 33°56'46.32"S 22°25'33.20"E</p>	<p>Steep bank leading down to the Malgas River on the western side of the site, showing dense alien scrub and tree infestations</p>	<p>Low</p>		
<p>S9 06-Apr-22 33°56'46.85"S 22°25'35.13"E</p>	<p>Alien reeds and <i>Eucalyptus</i> trees along the western boundary of the site</p>	<p>Low</p>		

Sample Site	Habitat Description	Likelihood of SCC	Photo 1	Photo 2
<p>S10 06-Apr-22 33°56'49.95"S 22°25'36.06"E</p>	<p>Alien vegetation and regularly mown / cleared grass in the south-western section of the site</p>	<p>Low</p>		
<p>S11 06-Apr-22 33°56'51.29"S 22°25'37.46"E</p>	<p>Southern portion of the site adjacent to a residential development (Photo 1) and disturbed track infested with alien plants (Photo 2)</p>	<p>Low</p>		
<p>S12 06-Apr-22 33°56'49.80"S 22°25'39.01"E</p>	<p>Adjacent residential development on the south-eastern side of the site (Photo 1); regularly disturbed grass in the central parts of the site and alien trees surrounding the site (Photo 2)</p>	<p>Low</p>		

7. SUMMARY AND RECOMMENDATIONS

7.1 SUMMARY

Overall, the site (and immediate surrounds) displays a low sensitivity from a terrestrial biodiversity and faunal perspective. The site is largely in a modified state due to previous land use practices (historical clearing for cultivation) and subsequent disturbances to the site. There is little to no indigenous vegetation remaining and the site is bordered by dense stands of alien trees. The Malgas River on the western border of the site is also invaded with alien vegetation (mostly Eucalyptus trees) and is in a degraded state. The habitat for fauna is of poor quality and likely only supports generalist species. The site has limited use by fauna and no animal SCC are expected to occur on the site.

In terms of regional biodiversity, the site is relatively small, and it is evident both from the historical satellite imagery and the site visit that the site is in a modified state. The site is therefore not considered a representative portion of the vegetation type or ecosystem and is not considered important for reaching biodiversity targets due to the small size. The site is therefore considered to be of low importance from a terrestrial biodiversity perspective. The proximity of the site to the Malgas River is however a point of consideration and important ecological processes still exist even though the river is in a degraded state. The maintenance of a conservation buffer is critical for minimising impacts on the river, and maintaining ecological connectivity, especially the extreme western corner of the site.

7.2 IMPACT MANAGEMENT

The perceived impacts from a terrestrial faunal perspective will be low, however potential impacts on the Malgas River may be of concern if strict mitigation measures are not put in place. Impacts may include pollution and siltation during the construction phase, especially during high rainfall events, and pollution such as sewerage and litter during the operational phase. For the planning, construction, and operational phases, the following recommendations are critical for ensuring the impacts are kept to a minimum, and must be included in the Environmental Management Programme (EMPr):

1. The proposed layout plan must avoid the extreme western corner of the site that comes into proximity to the Malgas River. It is preferable that this section remains outside of the fence of the proposed development.
2. All components of the proposed development must remain outside the conservation buffer and the 32 m legislated buffer (see the aquatic assessment report by FEN Consulting, 2022).
3. All mitigation measures prescribed by the aquatic specialist must be implemented (see FEN Consulting, 2022)
4. An experienced, independent Environmental Control Officer (ECO) must be appointed to oversee the construction activities and compliance with the EMPr.
5. A formal Stormwater Management Plan should be compiled, and an appropriate stormwater management system must be incorporated into all the designs. This should be designed to at least a 1:50 year rainfall or flooding event.
6. The site must be cleared of all alien plants during the construction phase, and an Invasive Alien Plant (IAP) Species Management Plan must be compiled for future alien management. The development must be landscaped using only indigenous plants. Trees should form part of the landscaping plan.

7. During construction, no wild animal may under any circumstance be handled, removed, or be interfered with by construction workers. No wild animal may under any circumstance be hunted, snared, captured, injured, or killed. This includes animals perceived to be vermin.

7.3 CONCLUSION

It is the opinion of the specialist that the impacts on terrestrial biodiversity and fauna will be low considering the modified and currently disturbed state of the site, and that the project may be authorised subject to the recommendations in the EMPr being adhered to.

- This compliance statement is applicable to the study area as described in the EIA documentation and shown in **Figure 4**;
- Due to the disturbed habitat, the study area is of low sensitivity for terrestrial biodiversity and terrestrial animal species;
- It is likely that the proposed development will not have any impact on terrestrial animal SCC; and
- There are no conditions to which this compliance statement is subjected.

8. REFERENCES

- Bergwind Botanical Surveys and Tours (2022): Botanical Assessment for the proposed development of Erf 19374, George Municipality, Garden Route District Municipality, Western Cape Province, Report prepared for Sharples Environmental Services (SES), July 2022.
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- UNESCO (2022): <https://en.unesco.org/biosphere/africa>

APPENDICES

APPENDIX A: ABRIDGED CV OF THE SPECIALIST

Name and Surname	:	Robyn Phillips
Date of Birth	:	28 08 1975
Company Name	:	Cossypha Ecological
Field of Expertise	:	Terrestrial Ecologist and Avifaunal Specialist
SACNASP Registration	:	<i>Pr.Sci.Nat.</i> 400401/12 (Zoological and Ecological Sciences)
Highest Qualification	:	MSc (Zoology) <i>cum laude</i>
Years of Experience	:	21
Contact Number	:	084 695 1648
Email	:	robyn@cosypha.co.za

The first half of my professional career was spent working in ecological research at the University of KwaZulu-Natal. Since starting in consulting in 2011, I have been involved in many projects requiring biodiversity surveys and ecological assessments as part of the legislated requirements for the Environmental Impact Assessment (EIA) process. These studies include field assessment of habitat, species occurrence (especially those of conservation concern), assessment of ecological importance and sensitivity of floral and faunal communities and habitat, as well as assessment of impacts. Tasks also include making recommendations and prescribing mitigation measures after applying the mitigation hierarchy, aimed at minimising impacts.

Following is a selection of similar projects undertaken:

- Terrestrial Biodiversity and Animal Species Compliance Statement for the EA Amendment Application for the Hartenbos Landgoed Phase 2 Residential Development on a Portion of the Farm Vaale Valley 219, Mossel Bay, Western Cape (Sharples Environmental Services) – September 2022.
- Terrestrial Biodiversity and Animal Species Compliance Statement for the Section 24G Application for the Unlawful Construction of a Road and Clearance of Vegetation at Waboomskraal, George Local Municipality, Western Cape (Sharples Environmental Services) – March 2022 to present.
- Terrestrial Biodiversity (including Fauna and Flora) Compliance Statement for the proposed Ganyesa Landfill Site, Ganyesa, North West Province (GIBB Environmental) – March 2022.
- Faunal Assessment for the Pelikan Park Phase 2 housing development, False Bay Nature Reserve, Cape Town, Western Cape (City of Cape Town) – 2018 to 2021.
- Faunal Assessment for the Cape Flats Wastewater Treatment Works (WWTW) new access road, False Bay Nature Reserve, Cape Town, Western Cape (City of Cape Town) – 2020 to present.
- Terrestrial Biodiversity and Faunal Assessment for the Vanrhynsdorp Mining Right Application (MRA), Klaver, Western Cape (SA Lime and Gypsum) – 2020 to 2021.
- Terrestrial Biodiversity Assessment (flora and fauna) for the KwaZulu-Natal Automotive Supplier Park (ASP) and Township Establishment, including bulk sewer pipeline and powerlines, Illovo South, Durban, KwaZulu-Natal (Dube TradePort Corporation (DTPC)) – 2018 to 2021.
- Terrestrial Biodiversity Assessment for the Proposed Florida Heights Portion 10 Township Establishment Project, Uitenhage, Port Elizabeth, Eastern Cape (Sakhisizwe Developers) – 2018.
- Terrestrial Biodiversity Assessment (flora and fauna) for the Aquadene Stormwater Infrastructure project, Richards Bay, (uMhlatuze Municipality) – 2017 to 2018.
- Terrestrial Biodiversity Assessment for the Proposed Vumani Rural Housing Project, Vryheid, KwaZulu-Natal (Abaqulusi Municipality) – 2014 to 2019.