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SITE SENSITIVITY VERIFICATION REPORT

RE/3420, Sea Vista, St Francis Bay, Kouga Local Municipality, Eastern Cape

The Proposed Development of Residential Apartments and Associated Infrastructure on RE/3420, Sea Vista, St Francis Bay, Eastern Cape



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(1) Introduction and Terms of Reference

As required to compliment a Basic Assessment application the national web-based screening tool was used to generate a screening report. The screening report lists a variety of specialist studies to be undertaken based on the data informants of the tool at the study area. This site sensitivity verification report, following ground-truthing of the site, motivates the reason why certain specialist studies will not be required or conducted for the proposed development application.



Figure 1: Locality of RE/3420, Sea Vista (red polygon)

(2) The proposed development at the property

Eco Route Environmental Consultancy were appointed by the applicant, Crystal Chimes Properties (Pty) Ltd as the independent Environmental Assessment Practitioner to conduct a Basic Assessment application process for the proposed development of RE/3420 in St Francis Bay.

The following identified Specialist were appointed to inform the Basic Assessment Report:

- Biodiversity - Dr Adriaan Grobler
- Geotechnical assessment - Outeniqua Geotechnical Services (Iain Paton)
- Archaeological Heritage Impact Assessment - Eastern Cape Heritage Consultants cc (Kobus Reichert)



RE/3420 is zoned as “Special Zone” for which primary use “indicates the purposes for which land may be used and or buildings may be erected and used”, please see attached Appendix A: Zoning Certificate. The property is approximately 0.8 ha in extent and is currently vacant.

The proposed development will be the construction of four apartment blocks consisting of 4 floors (including ground floor) each with a total of 36 units, a reception area, 81 parking bays, and paved pathways leading to future extension plans of a clubhouse and pool area. The entire property will need to be levelled and graded accordingly for the proposed development. The development was previously applied for and approved by the Kouga Municipality.

The site is transformed and consists of mostly anthropogenic grassland with scattered alien invasive vegetation. A biodiversity specialist identified species typical of St Francis Dune Thicket restricted to the southern boundary of RE/3420 where a remnant strip of this vegetation approximately 1m wide (but extending onto some adjacent properties) can be found.

The property occurs within 100m inland from the high-water mark of the sea and thus falls within the Coastal Protection Zone.

Access to the property is via an existing access road off Triton Avenue. Proposed vehicle access for the development will be continued on from the existing access road.

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

No nearby wind or solar developments found.

(4) Environmental Management Frameworks relevant to the application:

No intersections with EMF areas found.

(5) Environmental screening results and assessment outcomes:

The following sections contain a summary of any development incentives, restrictions, exclusions or prohibitions that apply to the proposed development footprint as well as the most environmental sensitive features on the footprint based on the footprint sensitivity screening results for the application classifications that were selected. The application classifications selected for the screening reports are **Transformation of land|Indigenous vegetation** (dated 11 May 2021) and **Infrastructure|Localised infrastructure|Infrastructure in the Sea_Estuary_Littoral Active Zone_Development Setback_100M Inland or coastal public property** (dated 25 October 2022).

(6) Relevant Development Incentives, Restrictions, Exclusions or Prohibitions:

The proposed site is within a South African Conservation Area (SACAD).



(7) Proposed Development Area Environmental Sensitivity:

The following summary of the development site environmental sensitivities is identified by both Screening Tool Reports. Only the highest environmental sensitivity is indicated. The footprint of environmental sensitivities for the proposed development footprint as identified are indicative only and must be verified on site by a suitably qualified person before the specialist assessments identified below can be confirmed.

Table 1: Identified Environmental Sensitivities

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Animal Species Theme			X	
Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme		X		
Defence Theme				X
Paleontology Theme	X			
Plant Species Theme			X	
Terrestrial Biodiversity Theme				X

(8) Identified Specialist assessments:

Based on the selected classifications, and the environmental sensitivities of the proposed development footprint, the following list of specialist assessments have been identified for inclusion in the assessment report. It is the responsibility of the EAP to confirm this list and to motivate in the assessment report, the reason for not including any of the identified specialist study including the provision of photographic evidence of the site situation.

Table 2: Identified specialist assessments for Transformation of Land Screening Tool Report:

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

Table 3: Identified specialist assessments for Infrastructure within 100 of the HWM Screening Tool Report:

No:	Specialist Assessment	Assessment Protocol
1.	Landscape/Visual Impact Assessment	General
2.	Archaeological and Cultural Heritage Impact Assessment	General
3.	Palaeontology Impact Assessment	General



4.	Terrestrial Biodiversity Impact Assessment	Terrestrial Biodiversity
5.	Aquatic Biodiversity Impact Assessment	Aquatic Biodiversity
6.	Marine Impact Assessment	General
7.	Avian Impact Assessment	Avifauna assessment
8.	Geotechnical Assessment	General
9.	Socio-Economic Assessment	General
10.	Plant Species Assessment	Plant species assessment
11.	Animal Species Assessment	Animal species assessment

(9) RESULTS OF THE VERIFICATION OF THE ENVIRONMENTAL SENSITIVITY AND SPECIALIST ASSESSMENTS IDENTIFIED OF THE PROPOSED AREA:

(9)(1) Relative Animal Species Theme Sensitivity

The screening reports indicate that the receiving environment has a Medium Relative Animal Species Sensitivity and indicated the following features for the theme below.

Table 4: Animal Sensitivity Features:

Sensitivity	Feature(s)
Medium	Invertebrate- <i>Aneuryphymus montanus</i>

Conclusion:

The proposed development property was cleared of indigenous vegetation and subjected to topsoil disturbance. Google Earth imagery dating back to 2006 shows that the property was cleared of vegetation and was possibly gravelled to serve as a boat yard for the Port St Francis Harbour. The appointed biodiversity specialist had noted in his Compliance Statement (attached as Appendix D to the BAR) that “During the 15 years since then, there appears to have been some rehabilitation of the site through grass planting followed by spontaneous establishment of some indigenous plant species. The field survey confirmed the above, with most of the site now transformed to an anthropogenic grassland and effectively no St Francis Dune Thicket remaining on Erf 3420.” The specialist goes on to list identified plant species on the property and makes mention that “no species typical of the fynbos component were encountered on site.”

The identified *Invertebrate-Aneuryphymus montanus* is associated with fynbos vegetation. Therefore, since the specialist had not identified any vegetation species belonging to the fynbos vegetation group on the development site, the site is deemed not suitable to host the species indicated in the Screening Tool Report.

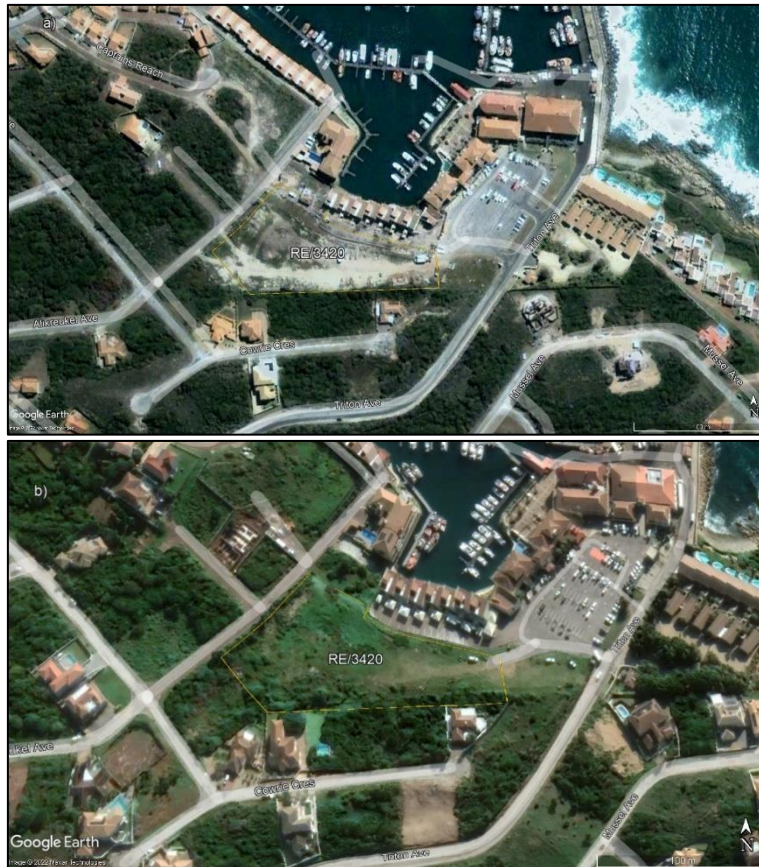


Figure 2: Google Earth imagery of the site cleared of vegetation during (a) 2006 and the site in present day (b) 2022

(9)(2) Relative Aquatic Biodiversity Theme Sensitivity

The screening reports indicate that the receiving environment has a Low Aquatic Biodiversity Sensitivity.

Conclusion:

There are no watercourses present on the property and with the previous site clearance and some rehabilitation of the site with grass planting, the site is not entirely suitable for aquatic biodiversity to thrive. In addition, much of the surrounding landscape has already been developed (particularly the seaward margin adjacent to the site); therefore, the site does not play a major role in landscape connectivity. Please refer to the Terrestrial & Aquatic Biodiversity Compliance Statement attached in Appendix D.

(9)(3) Relative Archaeological & Cultural Heritage Theme Sensitivity:

The screening report indicates that the receiving environment has a Low Relative Archaeological & Cultural Heritage Sensitivity; and indicated that specialist assessments be undertaken for Archaeological & Cultural Heritage Sensitivity as well as a Paleontological Impact Assessment.

Conclusion:

The development is within an archaeological sensitive zone as it is within 100m from the High-Water Mark of the sea. A heritage specialist had been appointed to conduct a site inspection regarding the Archaeological & Cultural



Heritage Theme Sensitivity and it was confirmed that a Compliance Statement is necessary for the EIA. A compliance statement has been attached to the BAR as Appendix D.

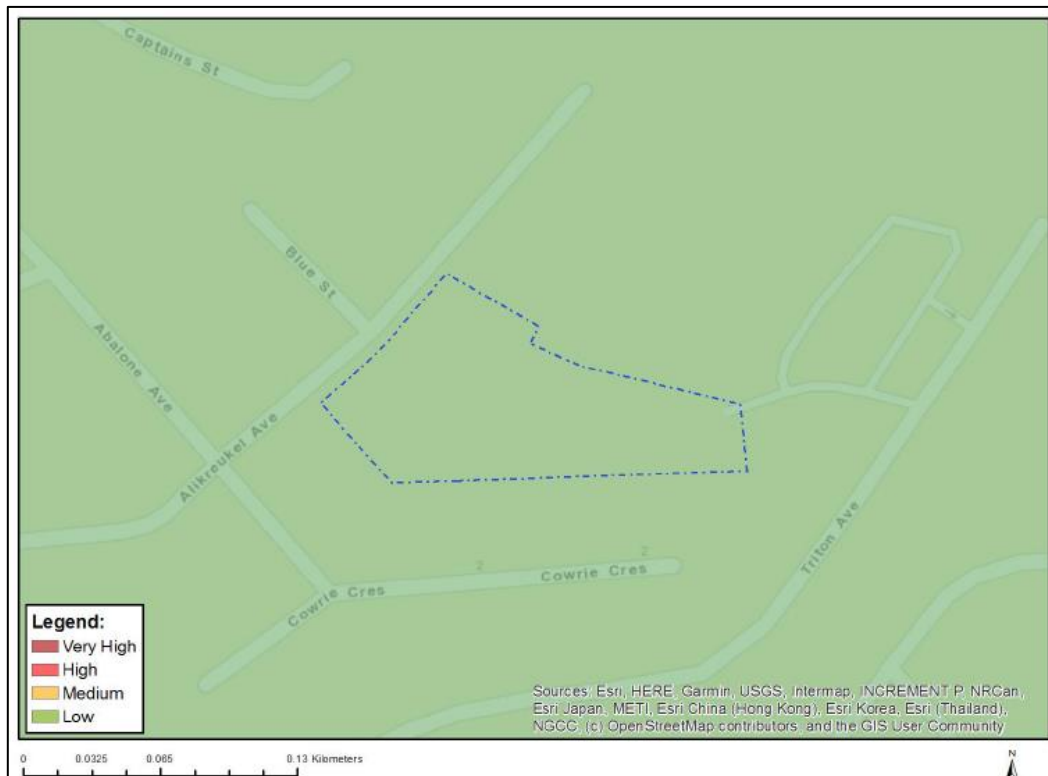


Figure 4: Archaeological and Cultural Sensitivity Theme: Low, as per the Screening Tool Reports

(9)(4) Civil Aviation Theme Sensitivity

The screening reports indicate that the receiving environment has a High Sensitivity for this theme as the proposed development property is within 8km of a civil aviation aerodrome – the St Francis Airfield.

Conclusion:

As the development occurs within an urban area, all municipal bylaws will be implemented to restrict building heights. Therefore, it is motivated that a specialist assessment will not be necessary to conduct for the Basic Assessment Report; however, the St Francis Airfield will be included as an I&AP.

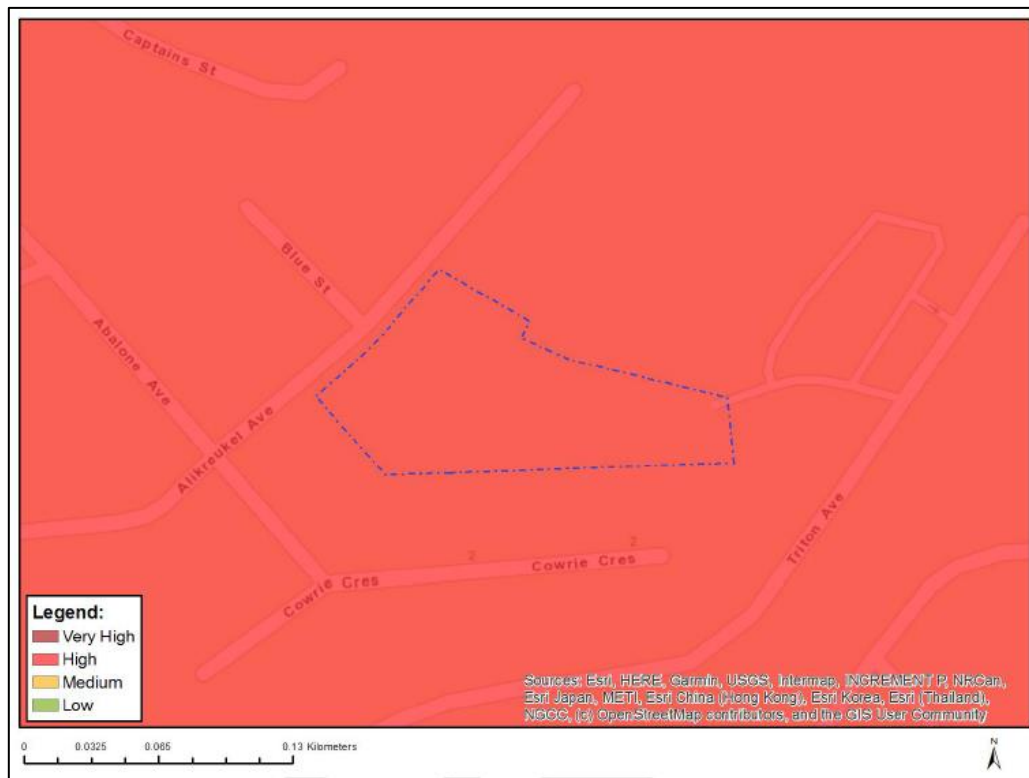


Figure 5: Map of Relative Civil Aviation Theme as per the Screening Tool Reports

(9)(5) Defence Theme Sensitivity

The screening reports indicate that the receiving environment has a Low Sensitivity for this theme. As no specific protocol exists for this theme, the General Requirements Protocol is assigned to this sensitivity.

Conclusion:

The EAP confirms that the Defence Sensitivity of the proposed development property is low, and no further assessments will be required in the EIA process.

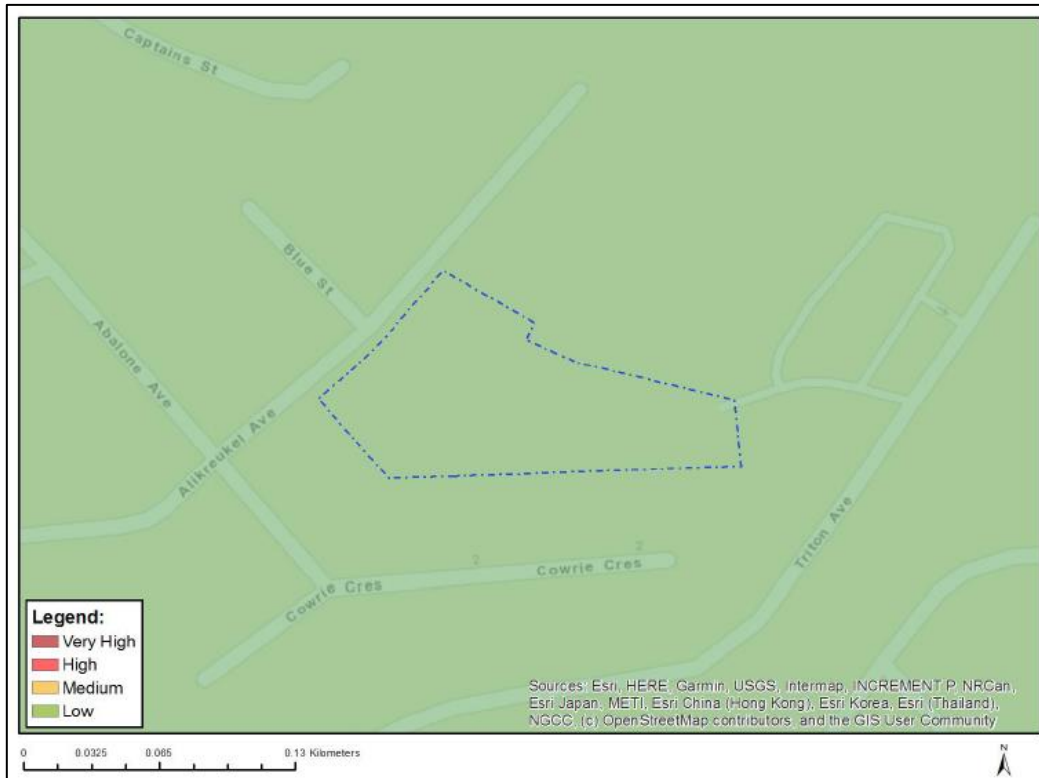


Figure 6: Map of Relative Civil Aviation Theme as per the Screening Tool Reports

(9)(6) Paleontology Theme Sensitivity

The screening report results indicate that the receiving environment has a Very High Sensitivity for this theme. However, the Map of Relative Paleontology Theme Sensitivity shows that majority of the proposed site is within a low sensitivity and a small portion to the west occurs within an area of Very High Sensitivity.

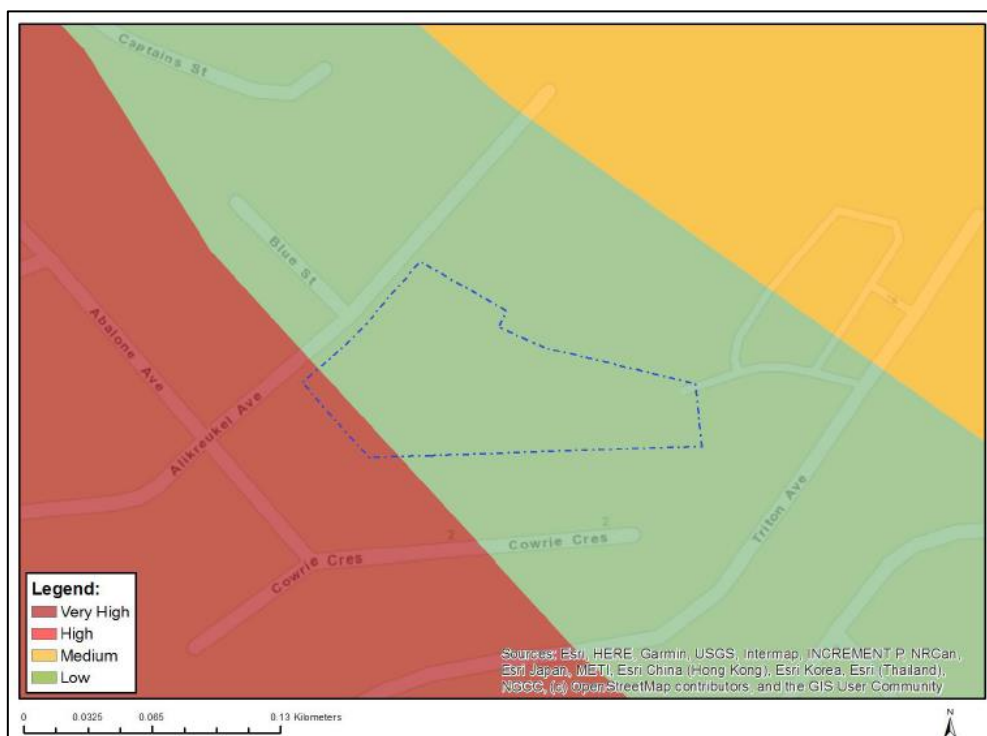


Figure 7: Map of Relative Paleontology Theme Sensitivity as per the Screening Tool Reports



Conclusion:

No paleontological fossils were noted during the site inspection by the heritage specialist. It is also possible that previous site clearance could have disturbed or destroyed any remains of historical significance. It is motivated that a Paleontological specialist will not be required for the Basic Assessment Report; however, the applicant will be advised that should any fossils be noted during site clearance, the Eastern Cape Provincial Heritage Resources Authority/ ECPHRA and the Albany Museum must be alerted. ECPHRA will be included as an I&AP during the EIA process and any comments received will be included in the Basic Assessment Report.

(9)(7) Relative Plant Species Theme Sensitivity

The screening reports indicate that the receiving environment has a Medium Relative Plant Species Sensitivity and indicated the following features for the theme in Table 5 below.

Table 5: Plant Species Sensitivity Features:

Sensitivity	Feature(s)
Low	Low Sensitivity
Medium	<i>Aspalathus recurvispina</i>
Medium	Sensitive species 308
Medium	<i>Hyobanche robusta</i>
Medium	<i>Erica chloroloma</i>
Medium	<i>Erica glandulosa</i> subsp. <i>fourcadei</i>
Medium	Sensitive species 588
Medium	Sensitive species 657
Medium	<i>Centella tridentata</i> var. <i>hermanniifolia</i>
Medium	<i>Rapanea gilliana</i>
Medium	Sensitive species 1192
Medium	Sensitive species 1032
Medium	<i>Syncarpha sordescens</i>
Medium	Sensitive species 78
Medium	<i>Agathosma stenopetala</i>
Medium	<i>Cotyledon adscendens</i>
Medium	<i>Capeochloa cincta</i> subsp. <i>sericea</i>
Medium	Sensitive species 448
Medium	<i>Erica glumiflora</i>

Conclusion:

A Terrestrial Plant Species Specialist has been identified as one of the specialist inputs to be included in the EIA process. A specialist had been appointed to conduct a site inspection regarding the plant species theme sensitivity and it was confirmed that a Compliance Statement is necessary for the EIA. The specialist's Compliance Statement is included in the Basic Assessment Report as Appendix D.



Figure 8: Protected plant species that were recorded on the site. (a, b) *Cynanchum obtusifolium*, a climber associated with dune thicket vegetation along the southern boundary of the site. (c, d) *Mesembryanthemum aitonis*, an annual succulent occurring in disturbed areas, especially the secondary shrubland, on site., courtesy of the Terrestrial Biodiversity and Plant Species Compliance Statement (attached to the BAR as appendix D)

(9)(8) Relative Terrestrial Biodiversity Theme Sensitivity.

The screening reports indicate that the receiving environment has a Low Terrestrial Biodiversity Sensitivity.

Conclusion:

A Terrestrial Biodiversity Specialist has been identified as one of the specialist inputs to be included in the EIA process. A specialist had been appointed to conduct a site inspection regarding the terrestrial biodiversity theme sensitivity and it was confirmed that a Compliance Statement is necessary for the EIA. The specialist's Compliance Statement is included in the Basic Assessment Report as Appendix D.



Figure 9: The location of terrestrial biodiversity features on ERF 3420 Sea Vista in relation to the proposed development layout. The development is likely to have an impact on both protected plant species identified on site (*Cynanchum obtusifolium* and *Mesembryanthemum aitonis*), as well as the strip of fragmented dune thicket along the southern boundary of the site. Courtesy of the Terrestrial Biodiversity and Plant Species Compliance Statement (attached to the BAR as appendix D)

(9)(9) Landscape/Visual Impact Assessment:

The screening reports identified that a visual impact assessment be conducted for inclusion in the assessment process and application.

Conclusion:

Due to the nature of the proposed development and considering the surrounding environment, it was deemed necessary to include a visual impact assessment in the BAR process. A visual impact assessment has been included in the BAR as Appendix D.

(9)(10) Socio-economic Impact Assessment:

The screening report identified that a socio-economic impact assessment be conducted for inclusion in the assessment process and report.

Conclusion:

Due to the nature of the proposed development and considering the surrounding environment, it was deemed necessary to include socio-economic aspects in the BAR from information gathered from municipal documents. However, it is motivated that due to the surrounding environment consisting of an already developed landscape, a full socio-economic impact assessment will not be necessary for inclusion in the Basic Assessment Report.



(9)(11) Marine Impact Assessment

The screening report for Infrastructure within 100m of the HWM of the sea identified a Marine impact assessment as a specialist assessment required. The protocol for this specialist assessment falls under General Requirements.

Conclusion:

The proposed residential dwelling will not encroach on the marine environment. There is a buffer of developed landscape between the development property and the HWM of the sea. The property is also in location with no short-term erosion risk and very-low long-term coastal erosion risk and no flooding risk, in terms of the data available for the EC coastline. Therefore, it is motivated that a Marine Impact Assessment will not be required for inclusion in the Basic Assessment Report.

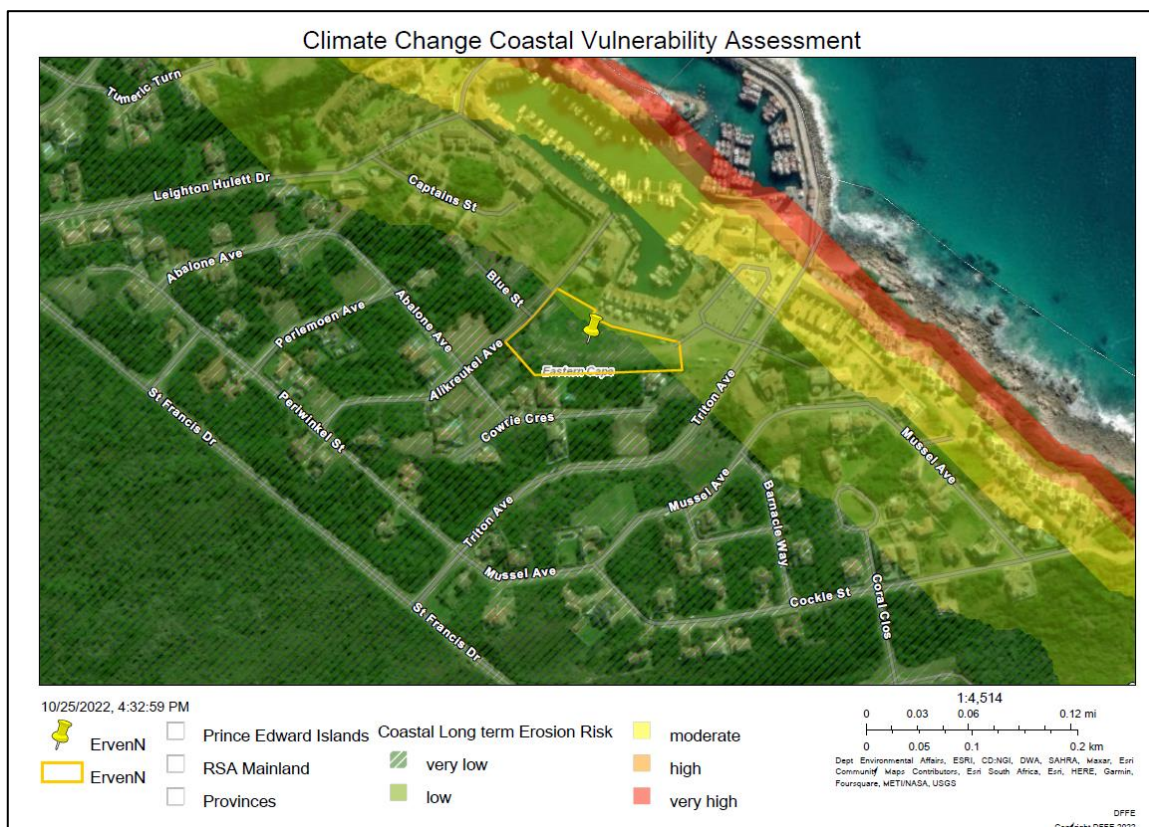


Figure 10: Map of coastal long-term erosion, courtesy of the Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans and Coasts.

(9)(12) Avian Impact Assessment

The screening report for Infrastructure within 100 of the HWM of the sea identified Avian Impact Assessment as a specialist assessment required for the EIA. The protocol for this specialist assessment falls under Avifauna Assessment Protocols. This protocol provides the criteria for the specialist assessment and minimum report content requirements for impacts on avifaunal species associated with the development of onshore wind energy generation facilities, where the electricity output is 20 megawatts or more, which require environmental authorisation



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Conclusion:

The proposed residential development will not involve the development of onshore wind energy generation facilities; therefore, it is motivated that the identified specialist assessment is not required for inclusion in the Basic Assessment Report.

(9)(13) Geotechnical Assessment

The screening report for Infrastructure with 100m of the HWM of the seas identified Geotechnical Assessment as a specialist assessment required for the EIA. The protocol for this specialist assessment falls under General Requirements.

Conclusion:

A Geotechnical Report has been compiled by Outeniqua Geotechnical Services and is dated 5 September 2022. This report is included in the Basic Assessment Report.