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SITE SENSITIVITY VERIFICATION REPORT

Erf 1510, Sea Vista, St Francis Bay, Kouga Local Municipality, Eastern Cape

Proposed New Residential Dwelling



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EAPASA reg no.: 2019/1286



(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 Erf 1510, Sea Vista (red polygon)

(2) The proposed development at the property

Eco Route Environmental Consultancy were appointed by the applicant, Dr Ivan Marx as the independent Environmental Assessment Practitioner to conduct a Basic Assessment application process for the proposed development of Erf 1510 in St Francis Bay.

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

- Dr Adriaan Grobler - Biodiversity
- Outeniqua Geotechnical Services (Iain Paton) – Geotechnical assessment

Erf 1510 is zoned for Residential use. The property is 815m² in extent and is currently vacant.

The dwelling footprint will be 320m² and is located in a coastal dune landscape just over 60m from the littoral zone. The proposed residential development will entail the construction of a three-storey (lower ground, ground and first floor) house, associated decking and paving for vehicular access.



The vegetation type present on the site is St Francis Dune Thicket vegetation which has been listed as “Least Concern” in terms of conservation status (SANBI, 2018b; Skowno et al., 2019). No CBA or ESAs are present.

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

Access to Erf 1510 is via Tom Brown Boulevard, which lies to the south of the property.

(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 17 January 2022) and Infrastructure|Localised infrastructure|Infrastructure in the Sea_Estuary_Littoral Active Zone_Development Setback_100M Inland or coastal public property (dated 16 August 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.	Socio-Economic Assessment	General
7.	Plant Species Assessment	Plant species assessment
8.	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.	Socio-Economic Assessment	General
7.	Plant Species Assessment	Plant species assessment
8.	Animal Species Assessment	Animal species assessment
9.	Marine Impact Assessment	General
10.	Avian Impact Assessment	Avifauna assessment
11.	Geotechnical Assessment	General



(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>
Medium	Sensitive species 7

Sensitivity	Feature(s)
Medium	Aves- <i>Stephanoaetus coronatus</i>
Medium	Sensitive species 8

Conclusion:

The proposed development property was cleared of indigenous vegetation and subjected to topsoil disturbance twice by the previous owner. The appointed biodiversity specialist had noted in his Compliance Statement (attached as Appendix D to the BAR) that although the site is mapped as having St Francis Dune Thicket, the previous disturbance has resulted in the site now supporting poorly developed, secondary dune thicket. The vegetation on the development site is now not suitable to host the species indicated in the Screening Tool Report. Therefore, an Animal Species Specialist will not be required for the EIA process.



Figure 2: Google Earth imagery of the site cleared of vegetation during (a) 2016 and (b) 2019

(9)(2) Relative Aquatic Biodiversity Theme Sensitivity

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

Conclusion:

As the land is situated on a dune landscape and there are no watercourses present, it is motivated that an Aquatic Biodiversity Sensitivity Assessment will not be necessary to conduct for the Basic Assessment process.



Figure 3: Image of the dune landscape

(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 will not trigger Section 38 of the National Heritage Resources Act (no.25 of 1999). In addition, no heritage artefacts or remains were noted on the site. It is also possible that previous site clearance could have disturbed or destroyed any artefacts of historical significance. It is motivated that an Archaeological specialist will not be required for the Basic Assessment Report; however, the applicant will be advised that should artefacts or remains be noted during site clearance, the Eastern Cape Provincial Heritage Resources Authority/ ECPHRA 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.

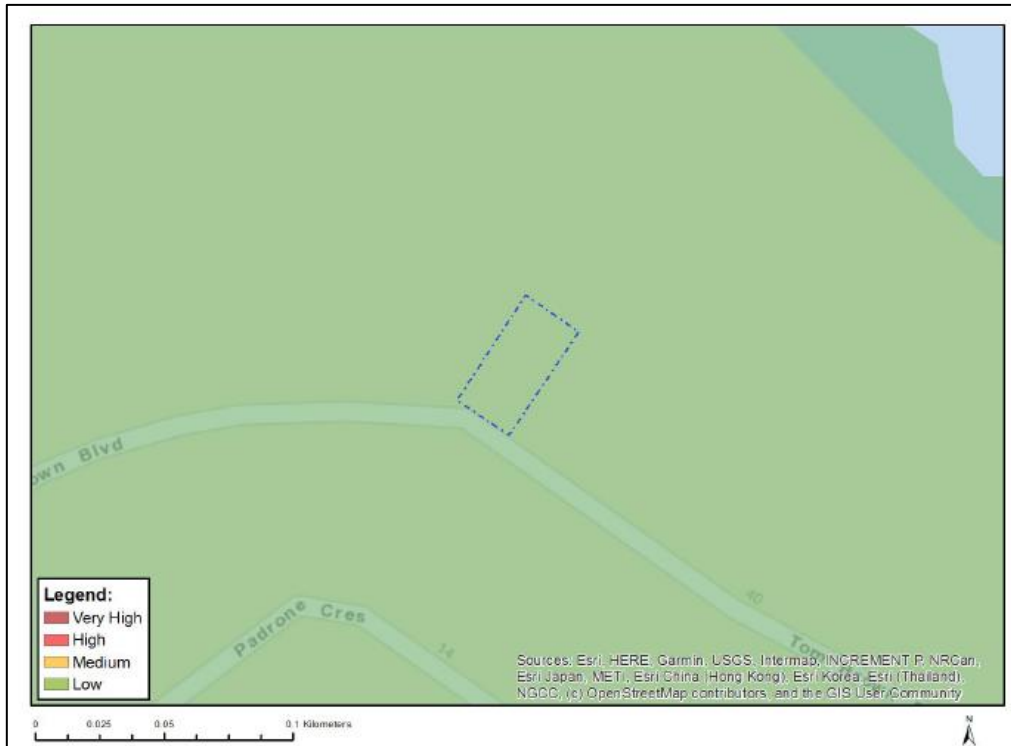


Figure 4: Archaeological and Cultural Sensitivity Theme: Low, as per the Screening Tool Reports

(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 is of a residential nature and 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.



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 south-west occurs within an area of Very High Sensitivity.

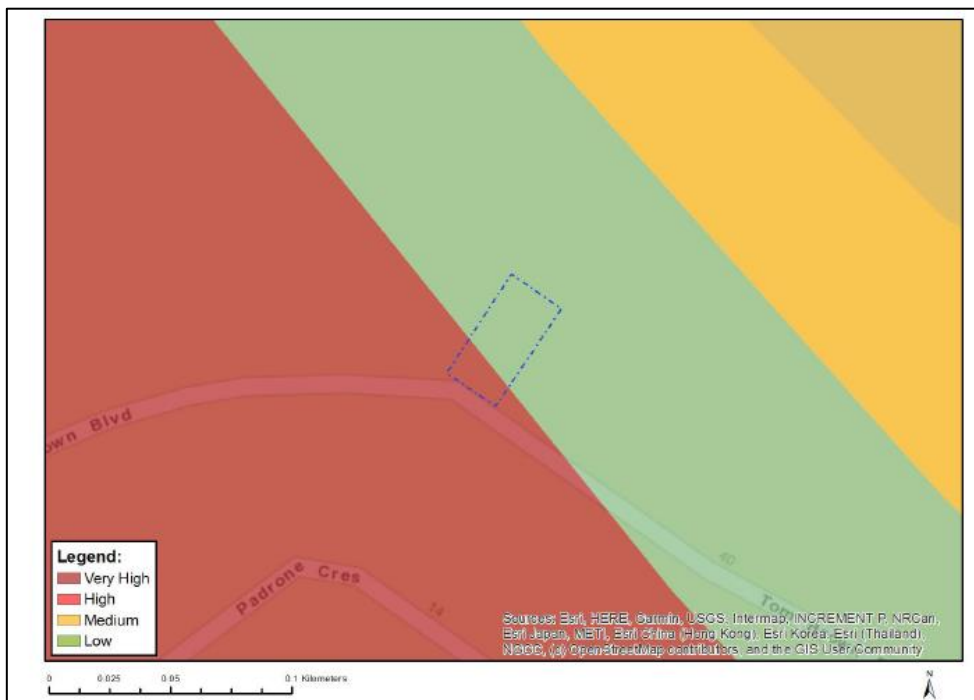


Figure 7: Map of Relative Paleontology Theme Sensitivity as per the Screening Tool Reports



Conclusion:

The development will not trigger Section 38 of the National Heritage Resources Act (no.25 of 1999). In addition, no paleontological fossils were noted on the site. 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 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)
Medium	Aspalathus recurvispina
Medium	Lebeckia gracilis
Medium	Sensitive species 308
Medium	Hyobanche robusta
Medium	Erica chloroloma
Medium	Erica glandulosa subsp. fourcadei
Medium	Sensitive species 588
Medium	Sensitive species 657
Medium	Centella tridentata var. hermanniifolia
Medium	Rapanea gilliana
Medium	Sensitive species 1192
Medium	Sensitive species 1032
Medium	Syncarpha sordescens
Medium	Sensitive species 78
Medium	Agathosma stenopetala
Medium	Cotyledon adscendens
Medium	Capeochloa cincta subsp. sericea
Medium	Sensitive species 448
Medium	Erica glumiflora

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 will be included in the Basic Assessment Report.

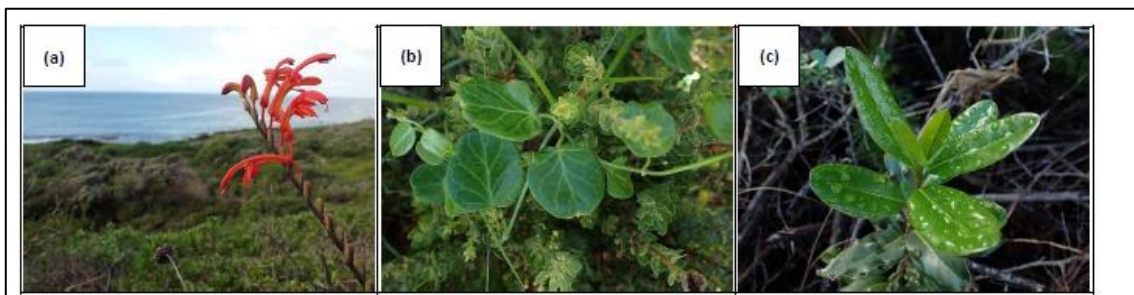


Figure 8: Protected plant species that were recorded on the site: (a) *Chasmanthe aethiopica*; (b) *Cynanchum obtusifolium*; (c) *Sideroxylon inerme*, courtesy of the Terrestrial Biodiversity and Plant Species Compliance Statement (attached to the BAR as appendix D)



(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 will be included in the Basic Assessment Report.



Figure 9: Secondary dune thicket present on the proposed development site.

(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 proposed development property being zoned as Residential and the proposed activity will be a residential dwelling within a residential area, it is motivated that a visual impact assessment will not be necessary for inclusion in the Basic Assessment Report.

(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 proposed development property being zoned as Residential and the proposed activity will be a residential dwelling within a residential area, it is motivated that a socio-economic impact assessment will not be necessary for inclusion in the Basic Assessment Report. The Basic Assessment Report will include information regarding municipal socio-economic aspects.

(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 vegetation between the development property and the HWM of the sea. The property is also in location with no short-term erosion risk and mostly moderate 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.

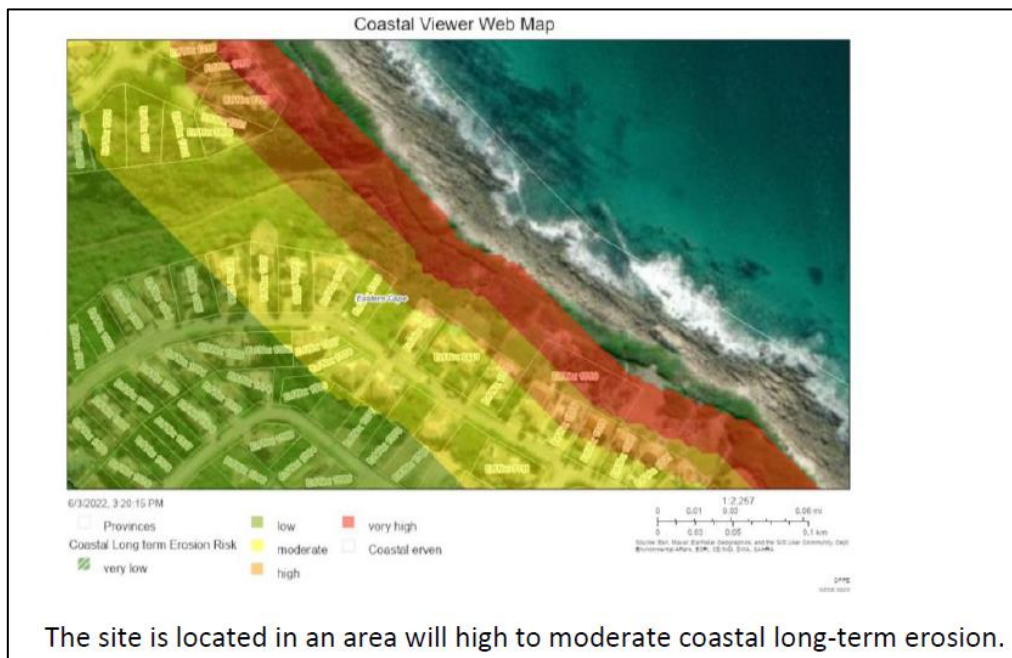


Figure 10: Map of coastal long-term erosion, courtesy of the Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans and Coasts.

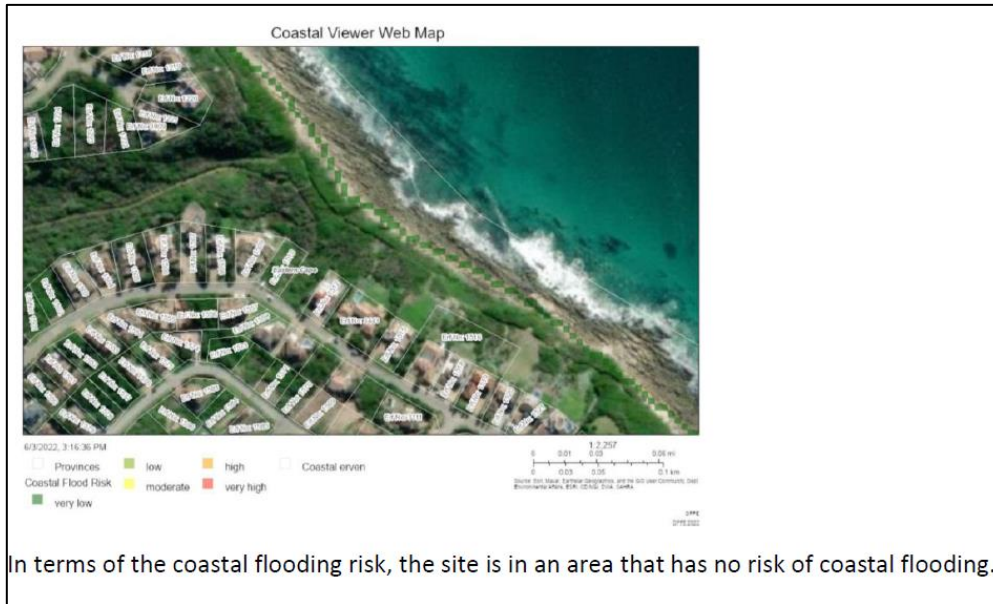


Figure 11: Map of coastal flood risk, courtesy of the Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans and Coasts.

(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

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 Soil Test Report has been compiled by Outeniqua Geotechnical Services and is dated 21 July 2022. This report will be included in the Basic Assessment Report.