



24 November 2021

Our Ref: MOS618/05

DEA&DP Ref: 16/3/3/6/7/1/D6/37/0159/20

### **RE: SITE SENSITIVITY VERIFICATION REPORT FOR BASIC ASSESSMENT APPLICATION FOR HOUSE STEENEKAMP ON PORTION 19 OF 257 MISGUNST AAN DE GOURITZ RIVIER**

On 20 March 2020 the Minister of Forestry, Fisheries and the Environmental published the general requirements for undertaking site sensitivity verification for environmental themes for activities requiring environmental authorisation (Government Gazette No. 43110). In terms of these requirements, prior to commencing with a specialist assessment, the current land use and environmental sensitivity of the site under consideration by the screening tool must be confirmed by undertaking a site sensitivity verification.

The report uses national datasets to identify site sensitivities and potential specialist studies that may be required for any particular development. Since the datasets are not necessarily ground truthed, there may be instances where the required specialist study is in actual fact not necessary.

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration identified by the screening tool must be confirmed by the undertaking a **site sensitivity verification**. According to the Assessment Protocol for specialist involvement, If any part of the proposed development falls within an area of "high" or "very high" sensitivity, the requirements prescribed for such sensitivity must be followed.

Several Screening Tool Reports have been run for this application and 2 (two) have already been submitted to the DEA&DP with the Notice of Intent (21 February 2020) and the Clarification Application (12 November 2020) respectively. An additional Screening Tool was run on 16 November 2021 to accompany the Application Form for two different classification categories.

#### **Screening Tool 21 February 2020**

**Category:** Transformation of land | From agriculture or afforestation | Transformation of land - From agriculture or afforestation

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme		X		
Animal Species Theme		X		

Aquatic Biodiversity Theme				X
Archaeological and Cultural Heritage Theme		X		
Civil Aviation Theme				X
Paleontology Theme			X	
Plant Species Theme			X	
Defence Theme				X
Terrestrial Biodiversity Theme	X			

### Screening Tool 12 November 2020

**Classification:** Transformation of land | Indigenous vegetation | Transformation of land - Indigenous vegetation

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
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			

### Screening Tool 16 November 2021

**Category:** Transformation of land | Indigenous vegetation

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
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			

### Screening Tool 16 November 2021

**Category:** Infrastructure | Localised infrastructure | Infrastructure in the Sea\_Estuary\_Littoral Active Zone\_Development Setback\_100M Inland or coastal public property

Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity
Agriculture Theme			X	
Animal Species Theme			X	

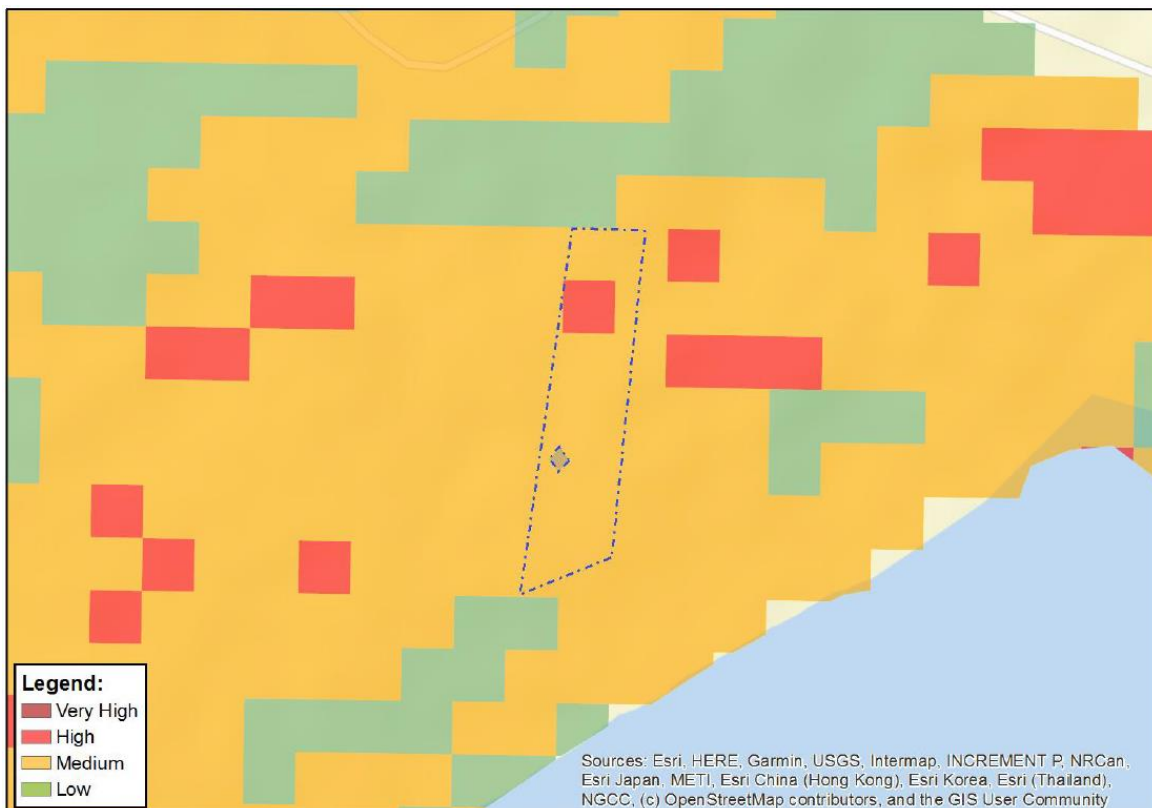
Aquatic Biodiversity Theme	X			
Archaeological and Cultural Heritage Theme				X
Civil Aviation Theme				X
Defence Theme				X
Paleontology Theme			X	
Plant Species Theme			X	
Terrestrial Biodiversity Theme	X			

As can be seen above, the sensitivities have changed over time and with the differing categories. This office will use the Screening Tool Report that was run on **16 November 2021**, and consider the following summary of the development footprint environmental sensitivities is identified. It must be noted that there have been various specialist investigations undertaken on this property since early in 2020 and as such there is a well established ground truthing that has taken place.

Below is confirmation of the studies that will be submitted for the Application based on the sensitivity themes identified above and the ground truthing to date.

**Agriculture (Medium Sensitivity)**

The Screening Tool identifies the agricultural sensitivity theme as “medium” due to a portion of the development site falling within the estimated land capability of the site. The property is zoned for Agriculture Zone I and has not been utilised for agricultural purposes. There is also no intention on the part of the applicant to use the property for agricultural purposes.



The property is zoned for agriculture but is not and never has been utilised for agricultural purposes in recent history. Historical records provided as part of the Heritage study indicates that the property was previously used for grazing. There is no evidence on site of agricultural activities currently and there is no intention to practise any agricultural activities. There is no

likelihood of **high value agricultural land** being preserved for **continued agricultural production** thus ensuring long term national food security. This property does not qualify in this respect.

#### Layer Information

##### Title

Land Capability (DAFF 2016)

##### Description

The Land Capability (2016) represents the distribution of the land capability evaluation values in the country, used as one of the input data layers to determine and demarcate all high value agricultural land for ensuring that these areas, pending availability, are preserved for continued agricultural production, thereby ensuring long-term national food security. The data layer is a seamless data layer and does not exclude permanently transformed areas (built up; waterbodies; mining etc.)

Land capability is defined as the most intensive long-term use of land for purposes of rainfed farming determined by the interaction of climate, soil and terrain. Land capability should not be seen as a substitute for the interpretation designed to show land suitability or agricultural potential.

The approach to the refinement of the 2016 Land capability data layer was based on a spatial modelling exercise and verified through actual in-field verification processes and local level soil assessment data.

The Land capability evaluation 2016 data layer is a refined and updated spatial modelled data layer depicting the land capability evaluation values for the country. The main contributing factors towards land capability in a "natural or unimproved" "rainfed (dryland) scenario, were the soil, climate and terrain capabilities with a weighted reference of:

Soil capability = 30%; Climate capability = (40%) and Terrain capability = (30%).

##### Source

Department of Agriculture, Forestry and Fisheries (DAFF)

##### Type

Raster Layer

In terms of agriculture, as there is no likelihood of practising agricultural activities and the applicant intends on retaining the status quo of the site (natural) and only exercising the associated zoning right to construct a residential dwelling on the property, the sensitivity of this layer is deemed to be negligible.

No Agriculture studies are being considered. The Western Cape Department of Agriculture will be included as an I&AP for comment.

#### **Animal Species (Medium Sensitivity)**

The screening tool identified the sensitivity for animal species (fauna) as "medium" for the following species:

Sensitivity	Feature(s)
Medium	Invertebrate-Aneuryphymus montanus
Medium	Aves-Circus ranivorus
Medium	Aves-Circus maurus
Medium	Aves-Neotis denhami
Medium	Insecta-Lepidochrysops littoralis
Medium	Sensitive species 7

The applicant is proposing a single residential dwelling and using existing road access only while retaining the remaining natural vegetation of the site. There are no fences being proposed around the property.

The impact of this dwelling on the faunal environment will be **Negligible**, particularly as it does not require the removal of the sensitive thicket vegetation as determined by the botanical specialist, thus the disturbance of faunal habitat is limited.

***Aneuryphymus montanus*** (yellow winged grasshopper) 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). The proposed development site is not located within the thicket as identified by the botanical specialist and is therefore not expected to occur at this site..

***Circus ranivorus*** (African Marsh Harrier) is found in association with pans, wetlands and wet grasslands. It nests in grasslands and pans in thick vegetation near a wetland or marsh - hence the name. The aquatic specialist has already confirmed that there are no aquatic resources within 2kms of the site, the it is unlikely that this species will occur here.

***Circus maurus*** (Black Harrier) is found in association with open grassland, shrublands, semi-deserts and mountainous areas. According to BirdLife SA, the biggest threats to this species comes from agriculture (use of poisons) and fragmentation of landscapes. The single residential dwelling proposed will not fragment the landscape to the detriment of this species.

***Neotis denhami*** (Denham's bustard) is usually associated with grassland habitats but can be found in a considerable range of secondary habitats including dense shrubland, light woodland, farmland, dried marsh and arid plains. It is the largest species within the Genus *Neotis*. Denham's bustard generally requires large swathes of grassland with minimal human disturbance. The reason is the large size of the bird, it needs some space and time to get off into flight and thus is vulnerable in a habitat that does not provide open plains and additionally experiences human disturbances. The vegetation in the area (dense dune thicket) means that it is unlikely that this species occurs in this vicinity.

***Lepidochrysops littoralis*** (Coastal Blue butterfly), listed as endangered (EN) in the Southern African Lepidoptera Conservation Assessment (Mecenero *et al.*,2020). Adults are on wing from late August to December. Its habitat preference is coastal sand dunes and flatlands covered with fynbos. According to Dr Dave Edge, this species prefers the limestone calcrete outcrops associated with sand dunes with suitable host plants and it is extremely unlikely that the species will be found at this site.

**Sensitive species 7.** This species is highly mobile and found in a variety of forested areas, including rain forests, riverine forests, dense thickets, and montane forests. The position of the residential dwelling will not impact on the species habitat and distribution.

A faunal impact study is therefore considered unnecessary for this application.

#### **Aquatic Biodiversity (Very High Sensitivity)**

The screening tool identified the aquatic biodiversity theme as "very high". There are no watercourses nor wetlands on the property. This has been confirmed on site by the EAP and by an aquatic specialist.

The screening tool classified the site as being of **Very High** aquatic biodiversity due to its location with a river Freshwater Ecosystem Priority Area (FEPA). The aquatic specialist undertook a site verification and compliance statement and based on the results of the desktop review and the site survey, the sensitivity of aquatic biodiversity on Portion 19 of Farm 257 can be regarded as **Low**. The main factors influencing the statement include the following:

- While the SQC in which the site falls is a FEPA, the site falls well outside the catchment area of the river reach for which the FEPA status was determined; and

- No freshwater features were identified within the footprint area of the site or within close proximity (i.e. within 2 km) of the site.



No assessment will thus be undertaken as no listed activity in terms of the NEMA EIA Regulations is triggered.

### **Archaeological & Cultural Heritage (Low Sensitivity)**

The screening tool identified this theme in 2020 as being "high" and this has subsequently been reduced to "low" in 2021. A Heritage Notice of Intent was submitted to Heritage Western Cape (HWC). On the 12<sup>th</sup> August 2020, the HWC requested a Heritage Impact Assessment be undertaken with specific reference to an Archaeological foot survey, comments from I&AP's including the SAHRA MUCH unit. This study was completed and the HIA has been submitted to HWC decision making.

### **Civil Aviation (Low Sensitivity)**

According to the screening tool, the development is considered to be of "low" sensitivity.

The development does not trigger the obstacle collision / potential hazard requirements as set out by the CAA, i.e.

- Buildings or other objects which will constitute an obstruction or potential hazard to aircraft moving in the navigable air space in the vicinity of an aerodrome, or navigation aid, or which will adversely affect the performance of the radio navigation or instrument lading systems,
- There are no buildings or objects higher than 45 metres above the mean level of the landing area;
- No building, structure or object which projects above a slope of 1 in 20 and which is within 3000 metres measured from the nearest point on the boundary of an aerodrome;

- No building, structure or other object which will project above the approach, transitional or horizontal surfaces of an aerodrome.

As such it is not necessary to request approval in terms of the Civil Aviation Act for obstacles. The sensitivity is thus null.

### **Defence (Low Sensitivity)**

The screening tool identified this theme as being "low". No further studies will be undertaken as the development constitutes an activity that is allowable in terms of the land use rights i.e. the construction of a single residential dwelling.

### **Palaeontology (Medium Sensitivity)**

The screening tool identified this theme as being "medium" with no specific reason provided.

A Heritage Notice of Intent was submitted to Heritage Western Cape (HWC). On the 12<sup>th</sup> August 2020, the HWC requested a Heritage Impact Assessment be undertaken with specific reference to an Archaeological foot survey, comments from I&AP's including the SAHRA MUCH unit. This study was completed and the HIA has been submitted to HWC decision making.

Since HWC did not require any Palaeontology studies, no further studies related to this theme will be undertaken. The sensitivity is deemed to be null.

### **Plant Species (Medium Sensitivity)**

The screening tool identified this theme as being "medium" sensitivity. A Botanical impact assessment has been drafted for this application.

### **Terrestrial Biodiversity (Very High Sensitivity)**

The screening tool identified this them as being "very high", notably for being in a Critical biodiversity area 1 and FEPA Subcatchments.

The WC BSP 2017 provides the following reason for the CBA 1 classification:

Summary_1	Coastal Habitat Type (1.65), Ecological processes (19.49), SA Vegetation Type (16.12), Threatened Vertebrate (19.49)
Summary_2	
Feature_1	Bontebok Extended Distribution Range
Feature_2	Canca Limestone Fynbos (LT)
Feature_3	Cape Seashore Vegetation (LT)
Feature_4	Coastal Habitat Type
Feature_5	Coastal resource protection- Eden
Feature_6	Foredune

The botanical specialist and the biodiversity mapping have confirmed that the development site is located within the Cape Seashore vegetation type which is considered to be of Least Concern, both in the gazetted 2011 Threat Status and in the 2018 Threat Status Assessment by Skowno et al.

Given that the reasons for the CBA 1 are related to vegetation type and coastal resource habitat and protection, it is motivated that the Botanical Impact Assessment and the Coastal Environmental Engineering Report are more than sufficient for the assessment of this theme and its sensitivity.

With regard to the FEPA subcatchment reasons for this sensitivity rating, the aquatic aspects of the site have already been considered in the Aquatic Compliance Statement, and it has been confirmed that there are no aquatic resources on the site or within 2kms of the site.

This office therefore motivates that no additional Terrestrial Biodiversity studies are required for this proposal.

### **Specialist Assessments**

According to the DEA&DP series of guidelines for the involvement of specialists in EIA processes (2005), one of the underpinning generic principles is to **eliminate the unnecessary specialist involvement** through proactive project planning and design to avoid or sufficiently reduce negative impacts. Another is to **maximise the use of existing relevant information** prior to involving a specialist. This includes the input from the EAP in the form of site photographs and site inspections. These principles apply to the specialist studies that have been identified in the screening tool and motivated as not necessary in this report.

Based on the site sensitives identified, the screening tool identified 10 possible specialist assessments for the development. These are as follows:

#### 1. Landscape/Visual Impact Assessment

The applicant is proposing a single residential dwelling (low key development<sup>1</sup>) which will remain within the relevant municipal building restrictions and in compliance with the Fransmanshoek Conservancy HOA aesthetic rules and architectural guidelines. The land use is in keeping with the property zoning and is not in conflict with the vision for the area. According to the issue categories for visual impacts (DEA&DP, 2005), minimal visual impact is expected:

- Potentially low level of intrusion on landscapes or scenic resources;
- Limited change in the visual character of the area;
- Low-key development, similar in nature to existing development.

Additional landscape / visual impact assessment is thus unnecessary and will not be undertaken.

#### 2. Archaeological and Cultural Heritage Impact Assessment

This study has been undertaken and submitted to Heritage Western Cape as explained in the section above.

#### 3. Palaeontology Impact Assessment

A Heritage Notice of Intent was submitted to Heritage Western Cape and no request for further Palaeontological studies was requested, only archaeological.

#### 4. Terrestrial Biodiversity Impact Assessment

This office does not agree that a specific Terrestrial Biodiversity Impact Assessment is required as a Botanical and a Coastal Environmental Engineering study have been

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<sup>1</sup> As defined in the Guideline for Involving Visual and Aesthetic Specialists in EIA Process, DEA&DP 2005.



undertaken for this proposal. Please see motivation in the section above relating to this theme.

5. Aquatic Biodiversity Impact Assessment

An Aquatic Compliance Statement has been completed.

6. Marine Impact Assessment

The development does not take place in the sea and therefore does not impact on the marine environment. This is a problem with the very broad categorisation that is applied in the Screening Tool. The proposed dwelling is located  $\pm 386\text{m}$  from and at  $\pm 70\text{m}$  above the highwater mark of the sea. In addition there is another cadastral unit between Portion 19 and the high water mark. Therefore a Marine Impact Assessment is deemed unnecessary in this instance. A Coastal Environmental Engineering study provides specialist input into the onshore environment, particularly within the littoral active zone.

7. Avian Impact Assessment

No avian species were identified as sensitive species in the Animal Species theme. The proposed dwelling will be an area of  $\pm 500\text{m}^2$  in total and the remaining habitat on the site will remain natural. The dwelling will not interrupt pattern or process and therefore is completely unlikely to impact on avian habitat and movement. The development is not associated with the development of onshore wind energy generation facilities, where the electricity output is 20 megawatts or more, which require environmental authorisation. An avian assessment is therefore considered unnecessary and will not be undertaken.

8. Geotechnical Assessment

The applicant is proposing a single residential dwelling on an area that the coastal engineer has identified as stable. Soil compaction tests will be undertaken as part of the engineering aspect during construction and it is therefore not considered necessary to undertake a Geotechnical Assessment.

The Services Report found that the in-situ soil types encountered are fine grained non plastic sands with a Typical Permeability Class of Moderate to High (600 – 6 000) mm/day. The bearing capacity of the in-situ soil will typically range from 50-200kPa depending on the

depth below natural ground level. At  $\pm 2\ 000\text{mm}$  below natural ground level 200kPa bearing capacity could be expected. This is considered sufficient for the construction of the proposed dwelling.

9. Socio-Economic Assessment

The applicant is proposing a single residential dwelling which will remain within the relevant municipal building restrictions. The land use is in keeping with the property zoning and is not in conflict with the vision for the area. According to the indicators associated with the nature of the receiving environment and the project as provided in the DEA&DP Guideline for Involving Economists in EIA Process (2005), this development does not trigger the need for a Socio Economic Assessment.

10. Plant Species Assessment

A Botanical Impact Assessment has been undertaken for this proposal.

11. Animal Species Assessment

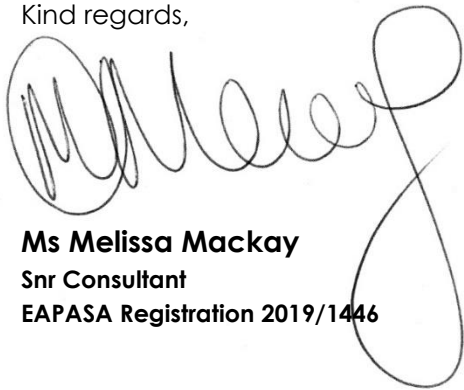
As motivated for earlier in the report, the placement and disturbance footprint of the single residential dwelling.

The site verification per theme as provided above motivates that only the following assessments will be undertaken:

1. Heritage Impact Assessment, including Archaeological Impact Assessment;
2. Botanical Impact Assessment;
3. Coastal Environmental Engineering Assessment which considers the impact on the dune and littoral active zone;
4. Aquatic Compliance Statement;
5. Geohydrology Statement.

Please feel free to contact this office should you require any further information.

Kind regards,

A handwritten signature in black ink, appearing to read 'Melissa Mackay', with a large, stylized flourish extending downwards and to the right.

**Ms Melissa Mackay**  
**Snr Consultant**  
**EAPASA Registration 2019/1446**