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PROPOSED POOLE'S BAY CONNECTION PATH
Hermanus
(Pre-application EA DEA&DP Ref no: 16/3/3/6/7/1/E2/15/1135/19)

SITE SENSITIVITY VERIFICATION REPORT

April 2020

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1. Introduction

The Department of Environmental Affairs' National web-based National Environmental Screening Tool (NEST) allows for the generation of a Screening Tool Report (STR) referred to in Regulation 16(1)(v) of the Environmental Impact Assessment Regulations 2014, as amended, whereby this is required to accompany any application for Environmental Authorisation (see <https://screening.environment.gov.za/screeningtool/#/pages/welcome>).

A STR provides site specific EIA process and review information related to the type of development (national sector classification), minimum information requirements, Environmental Management Framework or bio-regional plans that apply to a specific area.

Further to this, the NEST identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, also based on the national sector classification and the environmental sensitivity of the site.

Prior to commencing with a specialist assessment, the current use of the land and the environmental sensitivity of the site under consideration as identified by the NEST, must be confirmed by undertaking a site sensitivity verification. A Site Sensitivity Verification Report (SVR) is then required in response to STR through the Procedures for the Assessment and Minimum Criteria for Reporting on Identified Environmental Themes in terms of Sections 24(5)(A) And (H) And 44 Of The National Environmental Management Act, 1998, When Applying For Environmental Authorisation (Government Gazette No. 320, 20 March 2020).

This report therefore covers the STR compiled for the proposed Poole's Bay connection Path.

2. Methodology

The site sensitivity verification must be undertaken through using:

- a desk top analysis, using satellite imagery;
- a preliminary on-site inspection; and
- any other available and relevant information.

Note on accuracy of data:

The spatial data contained in the NEST used to generate reports has been collected as accurately as possible. Although the greatest care has been taken to ensure that the data is up to date and spatially accurate, the Department of Environmental Affairs and its entities give no warranty, express or implied, as to the accuracy, reliability, utility or completeness of this data.

The spatial information used for screening purposes, which in turn is used to generate the STR, is collected from various sources, therefore its correctness cannot be guaranteed, and it will change over time without notice.

The above is a limitation which has been verified in this report. The STR for the proposed path clearly shows a discrepancy in the application of the data, as the positioning of the proposed path is not accurately indicated in the STR (the final version of the STR placed the path in the sea). When compiling it, however, we ensured to place the footprint as close as possible to the HWM to inform the requirements and must therefore assume that the sensitivities indicated have been determined accordingly:

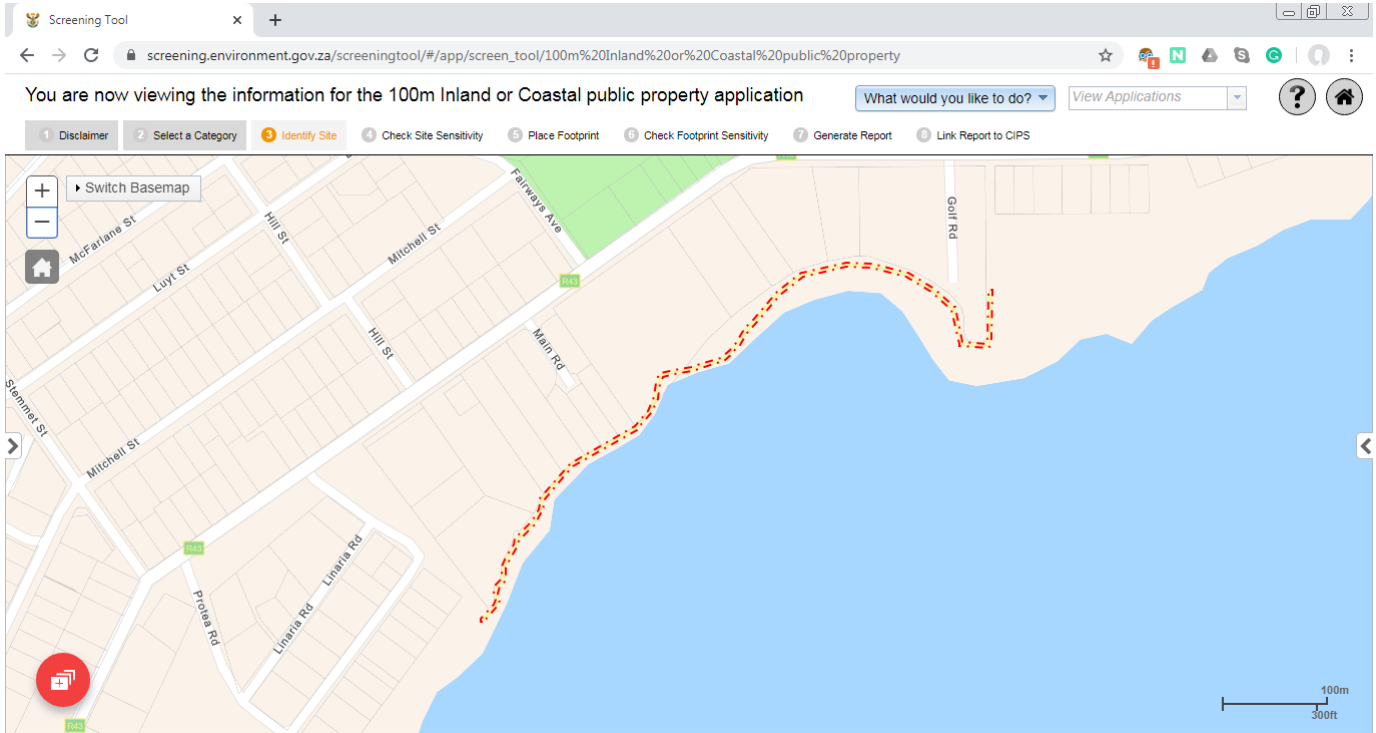


Figure 1: Screenshot of area for which Screening tool report was generated

The site sensitivity verification has been undertaken by Kozette Myburgh (EAP) and is supported by investigation undertaken by the following specialists (all reports referred to are included under Appendix G of the Basic Assessment Report):

- Jayson Orton (Heritage Specialist)
- Joshua Gericke (Aquatic Specialist)
- Dr Rob Simmons (Avian Specialist)

Note that at the time of specialist investigations, the Procedures and Protocol (GG320) was not promulgated yet, but we are of the opinion that the studies undertaken covers the requirements.

The STR notes the environmental sensitivity of the site in relation to several environmental themes which are associated with the classification code, in this case being development below or within 100m of the highwater mark. The environmental sensitivity is rated as either a two or four tier sensitivity, being very high, high, medium and low in the four tier and very high and low in the two-tier rating. Their rating is associated with level of assessment required to determine the possibility of impact management or mitigation.

3. Findings:

The STR identified the following for consideration

- a. Possible incentive, restriction, or prohibition
 - South African Protected Areas
- b. Environmental attributes/features on the site which will be sensitive to development:
 - Agriculture Theme
 - Animal Species Theme
 - Aquatic Biodiversity Theme
 - Archaeological and Cultural Heritage Theme
 - Civil Aviation Theme
 - Paleontology Theme
 - Plant Species Theme
 - Defense Theme
 - Terrestrial Biodiversity Theme

Possible specialist studies:

- Landscape/Visual Impact Assessment
- Archaeological and Cultural Heritage Impact Assessment
- Palaeontology Impact Assessment
- Terrestrial Biodiversity Impact Assessment
- Aquatic Biodiversity Impact Assessment
- Marine Impact Assessment
- Avian Impact Assessment
- Geotechnical Assessment
- Socio-Economic Assessment
- Plant Species Assessment
- Animal Species Assessment

Based on information gathered through desktop study, site visits and inputs from specialists that in the path specific context, not all of the identified sensitivities apply. The tables that follow serve to:

- Verify land use and sensitivities identified in the STR; and
- Confirm / refute the need for the various specialist inputs called for in terms of the STR.
- Motivation and evidence of either the verified or different use of the land and environmental sensitivity.

a. Incentive, restriction or prohibition

No	Incentive, restriction or prohibition	Implication	EAPs comment
1	South African Protected Areas	The proposed development is located adjacent to Walker Bay Whale Sanctuary Marine Protected Area and Fernkloof Nature Reserve according to the Protected Areas Register (as viewed at https://portal.environment.gov.za/portal/apps/webappviewer/index.html?id=54487a82bafb4a7e9ab3a42aacabdf84)	The DEA: Oceans and Coasts are of the opinion that the applicable Protected Area (Walker Bay Whale Sanctuary Marine Protected Area), where the path is triggering a listed activity relates to the seasonal occurrence of whales in the bay and thus the boundary to the MPA is likely the low water mark. The path will not be located below the LWM.

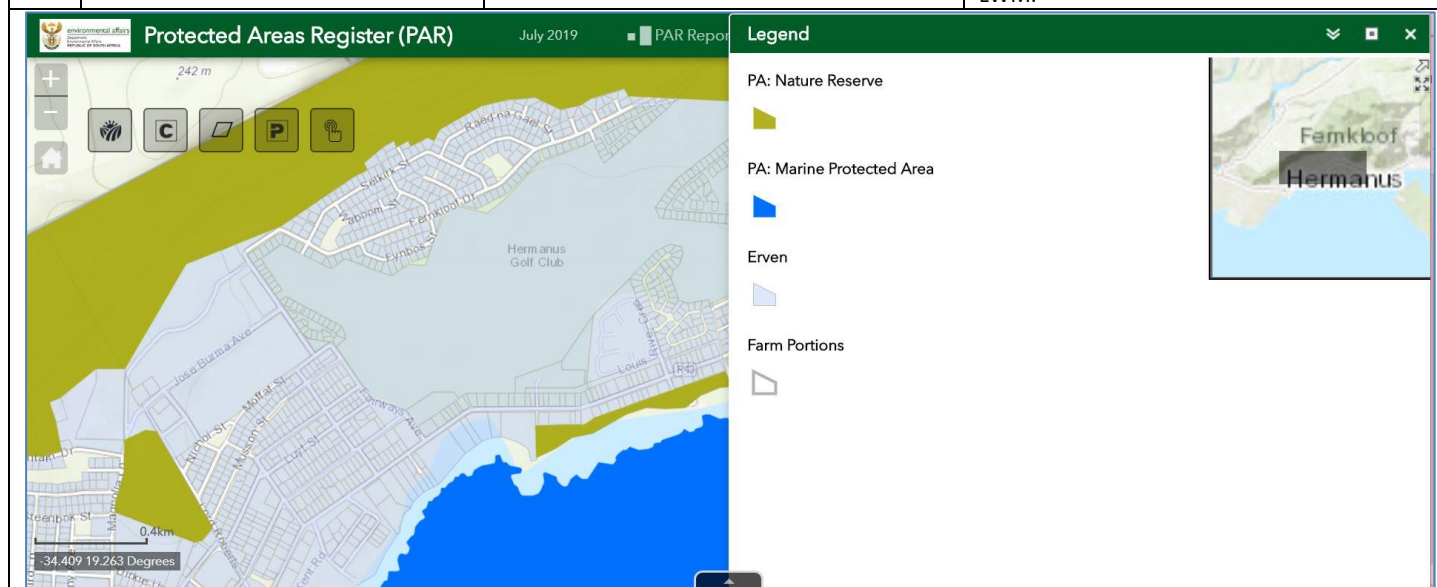




Figure 2: Marine Protected Area Boundary according to the South African Protected Areas Register

b. Themes identified by Screening tool report

No	Theme	Very High sensitivity	High sensitivity	Medium sensitivity	Low sensitivity	Relevant (yes/no)	EAP's comment
1.	Agriculture Theme			X		No	The land capability is indicated to be low to moderate. The cliff path will be on a thin strip of rocky coastline, wedged between private residential property within the urban edge and ocean, with no potential for agriculture. Medium sensitivity is therefore refuted.
							
		<p>Figure 3: The area is not suitable for agriculture as it falls below the HWM with pebbled beaches bordering onto private property with landscaped gardens</p>			<p>Figure 4: Some other areas along the pathway is very rocky with steep cliff faces, not suitable for agriculture</p>		
2.	Animal Species Theme		X			Yes	<p>No terrestrial animal habitat was observed below the HWM.</p> <p>From other specialist studies done for projects affecting the intertidal zone, the general findings regarding impacts on the organisms found in the intertidal zone points to low sensitivity: The majority of species found in the intertidal and nearshore areas of a beach tend to be opportunistic pioneer species with high reproductive and growth rates (e.g. small crustaceans and polychaetes) (Newell et al. 1998 as cited by Anchor Environmental). As marine invertebrates will start to re-colonise the affected areas through recruitment from adjacent rocky and sandy habitats immediately after construction is completed, the temporary disturbance within each relatively small construction footprint is expected to be 'low' to 'insignificant' and no mitigation is required.</p> <p>Bird habitat on Kraal Rock island, a rocky outcrop off the coastline where the path will be situated, was the only area near the site that, according to the aviation study done, two South African Red Data species were recorded– the Near Threatened African Black Oystercatcher <i>Haemotopus moquini</i> and the Endangered Cape Cormorant, <i>Phalacrocorax capensis</i>. These species were not disturbed by the presence of humans on the nearby mainland.</p> <p>None of the birds on the beach, where the cliff path would pass through, were threatened Red Data species.</p>



							The Avian Specialists concluded that no fatal flaws were found that may compromise the birds' presence or possible breeding. Even though endangered species occur, these should not be significantly affected by the proposed path and the high sensitivity in site and project specific context is therefore refuted.
							
<p>Figure 5: The path being located below the HWM doesn't provide suitable natural habitat for terrestrial animal species</p>				<p>Figure 6: Rocky region between the HWM and the LWM</p>			
3.	Aquatic Biodiversity Theme				X	Yes	It is agreed with the sensitivity that is indicated as low - some habitat is present adjacent to the site according to a freshwater Ecology screening (31st of March 2019). DWS must still indicated if they require a GA / WUL, in which case an assessment would be required. Low sensitivity is therefore confirmed.



Figure 7: Wetland area below Erf 12557 above the HWM



Figure 8: The channel (choked with exotic *Nasturtium officinale*), is visible, with the alien *Pennisetum clandestinum* in the foreground and the indigenous *Cyperus textillis* in the background



Figure 9: Close-up of wetland area in Figure 7



Figure 10: Small stream flowing into the sea

4.	Archaeological and Cultural Heritage Theme		X			No	<p>The site abuts the Marine Protected Area and is within the coastal belt. This will positively affect the cultural heritage of the area as the path is public property allowing for free access for all.</p> <p>According to a heritage specialist investigation, the proposed cliff path will not have any effect on the two heritage features, the tidal pool, and the hotel pool, situated along the route. High sensitivity in the site-specific context is therefore refuted.</p>
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Figure 11: Historic photograph of pool at Bayview apartments (then Bayview hotel), circa 1950's



Figure 12: Tidal pool at Erf 1234



Figure 13: Present day appearance of pool at Bayview apartments



Figure 14: View towards the ocean from tidal pool at Erf 1234

5.	Civil Aviation Theme			X		No	<p>The site is within 15 km of a civil aviation aerodrome (Private Airfield - African wings). However, the proposed cliff path would not have elements that would affect civil aviation. Markings and further consideration is only required for structures higher than 45m and which has the potential to endanger aviation in navigable airspace, or has the potential to interfere with the operation of navigation or surveillance systems or Instrument Landing Systems, including meteorological systems for aeronautical purposes (http://www.caa.co.za/Pages/Obstacles/Objects-affecting-airspace.aspx). Medium sensitivity in the site-specific context is therefore refuted.</p>
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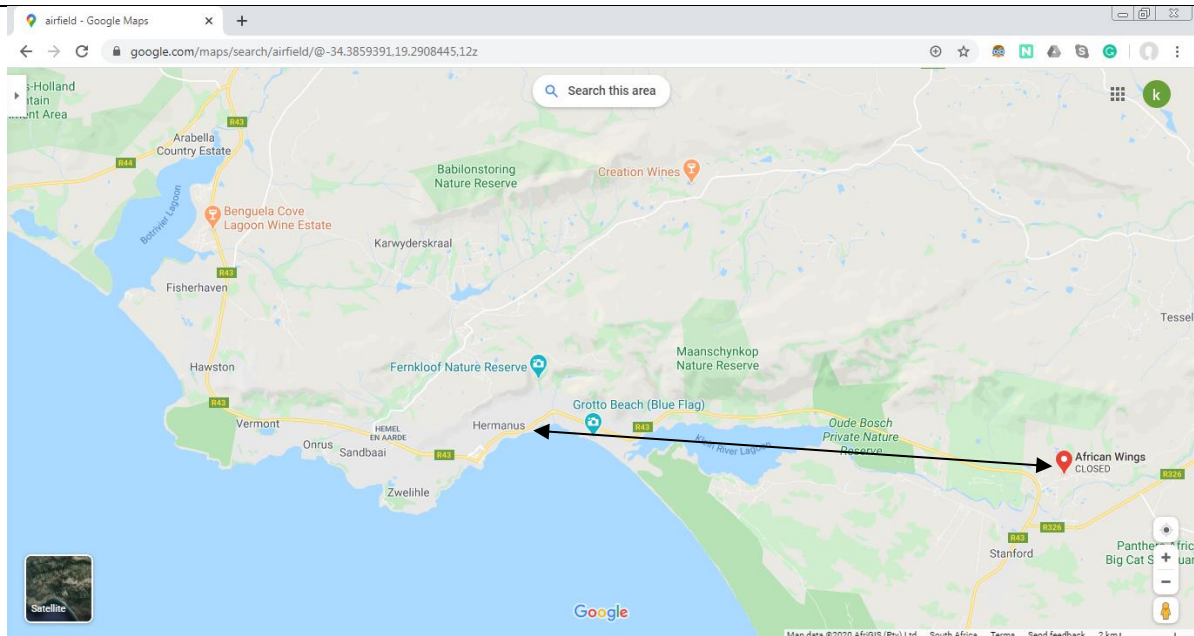


Figure 15: Distance to closest airfield

6.	Palaeontology Theme			X		No	An NID was submitted. Heritage Western Cape required no further palaeontology studies to be done. Medium sensitivity in the site specific context is therefore refuted.
7.	Plant Species Theme			X		No	Plant diversity below the HWM where the path is proposed is relatively low and does not contain the plants listed in the Screening report. The Freshwater Ecology screening confirmed that soil and plant life within the proposed site were scarce and limited to isolated pockets. The two small wetlands identified adjacent to the proposed path were dominated by hydrophytic vegetation, indigenous sedge <i>Cyperus textilis</i> and the alien grass <i>Pennisetum clandestinum</i> with alien <i>Nasturtium officinale</i> dominating the stream channel. Medium sensitivity is therefore refuted within the project and site specific context.
8.	Defence Theme				X	No	The nearest military base is 9 South African Infantry Battalion Base, 100 km away from Hermanus. The proposed path would not affect any military operations. Low sensitivity is therefore refuted within the project and site specific context.

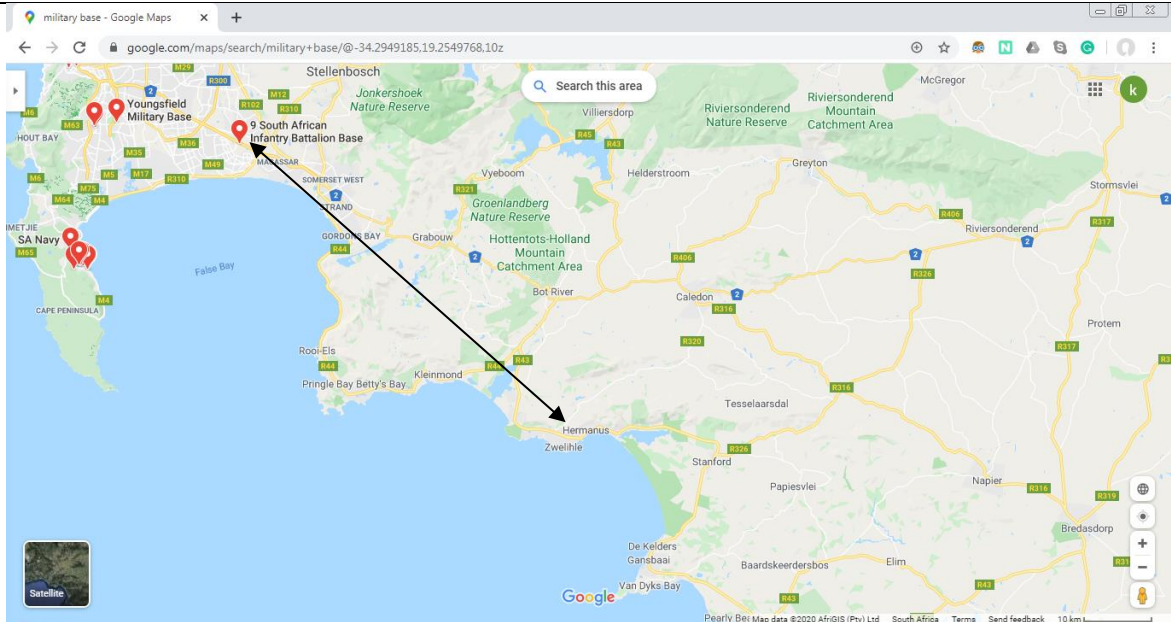


Figure 16: Google Map showing distance to nearest military base

9.	Terrestrial Biodiversity Theme	X				No	<p>The proposed site is adjacent to a degraded Terrestrial Critical Biodiversity Area, according to the WCBS on Cape Farm Mapper. The cliff path would be low-impact and would not have a significant effect on remaining biodiversity in the area. The path would cross a small stream into the ocean (described as Aquatic Ecological support area). However, where the stream enters the HWM, there is no further functionality in terms of terrestrial biodiversity. The path will also not impede faunal movement, thus the high sensitivity is therefore refuted within the project and site specific context.</p>
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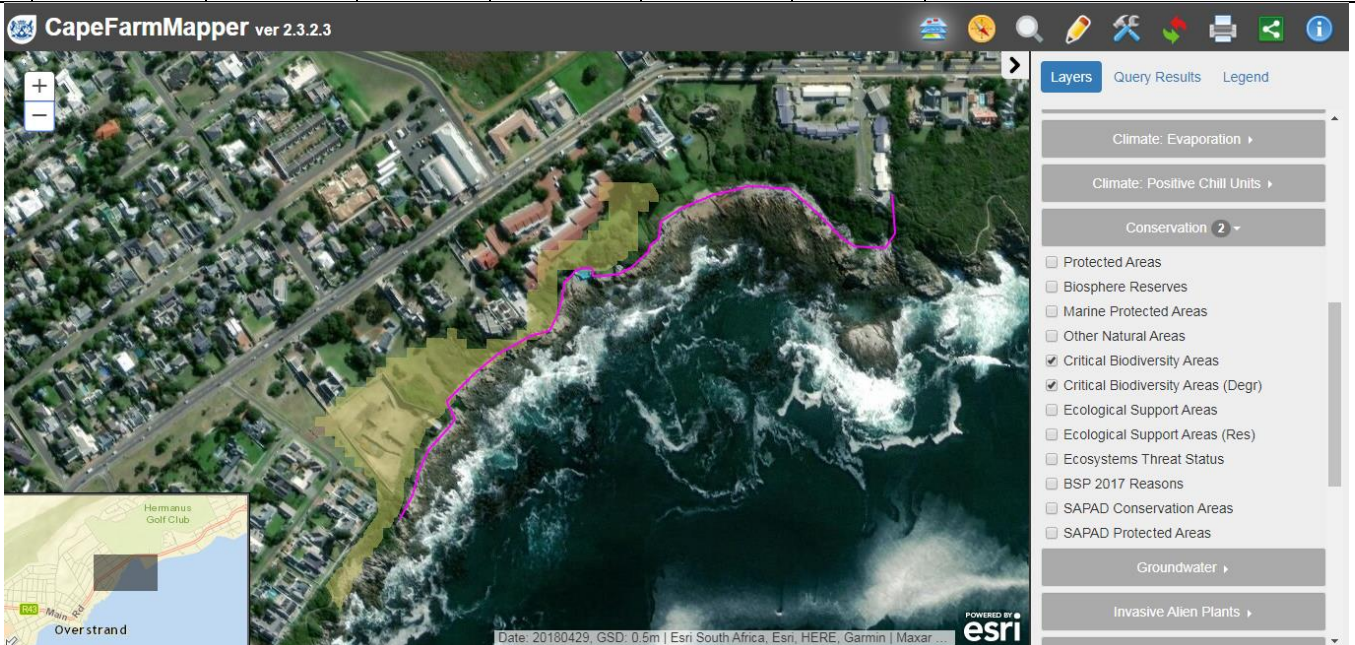









Figure 17: Degraded Critical Biodiversity Areas



Figure 18; Ecological Support Areas

c. Specialist studies identified by Screening tool report

No	Specialist assessment	Assessment Protocol	Required: Yes/No/Maybe	Reason / motivation
1.	Landscape/Visual Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	The 850m Poole's Bay connecting footpath will be a low-key concrete path designed to complement the rest of the Hermanus cliff path that lines much of the coast. NID was submitted and visual study was not required by Heritage Western Cape.
 <p>Figure 19: Artists impression of the cliff path extension</p>				
2.	Archaeological and Cultural Heritage Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	NID was submitted, no further studies required
3.	Palaeontology Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	Feedback on the NID did not indicate any further studies required.

4.	Terrestrial Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Terrestrial_Biodiversity_Assessment_Protocols.pdf	No	No terrestrial biodiversity is found below the HWM, where the path is proposed. Minor removal of vegetation may be required at the connection points to the existing path, but this would be less than 300m ² .
 <p>Figure 20: Area at western connection point where some removal of shrubs may be required (mainly <i>Searsia Crenata</i> / Dune crow-berry which is not threatened on the National list of threatened or endangered species)</p>		 <p>Figure 21: Steps at eastern connection point, which would be incorporated into the path, thus not requiring significant removal of vegetation other than pruning.</p>		
 <p>Figure 22: 5m 'construction zone' within which the ±1,4m wide path will be constructed, containing sparse hydrophytic vegetation</p>		 <p>Figure 23: Rocky areas with minimal vegetation</p>		
 <p>Figure 24: Pathway to follow HWM along edge of tidal pool at Erf 1234</p>		 <p>Figure 25: Pathway to follow below swimming pool at Bayview Apartments with no terrestrial vegetation occurring on rocky areas</p>		
5.	Aquatic Biodiversity Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_Aquatic_Biodiversity_Assessment.pdf	No	A Freshwater Ecology screening was undertaken to identify if any aquatic features would be impacted. Two wetlands were identified adjacent to the site, but these would not be affected significantly as they are




				located above the HWM. Refer to Figure 7-10 above.
6.	Marine Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	The proposed connection path will be located between the HWM and LWM (intertidal zone). Due to the relevant small scale of the project no significant impacts on the marine system is expected and therefore a specialist study is not warranted. Refer to discussion at Section 3(b) (2) above.
	 <p>Figure 26 Proposed location of pathway between HWM and LWM (intertidal zone)</p>		 <p>Figure 27: Rocky areas within intertidal zone with evidence of previous infrastructure</p>	
	 <p>Figure 28: Figure 30: Island at Kraal Rock / Mickey</p>			
7.	Avian Impact Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	No evidence of threatened species breeding was present along the proposed site. The Avian Study found that the proposed path will have minimal negative disturbance that may compromise presence or possible breeding of the avifauna occurring in the area.



Figure 29: Black Oyster catchers and cormorants - courtesy of Dr Rob Simmons, Avian Specialist



Figure 30: Kraalrock Island with birds such as cormorants, gulls and whimbrels (arrowed) - courtesy of Dr Rob Simmons, Avian Specialist

8.	Geotechnical Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	The pathways are to be site specific and formed to, with and by the natural rock-scape of the coastline. No deep foundations are required as concrete would be secured into the bedrock by galvanised steel pens.
9.	Socio-Economic Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	A socio-economic impact assessment weighs the socio-economic cost against the socio-economic benefit of a proposed project. The proposed cliff path will have no significant negative impact on socio-economics of Hermanus as it is a 850m connecting path to an already established coastal path used freely for recreational purposes.
10.	Plant Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	Plant species in the intertidal zone includes seagrass, algae, seaweeds. The rocky areas in Poole's bay are exposed to strong wave action and minimal plant species were observed. The proposed connection path will be located between the HWM and LWM (intertidal zone). Due to the relevant small scale of the project no significant impacts on the marine system is expected and therefore a specialist study is not warranted. See section 3 (c) (4) and (6) above.
11.	Animal Species Assessment	https://screening.environment.gov.za/ScreeningDownloads/AssessmentProtocols/DraftGazetted_General_Requirement_Assessment_Protocols.pdf	No	Animal species observed in the area includes Rock Hyraxes, Seals and Sea Otters. The proposed connection path will be located between the HWM and LWM which doesn't provide habitat for terrestrial animal species. Cetaceans are regular visitors in the area (as well as seasonal whales) but not in the inter-tidal zone. Due to the relevant small scale of the project no significant impacts on the marine system is expected and therefore a specialist study is not warranted. Refer to section

4. Conclusion and recommendations

a. Confirmed sensitivities:

The cliff path lies between the HWM and the LWM of the ocean. There are endangered bird species in the area, concentrated at the Kraal Rock island adjacent to the proposed site. This confirms the Animal Species Sensitivity, however, the avian specialist found no breeding sites along the proposed pathway and concluded that the path should not compromise the birds' presence or possible breeding. The site, according to EnviroSwift, lies along the perimeter of the Critically Endangered Overberg Sandstone Fynbos vegetation type and there are also wetlands associated with the proposed site. Thus, confirming the Plant Species Sensitivity and Aquatic Biodiversity Sensitivity. However, as the path will be situated in the intertidal zone, neither sensitivities should be affected by the path.

b. Refuted sensitivities

The land of the proposed site is not appropriate in size or location for agriculture. Given the proximity to aerodromes and military bases as well as the nature of the activity, the path would not affect civil aviation nor any defense themes. Heritage Western Cape required no additional studies after the NID; thus, the Archaeological and Cultural Heritage Theme and Paleontology Theme requires no further investigation.

c. Specialist studies recommended

A Marine Impact Study might be required to identify whether any fauna or flora are present in the intertidal zone and if so, whether they will be detrimentally affected by the construction or operation of the cliff path. However, specialist investigation for projects on the Hermanus coastline, as well as other referenced studies indicated that small scale projects has only temporary impact on organisms in the intertidal zone and that the impact is low to insignificant. It is therefore our opinion that a marine specialist assessment is not warranted.