

Department of Environmental Affairs and Development Planning
Directorate: Development Management, Region 3
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EIA REFERENCE NUMBER: 16/3/3/1/D6/37/0003/22 **NEAS REFERENCE:** WCP/EIA/0001035/2022

DATE OF ISSUE: 25 August 2022

REFUSAL OF ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: THE PROPOSED DEVELOPMENT OF A SINGLE RESIDENTIAL DWELLING WITH ASSOCIATED INFRASTRUCTURE OF HOUSE STEENEKAMP ON PORTION 19 OF THE FARM MISGUNST AAN DE GOURITZ RIVIER NO. 257, VLEESBAAI

With reference to your application for the abovementioned, find below the outcome with respect to this application.

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014, the Competent Authority herewith **refuses Environmental Authorisation** to the applicant to undertake the listed activities specified in section B below with respect to the proposed development of a residential dwelling with associated infrastructure on Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257, Vleesbaai, described in the Final Basic Assessment Report ("FBAR") (Ref: MOS618/06), dated 9 May 2022, as prepared and submitted by Cape EAPrac, the appointed environmental assessment practitioner ("EAP").

The applicant for this Environmental Authorisation is required to comply with the conditions set out in Section E below.

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

The Managing Director % Mr. Gerhardes Steenekamp Aquifer Resource Management (Pty)Ltd PO Box 448 RIVERSDALE

6670 E-mail: Steenekamp.gesin@gmail.com

The abovementioned applicant is the holder of this Environmental Authorisation (hereinafter referred to as "**the applicant**").

B. LIST OF ACTIVITIES REFUSED

Listed Activities

Environmental Impact Assessment Regulations Listing Notice 1 of 2014, Government Notice No. 983 of 4 December 2014 (as amended)

Activity Number: 17

Activity Description:

Development —

- (i) in the sea;
- (ii) in an estuary;
- (iii) within the littoral active zone;
- (iv) in front of a development setback line; or
- (v) if no development setback exists, within a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever is the greater;

in respect of

- (a) fixed or floating jetties and slipways;
- (b) tidal pools;
- (c) embankments;
- (d) rock revetments or stabilising structures including stabilising walls; or
- (e) infrastructure or structures with a development footprint of 50 square metres or more—

but excluding—

- (aa) the development of infrastructure and structures within existing ports or harbours that will not increase the development footprint of the port or harbour;
- (bb) where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies;
- (cc) the development of temporary infrastructure or structures where such structures will be removed within 6 weeks of the commencement of development and where coral or indigenous vegetation will not be cleared; or
- (dd) where such development occurs within an urban area.

Activity Number: 18

Activity Description:

The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion, excluding where—

- (i) the planting of vegetation or placement of material relates to restoration and maintenance of indigenous coastal vegetation undertaken in accordance with a maintenance management plan; or
- (ii) such planting of vegetation or placing of material will occur behind a development setback.

Activity Number: 19A

Activity Description:

The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from—

- (i) the seashore;
- (ii) the littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is the greater; or
- (iii) the sea—

but excluding where such infilling, depositing, dredging, excavation, removal or moving—

- (f) will occur behind a development setback;
- (g) is for maintenance purposes undertaken in accordance with a maintenance management plan;
- (h) falls within the ambit of activity 21 in this Notice, in which case that activity applies;
- (i) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or

where such development is related to the development of a port or harbour, in which case activity 26 in Listing Notice 2 of 2014 applies.

Environmental Impact Assessment Regulations Listing Notice 3 of 2014, Government Notice No. 985 of 4 December 2014 (as amended)

Activity Number: 4

Activity Description:

The development of a road wider than 4 metres with a reserve less than 13,5 metres

- i. Western Cape
 - i. Areas zoned for use as public open space or equivalent zoning; or
 - ii. Areas outside urban areas:
 - (aa) Areas containing indigenous vegetation;
 - (bb) Areas on the estuary side of the development setback line or in an estuarine functional zone where no such setback line has been determined; or
 - iii. Inside urban areas:
 - (aa) Areas zoned for conservation use; or
 - (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority.

Activity Number: 12

Activity Description:

The clearance of an area of 300 square metres or more of indigenous vegetation except where such clearance of indigenous vegetation is required for maintenance purposes undertaken in accordance with a maintenance management plan.

- i. Western Cape
 - i.Within any critically endangered or endangered ecosystem listed in terms of section 52 of the NEMBA or prior to the publication of such a list, within an area that has been identified as critically endangered in the National Spatial Biodiversity Assessment 2004
 - ii. Within critical biodiversity areas identified in bioregional plans;
 - iii. Within the littoral active zone or 100 metres inland from high water mark of the sea or an estuarine functional zone, whichever distance is the greater, excluding where such removal will occur behind the development setback line on erven in urban areas;
- iv. On land, where, at the time of the coming into effect of this Notice or thereafter such land was zoned open space, conservation or had an equivalent zoning; or
- v. On land designated for protection or conservation purposes in an Environmental Management Framework adopted in the prescribed manner, or a Spatial Development Framework adopted by the MEC or Minister.

The abovementioned list is hereinafter referred to as "the listed activities".

The applicant is herein **refused environmental authorisation** to undertake the following alternative that includes the listed activities as it relates to the development:

The proposal entails the development of a residential dwelling on a portion of Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai ("the property"). The property is zoned Agriculture

Zone I in terms of the Mossel Bay Zoning Scheme, at the identified locations on the property. The proposed residence will serve as a primary dwelling and it is expected to be approximately $500m^2$ in size. An access road of approximately 70m in length will need to be constructed to connect the proposed dwelling to the existing road network on the property. The total disturbance area for the proposed dwelling and associated infrastructure is expected to be approximately $1500m^2$. Furthermore, the proposal entails the planting of vegetation ("coastal gardening") around the dwelling of approximately $1500m^2$ in extent for the purpose of preventing the free movement of sand, erosion or accretion and thereby prevent wind-blown sand inundation off the blow-out on the dune top located below the proposed development site. The proposal also includes the development of associated infrastructure in terms of water provision as well as sewage treatment and disposal.

C. SITE DESCRIPTION AND LOCATION

The listed activities were to take place on Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai. The property is located in the Fransmanshoek Conservancy.

Coordinates of the site:

Alternatives	Latitude			Longitude		
Option 1 (preferred)	34°	18'	15.24"	21°	55'	17.94"
Option 2	34°	18'	14.24"	21°	55'	20.90"
Option 3	34°	18'	12.54"	21°	55'	19.74"

SG digit code: C0510000000025700019

Refer to Annexure 1 for the Locality Plan of this Environmental Authorisation.

The above is hereinafter referred to as "the site".

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER (EAP)

CAPE EAPRAC

% Ms. Louise-Mari van Zyl Tel: (044) 874 0365 PO Box 2070 Fax: (044) 874 0432

George E-mail: louise@cape-eaprac.co.za

6530 Web: https://www.cape-eaprac.co.za/

E. LEGISLATIVE REQUIREMENTS

- In accordance with regulation 46 of the NEMA EIA Regulations, 2014, an applicant may not submit an application which is substantially similar to a previous application that has been refused, unless any appeals on that refusal have been finalised or the time period for the submission of an appeal has lapsed.
- 2. The applicant must in writing, within 14 (fourteen) calendar days of the date of this decision-
 - 2.1. notify all registered Interested and Affected Parties ("I&APs") of
 - 2.1.1. the outcome of the application;
 - 2.1.2. the reasons for the decision as included in Annexure 3;
 - 2.1.3. the date of the decision; and

- 2.1.4. the date when the decision was issued.
- 2.2. draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of National Appeals Regulations, 2014 detailed in Section F below;
- 2.3. draw the attention of all registered I&APs to the manner in which they may access the decision:
- 2.4. provide the registered I&APs with:
 - 2.4.1. the name of the holder (entity) of this Environmental Authorisation,
 - 2.4.2. name of the responsible person for this Environmental Authorisation,
 - 2.4.3. postal address of the holder,
 - 2.4.4. telephonic and fax details of the holder,
 - 2.4.5. e-mail address, if any, of the holder,
 - 2.4.6. the contact details (postal and/or physical address, contact number, facsimile and email address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.

F. APPEALS

- 1. An appellant (if the holder of the decision) must, within 20 (twenty) calendar days from the date the notification of the decision was sent to the holder by the Competent Authority
 - 1.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator;
 - 1.2. Submit a copy of the appeal to any registered I&APs, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision; and
 - 1.3. Submit a copy of the appeal to the decision-maker (i.e. the Competent Authority that issued the decision) at:

<u>Gavin.Benjamin@westerncape.gov.za</u> and copied to <u>DEADPEIAadmin.George@westerncape.gov.za</u>

- 2. An appellant (if NOT the holder of the decision) must, within 20 (twenty) calendar days from the date the holder of the decision sent notification of the decision to the registered I&APs—
 - 2.1. Submit an appeal in accordance with Regulation 4 of the National Appeal Regulations 2014 (as amended) to the Appeal Administrator; and
 - 2.2 Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
 - 2.3. Submit a copy of the appeal to the decision-maker (i.e. the Competent Authority that issued the decision) at:

<u>Gavin.Benjamin@westerncape.gov.za</u> and copied to DEADPEIAadmin.George@westerncape.gov.za

3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.

4. The appeal and the responding statement must be submitted to the Appeal Administrator at the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and

Development Planning Private Bag X9186

CAPE TOWN

0008

By facsimile: (021) 483 4174; or By hand: Appeal Administrator

Attention: Mr Marius Venter (Tel: 021 483 3721)

Room 809

8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

Note: For purposes of electronic database management, you are also requested to submit electronic copies (Microsoft Word format) of the appeal, responding statement and any supporting documents to the Appeal Authority to the address listed above and/ or via e-mail to DEADP.Appeals@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from the Appeal Administrator at: Tel. (021) 483 3721, E-mail DEADP.Appeals@westerncape.gov.za or URL http://www.westerncape.gov.za/eadp.

Your interest in the future of our environment is appreciated.

Yours faithfully

MR. ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT

DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING

DATE OF DECISION: 25 AUGUST 2022

FOR OFFICIAL USE ONLY:

EIA REFERENCE NUMBER: 16/3/3/1/D6/37/0003/22 **NEAS REFERENCE:** WCP/EIA/0001035/2022

ANNEXURE 1: LOCALITY MAP



ANNEXURE 3: REASONS FOR THE DECISION

In reaching its decision, the Competent Authority considered, inter alia, the following:

- a) The information contained in the Application Form (Ref: MOS618/02), dated 3 February 2022, received on 3 February 2022, the Basic Assessment Report (Ref: MOS618/06) (BAR) and Environmental Management Programme ("EMPr") submitted together with the BAR on 9 May 2022;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the BAR submitted on 9 May 2022;
- e) The balancing of negative and positive impacts and proposed mitigation measures; and
- f) Appropriate information was made available in the report to understand the environmental and spatial context.
- g) The site visit undertaken on 19 May 2021 by the following parties:
 - Directorate: Development Management (Region 3) Messrs. Danie Swanepoel, Francois Naudé and Steve Kleinhans
 - Directorate: Biodiversity and Coastal Management Ms. leptieshaam Bekko
 - CapeNature: Conservation Intelligence Ms. Megan Simons
 - Aquifer Resource Management (Pty) Ltd Mr. Gerhardes Steenekamp
 - Cape EAPrac Ms. Melissa Mackay
 - Laurie Barwell and Associates Messrs. Laurie Barwell and Dudley Janeke

All information presented to the Competent Authority was taken into account in the consideration of the application for Environmental Authorisation. A summary of the issues that were considered to be the most significant for the decision is set out below.

1. Public Participation

The public participation process included:

- identification of and engagement with interested and affected parties (I&APs) including organs of state which have jurisdiction in respect of the activity to which the application relates;
- fixing notice boards at four locations on 13 November 2021;
- giving written notice to the owners and occupiers of land adjacent to the site and any alternative site where the listed activities are to be undertaken, the municipality and ward councillor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 9 March 2022;
- the placing of a newspaper advertisement in the "Mossel Bay Advertiser / Suid-Kaap Forum" on 11 March 2022; and
- making the Draft Basic Assessment Report available to I&APs for public review and comment from 14 March to 13 April 2022.

The following State Departments / Organs of State provided comment on the proposal:

- CapeNature:
 - According to CapeNature the current edge of the dune / plant interface is largely stabilised by alien plant species which are effectively preventing the westerly to south

westerly direction of movement of the dune field. According to CapeNature the legislated requirement to remove the alien vegetation is expected to extend the dune field in these directions. As a result the proposed site would be heavily exposed to sand inundations in the future and infrastructure such as the road will also be exposed.

 CapeNature submitted that it does not support any of the alternatives for the proposed dwelling.

Breede-Gouritz Catchment Management Agency:

- According to the BGCMA the use of the borehole will not trigger Section 21 of the National Water Act, Act No. 36 of 1998.
- BGCMA anticipates that the volume of treated effluent will be minimal for a single residential dwelling.
- o BGCMA advised the applicant to ensure that the borehole does not accelerate saltwater intrusion to the freshwater resource.

Western Cape Government: Department of Agriculture

The DoA has no objection towards the application on condition that the active littoral zone be excluded from development and that the mitigation measures presented in the EMPr are strictly adhered to and monitored for compliance.

Directorate: Biodiversity and Coastal Management

- o the Coastal Management Unit (CMU) are of the opinion that both Options 1 and 2 are located within the littoral active zone.
- According to the CMU the competent authority must not only consider the impact of the development on the environment but the impact of the environment, including the dynamic processes on the development.
- o The CMU notes that a substantial portion of the property is located outside the littoral active zone and that it would be prudent to rather develop a residential dwelling outside the littoral active zone where it would be subjected to fewer environmental risks or sensitivities.
- o The CMU indicated that it is not opposed to the development of the single residential dwelling on the property; but considering the proposed development site, the alternative sites, the environmental sensitivities, including coastal processes, the CMU recommended that the competent authority should only consider Option 3.

Mossel Bay Municipality: Town Planning

o The Mossel Bay Municipal: Town Planning has no objection since the proposal is a primary land use right in terms of the Mossel Bay Zoning Scheme By-law, 2021.

Mossel Bay Municipality: Infrastructure Services

- The Mossel Bay Municipal: Infrastructure Services has no objection to the proposed use of harvested rainwater for drinking / cooking and use of groundwater not exceeding 10m³/day for washing, waterborne sewage and fire emergency purposes.
- The property must adhere to the Mossel Bay Town Planning Scheme and Building Regulations.

All the comments and issues raised by the respective Organs of State and Interested and Affected Parties (I&APs) that were captured in the Basic Assessment Report were responded to by the EAP. The Competent Authority is satisfied that responses were provided to these other organs of state and I&APs by the EAP. However, the Department does not necessarily concur with all the responses or that the issues have been adequately addressed.

2. Alternatives

Location Alternative 1: Option 1 – (Applicant's Preferred Alternative)

This alternative entails the development of a single residential dwelling on a portion of Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai, which is zoned Agriculture Zone I. The primary dwelling is expected to be approximately 500m² in size, with an access road of approximately 70m in length, connecting the dwelling to the existing road network. Furthermore, the proposal entails the planting of vegetation ("coastal gardening") around the dwelling of approximately 1500m² to prevent wind-blown sand inundation off the blow-out on the dune top located below the proposed development site. The proposal also includes the development of associated infrastructure in terms of water provision and sewage treatment and disposal. The proposed dwelling will be located at a proposed level of +73m MSL at coordinates Latitude: 34° 18' 15.24"S; Longitude: 21° 55' 17.94"E.

This alternative is not acceptable to the Competent Authority based on the environmental attributes and sensitivities. The reasons for this view are set out in the key factors below.

Location Alternative 2: Option 2

This alternative entails the development of a single residential dwelling on Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai, which is zoned Agriculture Zone I. The primary dwelling is expected to be approximately $500m^2$ in size, with an access road of approximately 70m in length, connecting the dwelling to the existing road network. Furthermore, the proposal entails the planting of vegetation ("coastal gardening") around the dwelling of approximately $1500m^2$ to prevent wind-blown sand inundation off the blow-out on the dune top located below the proposed development site. The proposal also includes the development of associated infrastructure in terms of water provision and sewage treatment and disposal. The proposed dwelling will be located at a proposed level of +72m AMSL at coordinates Latitude: 34° 18' 14.24"S; Longitude: 21° 55' 20.90"E. The location is a slight depression with vegetated dunes.

This alternative is not acceptable to the Competent Authority based on the environmental attributes and sensitivities.

Location Alternative 3: Option 3

This alternative entails the development of a single residential dwelling on a portion of Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai, which is zoned Agriculture Zone I. The primary dwelling is expected to be approximately $500m^2$ in size, with an access road of approximately 70m in length, connecting the dwelling to the existing road network. Furthermore, the proposal entails the planting of vegetation ("coastal gardening") around the dwelling of approximately $1500m^2$ to prevent wind-blown sand inundation off the blow-out on the dune top located below the proposed development site. The proposal also includes the development of associated infrastructure in terms of water provision and sewage treatment and disposal. The proposed dwelling will be located at a proposed level of +74m MSL at coordinates Latitude: 34° 18' 12.54"S; Longitude: 21° 55' 19.74"E. The location is in a depression, and the barrier dune grades into vegetation described by in the Botanical and Terrestrial Biodiversity Impact Assessment as Hartenbos Dune Thicket. According to the BAR this is the least suitable of the alternatives and is not recommended from a botanical aspect. It is also the least preferred alternative by the coastal engineer.

This alternative is not acceptable to the Competent Authority based on the environmental attributes and sensitivities.

"No-Go" Alternative:

According to the BAR this alternative implies that the status quo is retained and that the dwelling will not be developed in the areas that have been identified. The BAR states that it could mean that no development takes place at all on the property, which is an unlikely scenario given that the property has zoning / land use rights which allow for a residential dwelling as a minimum.

Furthermore, the BAR states that the applicant may construct the dwelling outside of any of the geographical areas listed as activity triggers (i.e. outside of the littoral active zone), without having to undertake this EIA process, as long as the vegetation disturbance remains below 1 hectare in extent.

The EAP however motivates that this is not the ideal choice for either the applicant nor the environment for the following reasons:

- The applicant wishes to be able to have a view of the ocean and environs and placing the dwelling further back to the north will negate this possibility unless he opts to build a dwelling that includes multi storeys. This contrasts with the applicant's desire to have a resource friendly, environmentally friendly dwelling. In addition, it will not be in keeping with the sense of place of the surrounding properties or with the principle of the Fransmanshoek Homeowners Constitution.
- The areas further north of the current identified footprint contain intact and nearly pristine indigenous vegetation. It would be of greater negative impact to remove this vegetation in areas that are intact. This is confirmed in the botanical assessment which prefers Option 1 over Option 3 for this very reason.
- Fire risks for a dwelling located in thick vegetation are significantly increased.

3. Key Factors affecting the decision

In reaching its decision to refuse the proposed development, this Department took into account the following:

3.1 National Environmental Management Principles

The National Environmental Management Principles (set out in section 2 of the NEMA, which apply to the actions of all organs of state, serve as guidelines by reference to which any organ of state must exercise any function when taking any decision, and which must guide the interpretation, administration and implementation of any other law concerned with the protection or management of the environment), inter alia, provides for:

- the effects of decisions on all aspects of the environment must be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment. Whereas development must be socially, environmentally and economically sustainable;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures;
- the avoidance, minimisation or remediation of the disturbance of landscapes and sites that constitute the nation's cultural heritage and/or National estate;
- specific attention is required in the management and planning procedures relating to sensitive, vulnerable, highly dynamic or stressed ecosystems, such as coastal shores, estuaries, wetlands, and similar systems, especially where they are subject to significant human resource usage and development pressure; and

the selection of the best practicable environmental option.

3.2 Property Land Use Rights:

The subject property, Portion 19 of the Farm Misgunst Aan De Gouritz Rivier No. 257 in Vleesbaai, is zoned Agriculture Zone I in terms of the Mossel Bay Zoning Scheme By-law, 2021. In accordance with this By-law the owner has a primary right to develop a residential dwelling (as a minimum) on the property. The Department does not dispute the applicant's / landowner's right to a primary dwelling on the property; however, such a dwelling may be built outside the littoral active zone on the property. In addition, the view is held that there are areas on the landward portion of the property where the identified impacts on the environment can be avoided or mitigated to an acceptable level.

In this regard the applicant indicates that a dwelling may be developed outside the littoral active zone without the need for an environmental impact assessment ("EIA") and environmental authorisation. The Department concurs with this statement, as long as the site falls outside any of the listed geographical areas and/or does not trigger a listed activity (i.e. outside of the littoral active zone; the vegetation clearance remains below the 1-hectare threshold). It must however be highlighted that such development must adhere to the "Duty of Care principle" as stipulated in Section 28 of the NEMA. According to the applicant the area inland of the littoral active zone contains intact and nearly pristine *Hartenbos Dune Thicket* and the removal of such vegetation would result in a greater negative impact than developing in the littoral active zone.

3.3 Activity need and desirability:

Need and desirability must be consistent with the principles of sustainability as contained in Section 2 of the NEMA. In this context, EIA's play an important role by evaluating the need and desirability of development proposals, appropriateness of alternatives and cumulative implications. These aspects are integrally linked and must be informed by the strategic context within which the site/development proposal is situated.

According to the BAR the applicant wishes to be able to view the ocean and environs from the dwelling. Therefore, placing the dwelling further north (inland of the littoral active zone) would negate this possibility unless a dwelling of multiple storeys is built. The latter is motivated to be in contrast with the applicant's desire to have a resource and environmentally friendly dwelling. It is also motivated that such a dwelling will be in contrast with the sense of place of the surrounding properties and the principles of the Fransmanshoek Homeowners' Constitution.

Notwithstanding the applicant's / owner's wishes, the Department needs to consider not only the impact of the proposed dwelling on the environment but the impact of the environment on the proposed dwelling. In this regard the dynamic nature of the site location of the preferred site (Option 1) as well as that of Option 2 (and possibly Option 3) is likely to have an impact on the proposed dwelling during the entire operational phase of the proposed dwelling. Locating the dwelling in an ecologically sensitive area (i.e. site location option 3) is not recommended by the botanical specialist. The proposed sites are regarded to be undesirable for the proposed development.

The arguments presented regarding the expected impact(s) on the pristine indigenous vegetation inland from the littoral active zone are regarded to be flawed because the report(s) do not illustrate what portion of the property contains already disturbed areas (including the extensive road network) and how such a disturbed or transformed area could serve as an alternative site. This view is strengthened by the fact that a cottage is proposed on the eastern boundary of the property and this building would be located in a transformed / disturbed area. Therefore, if the cottage may be located in an area described to support/contain *Hartenbos Dune Thicket*, which location may be exposed to certain fire risks, it appears that the only reason to propose the house in the littoral active zone is to provide a view of the shoreline.

NEMA requires that decisions taken must take into account environmental, social and economic impacts of the activities applied for, including the benefits and disadvantages. The negative impacts are to be minimised and the beneficial impacts are to be maximised. It is evident that a significant imbalance exists with regards to the benefits associated with the proposed development, and the weighing up of the benefits to the applicant versus the costs that would be incurred at the expense of the environment. The potential benefits are not justifiable and substantive enough when the potential costs/negative impacts to the receiving environment are considered and therefore the proposed development is deemed to be inappropriate based on the "Need and Desirability" aspect of the development.

The application has not demonstrated the need or desirability of developing within any of the three site locations presented in the BAR.

3.4 Coastal Processes:

A Specialist Coastal Environmental Engineering Report was compiled by Laurie Barwell and Associates to inform the BAR. According to this report the coastline is in a dynamic state of equilibrium and the exposed sand area within the Fransmanshoek Dune Field is shrinking as areas become stabilised by vegetation an estimated rate of 0.5ha per year between 1969 and 2019. The report does not clearly describe what role the presence of alien and invasive plant has played in the progression of the littoral active zone shrinking, nor what would happen if such alien and invasive species were to be removed (as required by law). The report goes further and states that large areas of the dune field on the seaward sections within 300m of the high-water mark are well covered by pioneer grasses and coastal fynbos. Furthermore, the report indicates that the landward extent of the coastal processes active zone was located significantly northwards in 1969 but that human enhanced natural dune stabilisation has resulted in the northern edge of the partially vegetated dune field moving southwards. The report concludes that a 300m wide area running parallel to the high-water mark is still dynamic where mobile dunes advance east-north-eastwards and where sparse vegetation exists on the foredune, backdune and in the dune slacks. The report states that the area functions as an active littoral zone and should be managed as such. The report also recommends that the area seaward of the +65m MSL contour could be seen as being part of the coastal processes active zone and left to function as an unmanaged system.

Furthermore, the report indicates that the there is a natural plateau located north of the +70m MSL on the property. The western side of this area (Plateau 1) is stabilised by dune vegetation with no wind-blown sand moving into or from this area. The eastern- and northern side of this area (Plateau 2) consists of an exposed sand blow-out.

In light of the above, the placements of the dwellings are +73m MSL (Option 1), +72m MSL (Option 2) and +74m MSL (Option 3). However, during the site inspection on 19 May 2021 it was noted that the site for Option 1 and Option 2 have exposed sand surfaces and were sparsely vegetated with mostly alien marram grass. With due consideration of the definition of littoral active zone in the National Environmental Management: Integrated Coastal Management Act, Act No. 24 of 2008 ("NEM:ICMA") it is the decision-maker's considered opinion that both Option 1 and Option 2 (an possibly a large portion of site Option 3) are located within the littoral active zone. The recommendation of the specialist Coastal Environmental Engineer to actively vegetate the area around the proposed dwellings (so called "coastal gardening") to prevent wind-blown sand inundation off the blow-out on the dune top, in fact highlights that these areas form part of the littoral active zone.

Furthermore, according to the Botanical and Terrestrial Impact Assessment the establishment of plants as a garden around the dwellings would be challenging due to the highly dynamic zone (wind

with active movement of sand). This contradicts the findings of the coastal engineering environmental report.

With due consideration of the above, the decision-maker is obliged to take a risk-averse and cautious approach in the consideration of development within the littoral active zone to prevent not only the impact of the proposed dwelling on the environment but the impact the environment on the proposed dwelling. Experience has shown that dwellings which have been established in similar dynamic and active coastal areas, have caused cumulative impacts preventing natural processes to occur naturally.

3.5 Aspects related to coastal activities:

When any listed activities are to be carried out within the coastal zone which require an environmental authorisation in terms of the NEMA, the National Environmental Management: Integrated Coastal Management Act, 2008 (Act No. 24 of 2008) (NEM:ICMA) provides for additional criteria which must be considered when evaluating an application for an activity which will take place within the coastal zone.

The information which has been provided in the BAR including specialist studies, has provided sufficient information to consider the additional aspects which should be considered in terms of s63 of NEM:ICMA and to inform the decision to refuse the application.

3.6 Botanical and Terrestrial Biodiversity Impact Assessment

The vegetation on the property is mapped as Canca Limestone Fynbos and has a gazetted ecosystem threat status of least threatened (LT). The Western Cape Biodiversity Spatial Plan 2017 indicates that the property has Critical Biodiversity Areas (CBA 1: Terrestrial and fragments of CBA 2: Terrestrial); however, the property does not have any freshwater aquatic features.

A Botanical and Terrestrial Biodiversity Impact Assessment was compiled by Bergwind Botanical Surveys & Tours cc to inform the BAR. The botanical and terrestrial biodiversity report indicates that the property can be divided in to two main ecosystem/vegetation types, namely Hartenbos Dune Thicket (located on the inland portion of the property) and Cape Seashore Vegetation (which covers approximately 50% of the property on the seaward portion of the property). The study indicates that the proposed sites are located on the barrier dune where Location Options 1 and 2 are located on the dune crest and Option 3 in a depression landward of the suggested littoral active zone.

According to the study the vegetation on the preferred site consists of a grass-shrub mix (exotic marram grass and common shrubs) with low plant diversity and low botanical and terrestrial biodiversity. The study suggests that the establishment of a garden as recommended by the coastal engineering environmental report would be challenging.

Furthermore, the report indicates that the receiving environment is very harsh due to its proximity to the sea and exposed position on a high dune; however, in terms of habitat and environmental sensitivity the proposed locations are not highly sensitive nor threatened. As such, the report indicates that Option 1 and Option 2 would be acceptable from a botanical point of view but does not recommend Option 3 due to its topography and its position in the ecotone between the barrier dune (foredune) and the Hartenbos Dune Thicket on the dunes located further inland. Based on the botanical report the ecotone is regarded to be an area with high sensitivity and should and development should be avoided therein.

The decision-maker has considered the findings of the Botanical and Terrestrial Biodiversity Impact Assessment; however, with due consideration of the highly dynamic nature of the sites associated with Option 1 and Option 2 the decision-maker adopted a risk-averse and cautious approach regarding the decision of the application for environmental authorisation.

Furthermore, according to the Botanical and Terrestrial Biodiversity Impact Assessment Option 3 is located landward of the littoral active zone. However, the site's topography and its location is situated in the ecotone between the barrier dune and the Hartenbos Dune Thicket is not recommended / supported by the specialist. The decision-maker concurs with this finding in respect of Option 3 and reminds the applicant of his / her general duty of care towards the environment as required in terms of Section 28 of NEMA, namely:

"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment".

4. Conclusion

The Department applied a risk-averse and cautious approach with respect to this development proposal. The Department therefore took into consideration the potential negative impacts (as identified above) and that although some impacts can be minimised, it cannot altogether be prevented or mitigated to an acceptable level. Furthermore, with due consideration of the highly dynamic nature of the site, the Competent Authority also considered the likely impact of coastal environmental processes on the proposed activity as well as whether the very nature of the proposed activity or development requires it to be located within this section of the coastal protection zone. In this regard, the application was not deemed justified.