

**WESTERN CAPE DEPARTMENT OF ENVIRONMENTAL AFFAIRS AND DEVELOPMENT PLANNING**

**Basic Assessment Report in terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998), as amended, and the Environmental Impact Assessment Regulations, 2006**

**JULY 2006**



**Kindly note that:**

1. This **Basic Assessment Report** is the standard report required by DEA&DP in terms of the EIA Regulations, 2006 and must be completed for all Basic Assessment applications and submitted together with the application form.
2. This report is current as of 1 July 2006. It is the responsibility of the Applicant / EAP to ascertain whether subsequent versions of the report have been published or produced by the competent authority.
3. The required information must be typed within the spaces provided in the report. The sizes of the spaces provided are not necessarily indicative of the amount of information to be provided. It is in the form of a table that can extend itself as each space is filled with typing.
4. Incomplete reports may be rejected or returned to the applicant for amendment.
5. The use of "not applicable" in the report must be done with circumspection. Where it is used in respect of material information that is required by the competent authority for assessing the application, this may result in the rejection of the report as provided for in the regulations.
6. No faxed or e-mailed reports will be accepted.
7. The report must be compiled by an independent environmental assessment practitioner.
8. Unless protected by law all information contained in, and attached to this report, will become public information on receipt by the competent authority. Upon request, any interested and affected party should be provided with the information contained in and attached to this report. During any stage of the application process, the information contained in and attached to it must be provided by the applicant / EAP.
9. This report must be submitted to the Department at the postal address given below or by delivery thereof to the Registry Office of the Department. Should the report and attached information not be submitted to the addresses given below it will be rejected.

**DEPARTMENTAL DETAILS**

<b>CAPE TOWN OFFICE REGION A (Breede River/ Winelands, City of Cape Town: Tygerberg and Oostenberg Administrations)</b>	<b>CAPE TOWN OFFICE REGION B (West Coast, Overberg, City of Cape Town: Helderberg, South Peninsula, Cape Town and Blaauwberg Administrations)</b>	<b>GEORGE OFFICE (Eden and Central Karoo)</b>
Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region A2) Private Bag X 9086 Cape Town, 8000  Registry Office 1 <sup>st</sup> Floor Utilitas Building 1 Dorp Street, Cape Town  Queries should be directed to the Directorate: Integrated Environmental Management (Region A2) at: Tel: (021) 483-4793 Fax (021) 483-3633	Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region B) Private Bag X 9086 Cape Town, 8000  Registry Office 1 <sup>st</sup> Floor Utilitas Building 1 Dorp Street, Cape Town  Queries should be directed to the Directorate: Integrated Environmental Management (Region B) at: Tel: (021) 483-4094 Fax (021) 483-4372	Department of Environmental Affairs and Development Planning Attention: Directorate: Integrated Environmental Management (Region A1) Private Bag X 6509 George, 6530  Registry Office 4 <sup>th</sup> Floor, York Park Building 93 York Street George  Queries should be directed to the Directorate: Integrated Environmental Management (Region A1) at: Tel: (044) 874-2160 Fax (021) 874-2423

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## SECTION 1. ACTIVITY DESCRIPTION

### 1. ACTIVITY DESCRIPTION

(a) Is the project a new development or an upgrade of an existing development?	YES	NO
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(b) Clearly describe the activity and associated infrastructure for which you are applying.

This proposed development entails the construction of a single residential house on Portion 1 of the Farm Farufern no. 974, Misty Cliffs. The owner expressed his wish to build a house without disturbing the natural environment, and consequently the intention is to develop in such a way that the natural character and aesthetic value of the surrounding area stay intact. Farm 974/1 is currently zoned as rural, and it is currently vacant. The current zoning permits the construction of a single dwelling and related outbuildings..

In terms of R386 the following the listed activities triggered by this development are:

<p><b>Activity 2</b> Construction or earth moving activities in the sea or within 100m inland of the highwater mark of the sea, in respect of – (e) stabilizing walls (f) buildings (g) infrastructure</p>	<p>Farm 974/1 is 15.2861 hectares and abut the surveyed highwater mark on the western corner of the property. Location alternative L1 would be within 100m from the highwater mark and therefore the construction of the house which entails construction, removal of indigenous vegetation and potentially the moving or depositing of soil within 100m from the hwm.</p>
<p><b>Activity 5</b> The removal or damaging of indigenous vegetation of more than 10 square meters within a distance of 100 meters inland of the high-water mark of the sea.</p>	
<p><b>Activity 6</b> The excavation, moving, removal, depositing or compacting of soil, rock or rubble covering an area exceeding 10 square metres in the sea or within a distance of 100 meters inland of the high-water mark of the sea.</p>	
<p><b>Activity 15</b> The construction of a road that is wider than 4 meters or that has a reserve wider than 6 meters, excluding roads that fall within the ambit of another listed activity or which are access roads of less than 30 meters long.</p>	<p>Only applicable to alternative L2 and not for the preferred alternative</p>

(c) Please provide details of all components of the proposed project and attach diagrams (e.g. architectural drawings or perspectives, engineering drawings, process flow charts etc.).

Buildings	YES	NO
Provide brief description:		
A single residential unit will be build on farm 974/1 (refer Appendix B).		
Infrastructure (e.g. roads, power and water supply/ storage)	YES	NO
Provide brief description:		
<b>Access Driveway:</b> Farm 974/1 currently obtains access from Main Road (M65), and an access driveway will be built.		
<b>Electricity:</b> Municipal connection		
<b>Water:</b> Municipal connection		
<b>Sewer:</b> Conservancy tank, to be pumped by the municipality		
<b>Stormwater:</b> On-site discharge		
<b>Solid Waste:</b> Municipal connection		
Processing activities (e.g. manufacturing, storage, distribution)	YES	NO
Provide brief description:		

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No processing activities will be done on the site.		
Storage facilities for raw materials and products (e.g. volume and substances to be stored)		
Provide brief description	YES	NO
No storage will be done on the site.		
Storage and treatment facilities for solid waste and effluent generated by the project		
Provide brief description	YES	NO
No storage or treatment of solid waste of effluent will be done on the site.		

Other activities (e.g. water abstraction activities, crop planting activities)	YES	NO
Provide brief description		
None will be done on site.		

### 2. ACTIVITY NEED AND DESIRABILITY

(a) Describe the need and desirability of the activity:

Farm 974/1 is currently vacant. The owner merely want to utilise his right of constructing a single dwelling on the site as his personal residence for when he retires. The low use level intended is consistant with the character of the Misty Cliffs village. .

(b) Indicate the benefits that the activity will have for society in general and also indicate the benefits that the activity will have for the local communities where the activity will be located:

Due to the small size of the proposed development, there will be no major benefits to society. The proposed development may however generate employment in the building and construction industries in the short term, and it will marginally increase the demand for goods and services in the area, benefiting the local economy and local job creation over the longer term.

### 3. ALTERNATIVES

Describe alternatives that are considered in this application.

**Please Note:**

1. This report only provides space for 3 alternatives. The required information must however be provided for all alternatives being considered. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished. The determination of whether the site or activity (including different processes etc.) or both is appropriate needs to be informed by the specific circumstances of the activity and its environment. The no-go option must in all cases be included in the assessment phase as the baseline against which the impacts of all alternatives are assessed.
2. After receipt of this report the competent authority may also request the applicant to assess additional alternatives that could possibly accomplish the purpose and need of the proposed activity if it is clear that realistic alternatives have not been considered to a reasonable extent.
3. Consult the Department's Guideline on Alternatives prior to completing this section.

**3(a) Site alternatives:**

Please indicate the number of site alternatives assessed

Describe site alternative 1 (S1) (preferred or only site alternative), for the activity described above, or for any other activity alternative:

Farm 974/1, Main Road (M65), Misty Cliffs, is owned by the applicant, and is the only site that is considered for this development.

Describe site alternative 2 (S2), if any, for the activity described above, or for any other activity alternative:

n/a

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Describe site alternative 3 (S3), if any, for the activity described above, or for any other activity alternative:
n/a

### 3(b) Activity alternatives:

Describe activity alternative 1 (A1), if any, for any or all of the site alternatives as appropriate:
A single residential house will be built on farm 974/1, refer Appendix B for detailed site layout.

Describe activity alternative 2 (A2), if any, for any or all of the site alternatives as appropriate:
No Development Option, where no development will take place on farm 974/1.

Describe activity alternative 3 (A3), if any, for any or all of the site alternatives as appropriate:
n/a

### 3(c) Other alternatives (e.g. layout, technological, timing, process etc):

Describe the alternative
Farm 974/1 is 15.2861 hectares in extent, and is divided into two portions by the Main Road (M65). A smaller portion (approximately 500m <sup>2</sup> ) is located below the Main Road, and a much larger portion (approximately 14.6ha) located above the Main Road (refer Appendix A). Therefore two alternatives with regards to the location of the house on farm 974/1 is considered namely the portion below the Main Road, or on the portion above the Main Road.
<b>Location Alternative 1 (L1) (preferred alternative)</b> A single residential house will be built on the portion of farm 974/1 below the Main Road, the coastal precinct (refer Appendix A, figure 2, and Appendix D). This alternative entails the construction of a house on the lower section of the property, with buildings fit below road level. Due to the site configuration, the house will encroach on the building lines. The house will be accessed directly from Main Road. The footprint area of this alternative is approximately 300m <sup>2</sup> and the floor area of the house is approximately 130m <sup>2</sup> (excluding balcony and patio) plus a double garage (32m <sup>2</sup> )

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### Location Alternative 2 (L2)

A single residential house will be built on the portion of farm 974/1 above the Main Road, the mountain precinct (refer Appendix A, figure 2, and Appendix D). This option entails the construction of a house above Main Road. In the initial assessment the house was positioned between the 32m and 38m contour with a side space of 20m, which implied an encroachment of 10m. Due to comments received from I&AP's the alternative to construct a house above Main Road was developed in more detail and based on the request from I&AP's the house was located at a position which does not require the encroachment of building lines. The alternative thus considered in more detail is a house positioned between the 42m and 48m contour line in full compliance with the zoning scheme regulations.

For this alternative a driveway needs to be constructed and due to the topography the proposed alignment provides the only practicable, and viable alternative as to achieve an acceptable gradient for the road access.

This alternative comprises the following:

- Construction of a house on three levels (one level garages plus 2 accommodation)
- Road access
- Domestic Water pipeline from municipal connection on Main Road to a point above the house and possible storage tank. Water will have to be pumped from the municipal connection. The pipeline can either follow the road alignment or be taken straight against the slope.

### Access Alternatives for L1

For location alternative 1 (L1), three alternative access configurations have been considered during the initial planning phase:

Alternative A: driveway off Main Road directly onto farm 974/1 with park lift (Refer TIS addendum 2011)

Alternative B: Driveway via Farm 978 (Refer TIS report 2010)

Alternative C: driveway via erf 979/9 and 981 to farm 974/1 (Refer TIS report 2010)

Access for Location alternative L2

Alternative D: Access road to upper section (Refer TIS addendum 2011)

### SUMMARY OF DEVELOPMENT ALTERNATIVES:

Location Alternative L1	Access Alternative	Location Alternative L2	Access Alternative
Construction of house on lower section of Main Road	A: Driveway direct off Main Road with park lift	Construction of house on section above Main Road	D: Driveway of 43m from Main Road to upper location
	B: Driveway via Farm 978		
	C: Driveway via 979/9 and 981		

## 4. ACTIVITY LOCATION

Indicate the position of the activity using the latitude and longitude of the centre point of the site for each alternative site. The co-ordinates must be in degrees, minutes and seconds. The minutes should be given to at least three decimals to ensure adequate accuracy. The projection that must be used in all cases is the WGS84 spheroid in a national or local projection.

Alternative:	Latitude (S):			Longitude (E):		
Alternative S1 (preferred or only site alternative)	34°	10'	55.231"	18°	21'	34.845"
Alternative S2 (if any)	°	'	"	°	'	"
Alternative S3 (if any)	°	'	"	°	'	"

or, for linear activities:

Alternative:	Latitude (S):			Longitude (E):		
Alternative S1 (preferred or only route alternative)						
• Starting point of the activity	°	'	"	°	'	"
• Middle point of the activity	°	'	"	°	'	"
• End point of the activity	°	'	"	°	'	"

**Please Note:** For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 100 meters along the route for each alternative.

## 5. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity as well as alternative activities and its associated infrastructure (footprints):

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Alternative:	Size of the activity:
Alternative L1 (preferred activity alternative) <b>Proposed development below Main Road</b>	Building: 200m <sup>2</sup> Total Infrastructure: 400 m <sup>2</sup>
Alternative L2 (if any) <b>Proposed development above Main Road (House &amp; road)</b>	Building: 350m <sup>2</sup> Total Infrastructure: 650 m <sup>2</sup>
Alternative L3 (if any) <b>No development option</b>	0 m <sup>2</sup>

or, for linear activities:

Alternative:	Length of the activity:
Alternative A1 (preferred activity alternative)	N/a
Alternative A2 (if any)	m
Alternative A3 (if any)	m

Indicate the size of the alternative sites or servitudes (within which the above footprints will occur):

Alternative:	Size of the site/servitude:
Alternative A1 (preferred activity alternative)	N/a
Alternative A2 (if any)	m <sup>2</sup>
Alternative A3 (if any)	m <sup>2</sup>

### Associated Infrastructure:

Indicate the size of the alternative sites or servitudes (within which the above associated infrastructure footprints will occur):

Alternative: Access options for L1	Length/Size of the site/servitude:
Alternative A (preferred activity alternative) driveway off Main Road directly onto lower section of farm 974/1 with park lift	3 m
Alternative B: Driveway access via farm 978	30 m
Alternative C driveway via erf 979/9 and 981 to farm 974/1	30 m
Alternative: Access options for L2	Length/Size of the site/servitude:
Driveway of 43m from Main Road to the position of the garage	4 m

## 6. SITE ACCESS

Is there an existing access road?	YES	NO
If NO, what is the distance over which a new access road will be built?	m	

Describe the type of access road planned:

Access is obtained from Main Road (M65), and an access driveway will be built.

**Please Note:** indicate the position of the proposed access road on the site plan (See Section 7 below)

## 7. SITE PHOTOGRAPHS

Colour photographs of the site and its surroundings (taken of the site and from the site) with a description of each photograph. The vantage points from which the photographs were taken must be indicated on the site plan, or locality plan as applicable. If available, please also provide a recent aerial photograph. Photographs must be attached under Appendix D to this form. It should be supplemented with additional photographs of relevant features on the site. Date of photographs must be included. Please note that the above requirements must be duplicated for all alternative sites.

## 8. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

Please list all legislation, policies and/or guidelines that have or will be considered in the preparation of this application.

LEGISLATION	ADMINISTERING AUTHORITY	TYPE Permit/ license/ authorization/comment	DATE (if already obtained):
National Environmental Management Act	Department of Environmental Affairs and Development Planning	Basic Assessment	This Application
National Building Regulations	City of Cape Town	Building Plans	To be submitted after approval of building line departures have been approved.
Land Use Planning	City of Cape Town	Amendment of zoning scheme	To be submitted after

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Ordinance 15 of 1985		parameters	Environmental Authorization
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POLICY/ GUIDELINES	ADMINISTERING AUTHORITY
Mountains, Hills and ridges guideline	DEA&DP
Visual assessment guideline	DEA&DP

### SECTION 2. DESCRIPTION OF RECEIVING ENVIRONMENT

#### Site/Area Description

For linear activities (pipelines etc) as well as activities that cover very large sites, it may be necessary to complete copies of this section for each part of the site that has a significantly different environment. In such cases please complete copies of Section B and indicate the area which is covered by each copy No. on the Site Plan.

Section B Copy No. (e.g. A):

#### 1. GRADIENT OF THE SITE

Indicate the general gradient of the sites (tick the appropriate box).

##### Alternative S1: (L1)

Flat	Flatter than 1:10	<b>1:10 – 1:5*</b>	Steeper than 1:5
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##### Alternative S2: (L2)

Flat	Flatter than 1:10	<b>1:10 – 1:5*</b>	Steeper than 1:5
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Embankment within road reserve steeper than 1:5

##### Alternative S3:

Flat	Flatter than 1:10	1:10 – 1:5	Steeper than 1:5
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#### 2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site (tick ("✓") the appropriate box(es)).

##### Alternative S1 (L1):

Ridgeline	Plateau	<b>Side slope of hill/mountain</b>	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	<b>Sea-front</b>	Other
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##### Alternative S2 (L2):

Ridgeline	Plateau	<b>Side slope of hill/mountain</b>	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front	Other
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##### Alternative S3:

Ridgeline	Plateau	Side slope of hill/mountain	Closed valley	Open valley	Plain	Undulating plain/low hills	Dune	Sea-front	Other
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If other, please describe

#### 3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on or near any of the following (tick ("✓") the appropriate boxes)?

	Alternative S1 (L1)			Alternative S2 (L2)			Alternative S3		
	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Shallow water table (less than 1.5m deep)	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Seasonally wet soils (often close to water bodies)	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Unstable rocky slopes or steep slopes with loose soil	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Dispersive soils (soils that dissolve in water)	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Soils with high clay content	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Any other unstable soil or geological feature	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
An area sensitive to erosion	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE

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If any of the answers to the above are "YES" or "unsure", specialist input may be requested by the Department. (Information in respect of the above will often be available at the planning sections of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by Geological Survey may also be used).

### 4. SURFACE WATER

Indicate the surface water present on and or adjacent to the site and alternative sites (tick ("✓") the appropriate boxes)?

	Alternative S1(L1)			Alternative S2(L2)			Alternative S3		
Perennial River	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Non-Perennial River/Stream	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Permanent Wetland	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Seasonal Wetland	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Artificial Wetland	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE
Estuarine / Lagoonal wetland	YES	NO	UNSURE	YES	NO	UNSURE	YES	NO	UNSURE

### 5. VEGETATION / GROUNDWATER AND ECOSYSTEMS

#### 5.1 VEGETATION/GROUNDCOVER

Tick ("✓") and describe (where required) the vegetation types / groundcover present on the site.

##### Alternative S1: (L1)

Indigenous Vegetation - good condition		Indigenous Vegetation with scattered aliens		Indigenous Vegetation with heavy alien infestation	
Identify the vegetation type above:		Identify the vegetation type above:		Identify the vegetation type above:	
Provide ecosystem status for above:		Provide ecosystem status for above:		Provide Ecosystem status for above:	
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface		Veld dominated by alien species		Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe	
Bare soil		Building or other structure		Sport field	
Paved surface		Cultivated land		<b>Other (describe) Refer Appendix G2 (lower), Vegetation Survey</b>	

##### Alternative S2:

Indigenous Vegetation - good condition		Indigenous Vegetation with scattered aliens		Indigenous Vegetation with heavy alien infestation	
Identify the vegetation type above:		Identify the vegetation type above:		Identify the vegetation type above:	
Provide ecosystem status for above:		Provide ecosystem status for above:		Provide Ecosystem status for above:	
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface		Veld dominated by alien species		Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe	
Bare soil		Building or other structure		Sport field	
Paved surface		Cultivated land		<b>Other (describe) Refer Appendix G2 (upper), Vegetation Survey</b>	

##### Alternative S3:

Indigenous Vegetation - good condition		Indigenous Vegetation with scattered aliens		Indigenous Vegetation with heavy alien infestation	
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Identify the vegetation type above:	Identify the vegetation type above:	Identify the vegetation type above:
Provide ecosystem status for above:	Provide ecosystem status for above:	Provide Ecosystem status for above:
Indigenous Vegetation in an ecological corridor or along a soil boundary / interface	Veld dominated by alien species	Distinctive soil conditions (e.g. Sand over shale, quartz patches, limestone, alluvial deposits, termitaria etc.) – describe
Bare soil	Building or other structure	Sport field
Paved surface	Cultivated land	Other (describe)

**Please note:** The Department may request specialist input/studies depending on the nature of the vegetation type / groundcover and potential impact(s) of the proposed activity/ies.  
 To assist with the identification of the vegetation type and ecosystem status consult <http://bgis.sanbi.org> or [BGIShelp@sanbi.org](mailto:BGIShelp@sanbi.org). Information is also available on compact disc (cd) from the Biodiversity-GIS Unit, Ph (021) 799 8698. This information may be updated from time to time and it is the applicant/ EAP's responsibility to ensure that the latest version is used.

### 5.2 ECOSYSTEM

#### 1. Biodiversity pattern

The fixed components of ecological processes present in the area are:

- Soil interfaces
- Upland lowland interfaces
- Riverine corridors
- Coastline

The flexible components of ecological processes present in the area are:

- Upland lowland gradients
- Macro-climatic gradients

The figure 5.2 below indicates the spatial components and their relation to the proposed footprints for the two alternative locations for the house.

#### 2. Biodiversity process

The most important ecosystems drivers in the area are fire and micro-climatic conditions mainly influenced by the ocean and topography.

Currently the section above Main road burn at a frequency of between 8 to 10 years, which is higher than the historic frequency. This increase in frequency is potentially due to the increase human presence.

The section below Main Road host species less dependent of fire. It does however burn at a low frequency (approximately 50 year cycle) due to being spatially separated from the upper section by Main Road and the small extent of this lower section.

Development on the bottom section would thus not have a significant impact on the current fire regime. Development on the upper section would however require measures to protect the property and if possible will attempt to prevent and/or avoid fires. This may have a negative long term impact on the fire regime.

Micro-climatic conditions include day/night winds, seasonal winds, seaspray and temperature gradient due to topographical gradient. None of these drivers will be impacted on by the proposed development either on the upper or lower section.

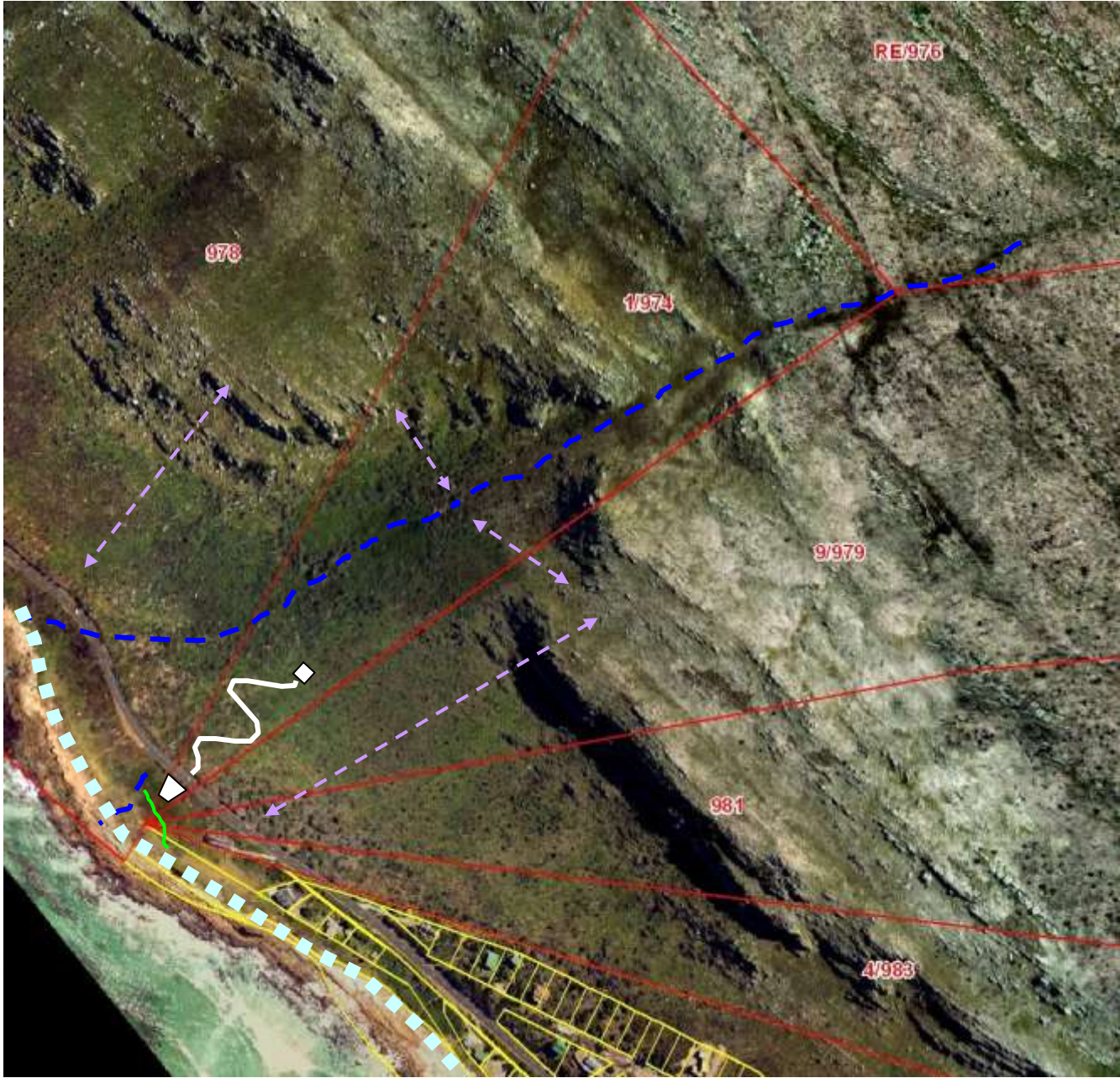
#### 3. Conclusion






Figure 5.2 indicates the spatial components of ecological processes. It is clear from Figure 5.2 that the proposed alternatives are not located within the spatial extent of these components. The development is within the lowland-upland gradient, but this gradient extent over a large area and the small footprint of the proposed development does not impact significantly on this component.

#### 4. Recommendation

No development should be allowed within the rivirine corridors or into the vegetation interfaces/ecotone areas.

Figure 5.2 indicating the spatial components of ecological processes present on and around the site.



-  Lowland-upland gradient
-  Coastal zone processes
-  Rivers/streams
-  Vegetation interface
-  Alternative Development footprints

## 6. LAND USE CHARACTER OF SURROUNDING AREA

Tick ("✓") the current land uses and/or prominent features that occur within +/- 500m radius of the site and neighbouring properties if these are located beyond 500m of the site. **Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential impact(s) of the proposed activity/ies.

### Alternative S1 (L1):

Untransformed area	Low density residential	Medium/Low density residential *	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	<b>River, stream or wetland</b>	<b>Nature conservation area</b>
<b>Mountain, koppie or ridge</b>	Museum	Historical building	Graveyard	Archeological site
<b>Other land uses (describe):</b>	<b>Coastline</b> <b>* The property is situated just outside the Misty Cliffs Village, the latter with properties in the order of 800m<sup>2</sup>. The closest house to the property is however also outside the Misty Cliffs Village on farm 4/983</b>			

### Alternative S2 (L2):

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
Retail	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station
Landfill or waste treatment site	Plantation	Agriculture	<b>River, stream or wetland</b>	<b>Nature conservation area</b>
<b>Mountain, koppie or ridge</b>	Museum	Historical building	Graveyard	Archeological site
<b>Other land uses (describe):</b>	<b>Coastline</b> <b>* The property is situated just outside the Misty Cliffs Village, the latter with properties in the order of 800m<sup>2</sup>. The closest house to the property is however also outside the Misty Cliffs Village on farm 4/983</b>			

### Alternative S3:

Untransformed area	Low density residential	Medium density residential	High density residential	Informal residential
<b>N/A</b>	Commercial & warehousing	Light industrial	Medium industrial	Heavy industrial
Power station	Office/consulting room	Military or police base/station/compound	Casino/entertainment complex	Tourism & Hospitality facility
Open cast mine	Underground mine	Spoil heap or slimes dam	Quarry, sand or borrow pit	Dam or reservoir
Hospital/medical center	School	Tertiary education facility	Church	Old age home
Sewage treatment plant	Train station or shunting yard	Railway line	Major road (4 lanes or more)	Airport
Harbour	Sport facilities	Golf course	Polo fields	Filling station

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Landfill or waste treatment site	Plantation	Agriculture	River, stream or wetland	Nature conservation area
Mountain, koppie or ridge	Museum	Historical building	Graveyard	Archeological site
Other land uses (describe):				

### 7. REGIONAL PLANNING CONTEXT

Is the activity permitted in terms of the property's existing land use rights? Please explain			
For L1 application needs to be made in terms of the Zoning scheme regulations to encroach on the side building lines. Alternative L2 complies with zoning scheme requirements.			
Will the activity be in line with the following?			
Provincial Spatial Development Framework (PSDF)	<b>YES</b>	NO	Please explain
Urban edge / Edge of Built environment for the area	<b>YES</b>	NO	Please explain
Farm 974/1 is outside but adjacent to the Misty Cliffs Village. The land use rights of the landowner allows for the construction of a single dwelling on farm 974/1. <b>The construction of a single dwelling on a rural or agricultural property is not prohibited by the Urban Edge study as this is a primary right and does not entail densification as intended by the urban edge guidelines.</b>			
Integrated Development Plan of the Local Municipality	<b>YES</b>	NO	Please explain
No reference or indication of policy applicable to this specific site or development.			
Spatial Development Framework of the Local Municipality	<b>YES</b>	NO	Please explain
No reference or indication of policy applicable to this specific site or development.			
Approved Structure Plan of the Municipality	<b>YES</b>	NO	Please explain
Scarborough and Misty Cliffs Structure Plan (February 2000) is currently in draft form.			
Any other Plans	<b>YES</b>	NO	Please explain
<u>Guideline on development on Mountains, Hills and ridges:</u> No structures are located on ridgelines and care has been taken to respect the mountain topography. The preferred option thus complies with this guideline.			
The following principles have been acknowledged in the proposal:			
Ensure the continued functioning of ecosystems, and to maintain species diversity through habitat protection	Ref. par 5.2 (above)		
Avoid inappropriate development (i.e. intrusive and consumptive development) on mountains, hills and ridges taking into account the character of the existing development	Ref Appendix G1		
Ensure that where development does take place, that its layout and design takes account of sensitive features and environmental constraints, thereby promoting environmentally sensitive development of projects on mountains, hills and ridges where development is authorized by the Department	Ref par 5.2 (above), Appendix G1, G2		
Preserve landform features through ensuring that the siting of facilities is related to environmental resilience and visual screening capabilities of the landscape	Ref Appendix G1		
Ensure that the scale, density and nature of development is harmonious and in keeping with the sense of place and character of the area.	Ref Appendix G1		
The following evaluation criteria are met as follows:			

## BASIC ASSESSMENT REPORT

Criteria	Response
Density of development	Single house
Aesthetics (design, scale, layout)	Refer appendix B and G
Location of development	Construction of a single dwelling is a primary right on the property
Erosion potential and stability	Refer par 8 (below) and Appendix H
Water resources (presence of springs, river catchment area)	Refer par 5.2 (above)
Occurrence of unique geological, cultural or biological features	No unique geological or cultural features occur. Refer Appendix G2, par. 5.2 (above) and Appendix G3
Value in terms of "sense of place"	Refer appendix G
Character and nature of adjacent land use	Refer Appendix G
Character of the general area	Ditto
Cumulative environmental impacts	Refer par. 11 (below)

Visual assessment guideline: A visual assessment was undertaken in accordance with this guideline (refer Appendix G2)

Development parameters to accommodate sea level rise:

Concerns were raised regarding the impact of sea level rise (SLR). The SLR study by the City of Cape Town (COCT) considered different scenarios. Based on this study, a proposed development line was drawn under which development should be prevented. **This line was determined at 5m above current sea level. The contour survey of the site indicates that the property is in its totality 5m above the HWM.**

The worst case scenario i.e. in the case of the total melting of the ice sheets, sea-level rise will initially be 7m, increasing to 12m. No timing could however be determined for this SLR. The proposed building footprint is above 9m. It is important to note that in the case of this scenario large areas along Milnerton, City Bowl, Strand etc. will be inundated which render the risk to the proposed development in the broader context insignificant.

## 8. SOCIO-ECONOMIC CONTEXT

Describe the existing social and economic characteristics of the community in order to provide baseline information.

Farm 974/1 is located in a high-income area, and its development should have little or no effect on the socio-economic status of the community of this area.

## 9. CULTURAL/HISTORICAL FEATURES

Please be advised that if section 38 of the National Heritage Resources Act 25 of 1999 is applicable to your proposed development, then you are requested to furnish this Department with written comment from Heritage Western Cape as part of your public participation process. Section 38 of the Act states as follows:

38. (1) Subject to the provisions of subsections (7), (8) and (9), any person who intends to undertake a development categorised as-

- (a) the construction of a road, wall, power line, pipeline, canal or other similar form of linear development or barrier exceeding 300m in length;
- (b) the construction of a bridge or similar structure exceeding 50m in length;
- (c) any development or other activity which will change the character of a site-
  - (i) exceeding 5 000 m<sup>2</sup> in extent; or
  - (ii) involving three or more existing erven or subdivisions thereof; or
  - (iii) involving three or more erven or divisions thereof which have been consolidated within the past five years; or
  - (iv) the costs of which will exceed a sum set in terms of regulations by SAHRA or a provincial heritage resources authority;
- (d) the re-zoning of a site exceeding 10 000 m<sup>2</sup> in extent; or
- (e) any other category of development provided for in regulations by SAHRA or a provincial heritage resources authority, must at the very earliest stages of initiating such a development, notify the responsible heritage resources authority and furnish it with details regarding the location, nature and extent of the proposed development.

### Alternative S1 (L1):

Are there any signs of culturally or historically significant elements including archaeological or palaeontological sites, on or in close proximity to the site?		YES	NO
		UNCERTAIN	
If YES, explain:	Refer Appendix K		
If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.			
Briefly explain the findings of the specialist if one was	Refer Appendix K		

## BASIC ASSESSMENT REPORT

already appointed:			
Will any building or structure older than 60 years be affected in any way?	YES	NO	
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO	
If yes, please submit or, make sure that the applicant or a specialist submit the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application.			

### Alternative S2(L2):

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	NO
	UNCERTAIN	
If YES, explain:		
If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist if one was already appointed:		
Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If yes, please submit or, make sure that the applicant or a specialist submit the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application.		

### Alternative S3:

Are there any signs of culturally or historically significant elements, as defined in section 2 of the National Heritage Resources Act, 1999, (Act No. 25 of 1999), including archaeological or palaeontological sites, on or close (within 20m) to the site?	YES	NO
N/a	UNCERTAIN	
If YES, explain:		
If uncertain, the Department may request that specialist input be provided to establish whether there is such a feature(s) present on or close to the site.		
Briefly explain the findings of the specialist if one was already appointed:		
Will any building or structure older than 60 years be affected in any way?	YES	NO
Is it necessary to apply for a permit in terms of the National Heritage Resources Act, 1999 (Act 25 of 1999)?	YES	NO
If yes, please submit or, make sure that the applicant or a specialist submit the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application.		

**Please note:** Heritage Western Cape / South African Heritage Resource Agency (which ever is the competent authority under the circumstance) comments needs to be submitted along with this Basic Assessment Report.

## SECTION 3. PUBLIC PARTICIPATION

The person conducting the public participation process must fulfil the requirements outlined in Regulation 56 and also take into account this Department's guideline on Public participation.

**Please tick ("✓") the appropriate box to indicate whether the specific requirement was undertaken or whether exemption has been applied for.**

1. Were all potential interested and affected parties notified of the application by –			
(a) having fixed a notice board at a place conspicuous to the public at the boundary or on the fence of -			
(i) the site where the activity to which the application relates is or is to be undertaken and	YES	NO	EXEMPTION

## BASIC ASSESSMENT REPORT

(ii) any alternative site mentioned in the application	YES	NO	EXEMPTION
(b) having given written notice to –			
(i) the owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site	YES	NO	EXEMPTION
(ii) the owners and occupiers of land within 100 metres of the boundary of the site or alternative site who are or may be directly affected by the activity	YES	NO	EXEMPTION
(iii) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represents the community in the area	YES	NO	EXEMPTION
(iv) the municipality which has jurisdiction in the area; and	YES	NO	EXEMPTION
(v) any organ of state having jurisdiction in respect of any aspect of the activity	YES	NO	EXEMPTION
(c) having placed an advertisement in –			
(i) one local newspaper, or	YES	NO	EXEMPTION
(ii) the official EIA <i>Gazette</i>	YES	NO	EXEMPTION
(d) having placed an advertisement in at least one provincial newspaper or national newspaper, if the activity has or may have an impact that extends beyond the boundaries of the metropolitan or local municipality in which it is or will be undertaken. (This requirement need not be complied with if an advertisement has been placed in the official EIA <i>Gazette</i> referred to in (c)(ii) above.	YES	NO	EXEMPTION
2. Was a register of interested and affected parties opened, maintained and made available to any person requesting access to the register in writing? (copy of register to be included in appendix E)	YES	NO	EXEMPTION
3. Were all registered interested and affected parties given access to this application form and basic assessment report and any other report(s) compiled in relation to this application and was an opportunity for interested and affected parties to comment on the report(s) in writing provided?	YES	NO	EXEMPTION
4. Were stakeholders that have direct interests in the site or property, such as servitude holders and service providers, informed of the application at least 30 (thirty) calendar days before the submission of this application and were they provided with the opportunity to comment. (Comments to be included in the comments and response report as described below)	YES	NO	EXEMPTION
5. Were Municipalities and other organs of state notified and given an opportunity to comment? (This information must also be included in the comments and response report)	YES	NO	EXEMPTION

**Please note:** Proof of all of the above must be submitted as part of the public participation information to be attached to this basic assessment report as Appendix E. Should any of the responses be “No” and no application for exemption from that requirement was applied for, the Department will not proceed with evaluating / processing the application until that specific requirement is undertaken. Any exemption application must be brought to the attention of all interest and affected parties through the public participation process.

The practitioner must record all comments and respond to each comment of the public / interested and affected party before the application is submitted. The comments and responses must be captured in a **Comments and Responses Report** as prescribed in the regulations and must also include a description of the public participation process followed and this report must also be included in the public participation information to be attached to this basic assessment report as Appendix E.

If an application is for a linear or ocean-based activity and strict compliance with the above requirements is inappropriate, the person conducting the public participation process may deviate from the requirements to the extent and in the manner as may be agreed to by this Department.

## SECTION 4. IMPACT ASSESSMENT

**Please note:** The information in this section must be duplicated for all the alternatives (where relevant).

### 1. WASTE, EFFLUENT AND EMISSION MANAGEMENT

#### (a) Solid waste management (L1 and L2)

Will the activity produce solid waste (including rubble) during the construction phase?	YES	NO
If yes, what estimated quantity during the construction period? Normal construction waste. No structures or infrastructure to be demolished which will produce rubble. Plant material will be removed which is equal to garden waste.	Unknown	

Where and how will the construction solid waste be treated / disposed of (describe)?
Solid waste to be disposed of at an approved refuse disposal site.

Will the activity produce solid waste during its operational phase?	YES	NO
If Yes, what estimated quantity will be produced per month? <b>Single house - domestic</b>	0.1m <sup>3</sup>	

Where and how will the solid waste be treated / disposed of (describe)?

Has the municipality or relevant authority confirmed that sufficient capacity exist for treating / disposing of the solid waste to be generated by this activity(ies)? If yes, provide written confirmation from Municipality or relevant authority	YES	NO
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Will the activity produce solid waste that will be treated and/or disposed of at another facility other than into a municipal waste stream?	YES	NO
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If yes, has this facility confirmed that sufficient capacity exist for treating / disposing of the solid waste to be generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of the facility:	YES	NO
	N/A	

Does the facility have an operating license? (If yes, please attach a copy of the license.)	YES	NO
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Facility name:	
Contact person:	
Postal address:	
	Postal code:
Telephone:	Cell:
E-mail:	Fax:

#### (b) Effluent (L1 and L2)

Will the activity produce sewage and or any other effluent?	YES	NO
Normal domestic effluent will be produced.		
What estimated quantity will be produced per month?	5.04m <sup>3</sup>	
Will the effluent be treated and/or disposed of in a municipal system?	YES	NO
If Yes, has the municipality or relevant authority confirmed that sufficient <b>unallocated</b> capacity exist for treating / disposing of the sewage or any other effluent to be generated by this activity(ies)? Provide written confirmation from the Municipality or relevant authority		
Cape Town Sanitation confirmed that an on-site disposal system would be required and the details be submitted for final approval.		
The Final BAR has been referred to Bulk water services to confirm that bulk capacity exist to accommodate the additional house.		

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Will any effluent produced be treated and/or disposed of on site?	YES	NO
If yes, briefly describe the nature of the effluent and how it will be disposed of:		
Conservancy tank to be provided and pumped by the municipality		
Will the activity produce effluent that will be treated and/or disposed of at another facility?	YES	NO
If yes, has this facility confirmed that sufficient capacity exist for treating / disposing of the liquid effluent to be generated by this activity(ies)? Provide written confirmation from the facility and provide the following particulars of facility:	N/a	NO
Does the facility have an operating license? (If yes, please attach a copy of the license.)	N/a	NO
Facility name:		
Contact person:		
Postal address:		
		Postal code:
Telephone:	Cell:	
E-mail:	Fax:	

Describe the measures that will be taken to ensure the optimal reuse or recycling of waste water, if any:
In the Operational Environmental Management Plan (refer Appendix J) it is recommended that: <ul style="list-style-type: none"> <li>Water saving appliances such as dual flush toilets and low flow shower heads should be installed;</li> <li>Rainwater from gutters and roofs should be captured and used for on-site landscaping to save water and minimize storm water run-off.</li> </ul>

### (c) Emissions into the atmosphere

Will the activity produce emissions that will be disposed of into the atmosphere?	YES	NO
If yes, does it require approval in terms of relevant legislation?	YES	NO
Describe the emissions in terms of type and concentration and how it will be treated/mitigated:		
N/a		

## 2. WATER USE

Please indicate the source(s) of water for the activity by ticking (“✓”) the appropriate box(es)

<b>Municipal</b>	Water board	Groundwater	River, Stream, Dam or Lake	Other	The activity will not use water
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If water is to be extracted from a groundwater source, river, stream, dam, lake or any other natural feature, please indicate the volume that will be extracted per month:	N/a	m <sup>3</sup>
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Please provide proof of assurance of water supply eg. letter of confirmation from municipality / water user associations, yield of borehole		
Refer Appendix F		
Does the activity require a water use permit / license from DWAF?	YES	NO
If yes, please submit the necessary application to Department of Water Affairs and Forestry and attach proof thereof to this application.		

## 3. POWER SUPPLY

Please indicate the source of power supply eg. Municipality / Eskom / Renewable energy source

Municipality ( refer Appendix F)

If power supply is not available, where will power be sourced from?
N/a

#### 4. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:
In the Operational Environmental Management Plan (refer Appendix J) the following recommendations are made: <ul style="list-style-type: none"> <li>• Use of insulating materials in roofs and walls to reduce need for heating / cooling</li> <li>• Installation of solar water heaters and outdoor lighting</li> <li>• Use of low voltage compact fluorescent light bulbs instead of incandescent</li> </ul>

Describe how alternative energy sources have been taken into account or been built into the design of the activity, if any:


#### 5. NOISE IMPACTS

Will the activity result in any noise impacts during the construction phase?	<b>YES</b>	<b>NO</b>
If yes, please describe and indicate the measures proposed to mitigate and manage these impacts?		
Construction to be restricted to hours permitted in the National Building regulations.		
Will the activity result in any noise impacts during its operational phase?		
		<b>NO</b>
If yes, please describe and indicate the measures proposed to mitigate and manage these impacts?		

**Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential noise impact(s) of the proposed activity/ies.

#### 6. VISUAL IMPACTS

Will the activity result in any visual impacts?	<b>YES</b>	<b>NO</b>
If yes, please describe and indicate the measures proposed to mitigate and manage these impacts?		
Refer Appendix G1 – Visual Assessment Report		
Will the activity result in potential lighting impacts at night?		
		<b>NO</b>
If yes, please describe and indicate the measures proposed to mitigate and manage these impacts?		
The proposed development is a single residential home with restricted lights. Guidelines of the Scarborough and Misty Cliffs Conservation Village (as found on their website <a href="http://www.scarborough.org.za">www.scarborough.org.za</a> ) require down-lit lighting types for outside lights.		

**Please note:** The Department may request specialist input/studies depending on the nature of the land use character of the area and potential visual impact(s) of the proposed activity/ies.

#### 7. SOCIO-ECONOMIC IMPLICATIONS OF THE ACTIVITY

What is the expected capital value of the activity on completion?	Unknown
What is the expected yearly income or contribution to the economy that will be generated by or as a result of the activity?	Unknown
Will the activity contribute to service infrastructure?	YES <b>NO</b>
How many new employment opportunities will be created in the construction phase of the activity?	Unknown
What is the expected value of the employment opportunities during the construction phase?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	Unknown

How will this be ensured and monitored (please explain):
N/a

## BASIC ASSESSMENT REPORT

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How many permanent new employment opportunities will be created during the operational phase of the activity?	Unknown
What is the expected current value of the employment opportunities during the first 10 years?	Unknown
What percentage of this will accrue to previously disadvantaged individuals?	Unknown

How will this be ensured and monitored (please explain):
N/a

### 8. IMPACTS THAT MAY RESULT FROM THE PLANNING, DESIGN AND CONSTRUCTION PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the planning, design and construction phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

#### 8.1 NO DEVELOPMENT ALTERNATIVE

This alternative has no planning, design or construction impacts.

#### 8.2 ALTERNATIVES

##### Rating:

High
Medium
Low

##### Impact rating before mitigation

Impact	House below road with driveway to car lift	House below road with driveway via Farm 978	House below road with driveway via Farm 979/9 and 981	House above road with driveway directly off Main Road
Erosion	Significant earthworks can cause erosion. Little if any additional earthworks required to fit lift.	Significant earthworks can cause erosion. Driveway require significant earthworks.	Significant earthworks can cause erosion. Driveway require significant earthworks	Significant earthworks are required to build an access road and due to the slope a large area will have to be cut to build the house
Visual	Can block view from Main Road. Construction may be visible from across the bay			Construction next to Main Road may detract from scenic quality. Construction may be visible from across the bay.
Pollution	Possible pollution of groundwater with cement, building chemicals etc			
Vegetation	The potential exist that sensitive areas can be damaged			
Sea level rise	Increase in sea level due to climate change can impact on locality of house. Development should be above 5msl.			None
Road safety	Access for construction vehicles to the site may hamper traffic on Main Road.			

##### Impact rating after Mitigation

Impact	House below road with driveway to car lift	House below road with driveway via Farm 978	House below road with driveway via Farm 979/9 and 981	House above road with driveway directly off Main Road
Erosion	Refer Construction EMP	Unavoidable	Unavoidable	Refer Construction EMP
Visual	Refer Construction EMP for screening of sites. Impact temporary.			
Pollution	Refer construction EMP			
Vegetation	Recommendations of Botanist be adhered to. Also refer EMP			
Sea level rise	All structures planned above the proposed development line namely 5msl			N/A
Road safety	Provide sufficient signs and warning signs; on-site signalling during peak hours			

### 9. IMPACTS THAT MAY RESULT FROM THE OPERATIONAL PHASE

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the operational phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

## BASIC ASSESSMENT REPORT

### 9.1 NO DEVELOPMENT ALTERNATIVE

The status quo would be maintained. This option require alien invasion management which may be neglected if the land is not inhabited. In such case it should be considered to include the land under the management of a conservation authority in accordance with an agreement. This option is however not a financial viable alternative for the land owner as he will have no real "enjoyment" of the property. Should DEA&DP consider to prevent the construction of a house within the current land use rights, by supporting the no-development option, the department would be liable for compensation due to the loss of value of the land to the owner.

### 9.2 DEVELOPMENT ALTERNATIVES

#### Impact rating before mitigation

Impact	House below road with driveway to car lift	House below road with driveway via Farm 978	House below road with driveway via Farm 979/9 and 981	House above road with driveway directly off Main Road
Erosion	Uncontrolled storm water can cause damage to the coastal strip	Larger surface with potential to cause increased run-off		
Visual	The house was planned in such a way to retain view lines from the road.	The house was planned in such a way to retain view lines from the road. The driveway will create a significant impact due to its visibility from across the bay		Due to the isolated locality at such a high contour line as well as the significant earthworks required to create a safe access intersection the house and driveway will remain extremely visible from across the bay.
Fire risk	Isolated from main natural area by the road and bordered by the coast			Positioned in vegetation type prone to and dependant on fire
Ecological processes	Taken into account during planning and thus already mitigated.	The driveway will cross the moist, sensitive area	No significant ecological components present	Taken into account during planning and thus already mitigated
Risk to fauna	Migration or breeding of endangered or vulnerable species do not occur on site	Driveway position may restrict migration or breeding		Avoid footprint encroaching onto sensitive areas.
Road safety	The 60m available distance to the north-west is 75m less than the prescribed distance of 135m, as this section of the road operates at a 90km/h speed limit.	stopping sight distances of 80m and 135m are easily achieved to the north-west and south-east respectively, which complies fully with prescribed guidelines and is the major advantage of this alternative, in relation to the others	The required stopping sight distance from this access point to the north-west is 107m and over the required 80m to the south-east respectively. The 107m north-west sight distance is less than the prescribed distance	The above-road access has highly sub-standard sight-lines available along Main Road, especially to the north-west. Poor visibility from this point is mainly ascribed to the fact that the access is located on the less-favourable position on the 'inside' of the curve of Main Road.
legal viability	All construction is on the application's property and normal access to the road via an application to the local authority required	Access to be obtained via properties in different ownership and portions proclaimed national park. These options would required significant negotiations and currently does not appear feasible.		Significant construction need to be undertaken within the road reserve as to achieve the required sight distances.
Maintenance	N/A	various owners may be responsible for maintenance which can be problematic and result in problems		N/A

**Impact rating after Mitigation**

Impact	House below road with driveway to car lift	House below road with driveway via Farm 978	House below road with driveway via Farm 979/9 and 981	House above road with driveway directly off Main Road
Erosion	Retention areas must be created to reduce the speed of run-off. This can be done by providing a catchment tank underneath the house. run-off water will gather in the tank and be dispersed slowly (single point discharge must be avoided).			
Visual	All structure as situated below view line. Entrance and street boundary appropriately landscaped	Due to retaining walls for the driveway, it will remain visible from across the bay. Planting can reduce the visibility		Planting to screen driveway. Minimize glazing to reduce glare from across the bay. Mitigation measure to reduce fire risk increase visual impact.
Fire Risk	None			Use fire resistant materials. Create fire break around house.
Ecological processes	Avoid footprint to encroach – this include restriction of landscaping	Unavoidable	Avoid footprint to encroach – this include restriction of landscaping	Avoid footprint to encroach – this include restriction of landscaping
Risk to fauna	Unavoidable			
Road safety	Should the speed limit be reduced to 60km/h (as it is to the south-east of Erf 974/1), the available stopping sight distance will only fall short by 20m (as only 80m will be required). It is hence of key importance that the speed limit be reduced from 90km/h to 60km/h on the portion of Main Road to the north-west of Erf 974/1.	None	Reduce speed limit to 60km/h.	The stopping and shoulder sight distance at this access could be brought more in line with the prescribed standards by cutting back a portion of the embankment in the road reserve on the upper side of Main Road, so as to create a clear line of sight to and from the proposed access. This “daylighting”, in conjunction with the speed limit reduction would enable much improved sight lines.
legal viability	Normal application procedures	Potential fatal flaw situation		Lengthy negotiation and potentially not financially feasible.
Maintenance	N/A	legal agreements		N/A

**10. IMPACTS THAT MAY RESULT FROM THE DECOMMISSIONING AND CLOSURE PHASE**

Briefly describe and compare the potential impacts (as appropriate), significance rating of impacts, proposed mitigation and significance rating of impacts after mitigation that are likely to occur as a result of the decommissioning and closure phase for the various alternatives of the proposed development. This must include an assessment of the significance of all impacts.

**10.1 ACTIVITY ALTERNATIVES**

Alternative S1 (preferred activity alternative)			
Potential impacts:	Significance rating of impacts(Low, Medium, Medium-High, High, Very High):	Proposed mitigation:	Significance rating of impacts after mitigation(Low, Medium, Medium-High, High, Very High):
N/a			

Alternative S2			
Potential impacts:	Significance rating of impacts(Low, Medium, Medium-	Proposed mitigation:	Significance rating of impacts after mitigation(Low, Medium,

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	<b>High, High, Very High):</b>		<b>Medium-High, High, Very High):</b>
N/a			

<b>Alternative S3</b>			
<b>Potential impacts:</b>	<b>Significance rating of impacts(Low, Medium, Medium-High, High, Very High):</b>	<b>Proposed mitigation:</b>	<b>Significance rating of impacts after mitigation(Low, Medium, Medium-High, High, Very High):</b>
N/a			

### 11. CUMULATIVE IMPACTS

Describe potential impacts that, on their own may not be significant, but will be significant when added to the impact of other activities or existing impacts in the environment and substantiate response (The information in this section must be provided for all the alternatives as well):

None.

Potential impacts have been identified, and mitigation measures put in place. It is foreseen that there are no impacts that will significantly threaten the quality of the environment.

This is the only remaining property currently with the rights to construct a dwelling as the adjacent properties are zoned for open space and conservation purposes. The scale of the development i.e. a single dwelling also pose insignificant cumulative impacts.

According to the Council on Environmental Quality (1997) cumulative effects occur when:

- Impacts on the environment take place so frequently in time or so densely in space that the effects of individual impacts cannot be assimilated; or
- The impacts of one activity combine with those of another in a synergistic manner<sup>1</sup>

DEAT<sup>2</sup> has provided types and characteristics of different cumulative effects, and the following potential impacts have been identified:

Types and characteristics of cumulative effects.

<b>TYPE</b>	<b>CHARACTERISTIC</b>	<b>IDENTIFY POTENTIAL IMPACT</b>
Time Crowding	Frequent and repetitive effects.	Activity remains at same pace, frequency and intensity over time. No time crowding impacts.
Time Lags	Delayed effects.	No time lag impacts.
Space Crowding	High spatial density of effects.	Small scale activity with no potential unintended leakages. No space crowding impacts.
Cross-boundary	Effects occur away from the source.	Water requirement, effluent and solid waste removal on domestic scale for one house and cross-boundary impact insignificant. All sources and disposal sites confirmed capacity.
Fragmentation	Change in landscape pattern.	Single dwelling outside Misty Cliffs village cause extremely low fragmentation as no further development is possible.
Compounding Effects	Effects arising from multiple sources or pathways.	No compounding impacts.
Indirect Effects	Secondary effects.	Only potential indirect effect is additional trip generated by one household. This is

<sup>1</sup> DEAT (2004) Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs and Tourism (DEAT), Pretoria

<sup>2</sup> DEAT (2004) Cumulative Effects Assessment, Integrated Environmental Management, Information Series 7, Department of Environmental Affairs and Tourism (DEAT), Pretoria

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		insignificant.
Triggers and Thresholds	Fundamental changes in system functioning and structure.	No fundamental changes to urban or ecological systems or structures

### 12. IMPACT SUMMARY OF PREFERRED ALTERNATIVE

Having assessed the significance of impacts of the various alternatives, please provide an overall summary and reasons for selecting the preferred alternative.

Alternatives have to be "feasible", "relevant", "reasonable" and "viable" according to the *Criteria for determining Alternatives in EIA* (DEAT). Due to the reasons mentioned above only option 1 (direct driveway) comply with all these criteria.

**Preferred Alternative: Development of a single residential house on the portion of farm 974/1 below the Main Road (coastal precinct) with direct driveway and car lift**

- The portion of farm 974/1 below the Main Road is situated in close proximity of an existing residential area.
- Visual impact of the proposed development is less on the coastal precinct than on the mountain precinct (refer Appendix G1).
- Development in accordance with the recommendations by the Vegetation and Visual Specialists should pose no significant impacts on the environment.
- The proposed building does not pose any significant negative impacts on the environment.

### 13. RECOMMENDATION OF ENVIRONMENTAL ASSESSMENT PRACTITIONER

In my view (EAP), the information contained in this application form and the documentation attached hereto is sufficient to make a decision in respect of the activity applied for.	<b>YES</b>	<b>NO</b>
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If "NO", list the aspects that should be further assessed through additional specialist input/assessment or whether this application must be subjected to a Scoping process before a decision can be made:

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If "YES", please list recommended conditions, including mitigation measures, that should in your view be considered for inclusion in an authorisation if the activity is authorised by the competent authority:

<p><b>Stormwater</b> Retention areas must be created to reduce the speed of run-off. This can be done by providing a catchment tank underneath the house - run-off water will gather in the tank and either re-used for landscaping purposes or be dispersed slowly (single point discharge must be avoided). A stormwater management plan should be submitted to the municipality for approval when the building plans are submitted. Approval from the Regional Catchment Manager.</p>
<p><b>Access</b> A separate application for Access should be submitted via the local authority to the Provincial Roads engineer for approval prior approval of building plans.</p>
<p><b>Vegetation/Biodiversity</b></p> <ul style="list-style-type: none"> <li>• A 10m buffer should be determined along the streams and where this extend onto the property, the areas should not be disturbed in any manner.</li> <li>• The development footprint should be surveyed and the extend approved by the botanist before building plans are submitted to ensure that the building does not encroach onto sensitive areas. A written approval to this extend should accompany the buildingplan submission.</li> <li>• No formal gardening should be allowed other than landscaping the entrance and road verge area. This landscaping to create a natural appeal.</li> </ul>
<p><b>Sewage:</b> Details of the on-site sewage disposal system (conservancy tanks) should be submitted with building plan for approval by the municipality.</p>
<p><b>Construction</b></p> <ul style="list-style-type: none"> <li>• An ECO with knowledge of construction site management should be appointed in terms of the construction EMP.</li> <li>• The sensitive area must be demarcated properly during construction to prevent the contractor from moving into the sensitive area.</li> </ul>

## APPENDICES

The following appendices must be attached where appropriate:

Appendix	Tick ("✓") box if Appendix is attached
Appendix A: Location map	✓
Appendix B: Site plan(s)	✓
Appendix C: Owner(s) consent(s)	✓
Appendix D: Photographs	✓
Appendix E: Public participation information: as required in Section C above. Include summary of Issues.	✓
Appendix F: Permit(s) / license(s) from any other organ of state including service letters from the municipality	✓
Appendix G: Specialist Report(s): Appendix G1 Visual Assessment Appendix G2 Vegetation study Appendix G3 Desktop Faunal Review	✓ ✓ ✓
Appendix H: Risk Assessment	✓
Appendix I: Construction EMP	✓
Appendix J: Operational EMP	✓
Appendix L: Comments from Vegetation Specialist on proposed layout of Alternative I	✓
Appendix M: Traffic Impact statement and addendum	

## DECLARATIONS

### The Applicant

I....., in my personal capacity or duly authorized thereto hereby declare that:

- The information contained in this application form is true and correct, and
- I am fully aware of my responsibilities in terms of the National Environmental Management Act of 1989 (“NEMA”) (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations (“EIA Regulations”) in terms of NEMA (Government Notice No. R. 385, R. 386, and R. 387 in the Government Gazette of 21 April 2006 refer), and that failure to comply with these requirements may constitute an offence in terms of NEMA and the EIA Regulations.

**Note:** If acting in a representative capacity, a certified copy of the resolution or power of attorney must be attached.

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Signature of the applicant:

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Name of company:

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Date:

### The independent Environmental Assessment Practitioner

I ....., as the appointed independent environmental practitioner hereby declare that:

- The information contained in this application form is true and correct, and
- I am fully aware of my responsibilities in terms of the National Environmental Management Act of 1989 (“NEMA”) (Act No. 107 of 1998) and the Environmental Impact Assessment Regulations (“EIA Regulations”) in terms of NEMA (Government Notice No. R. 385, R. 386, and R. 387 in the Government Gazette of 21 April 2006 refer), and that failure to comply with these requirements may constitute an offence in terms of NEMA and the EIA Regulations.

**Note:** The terms of reference must be attached.

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Signature of the environmental practitioner:

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Name of company:

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Date: