

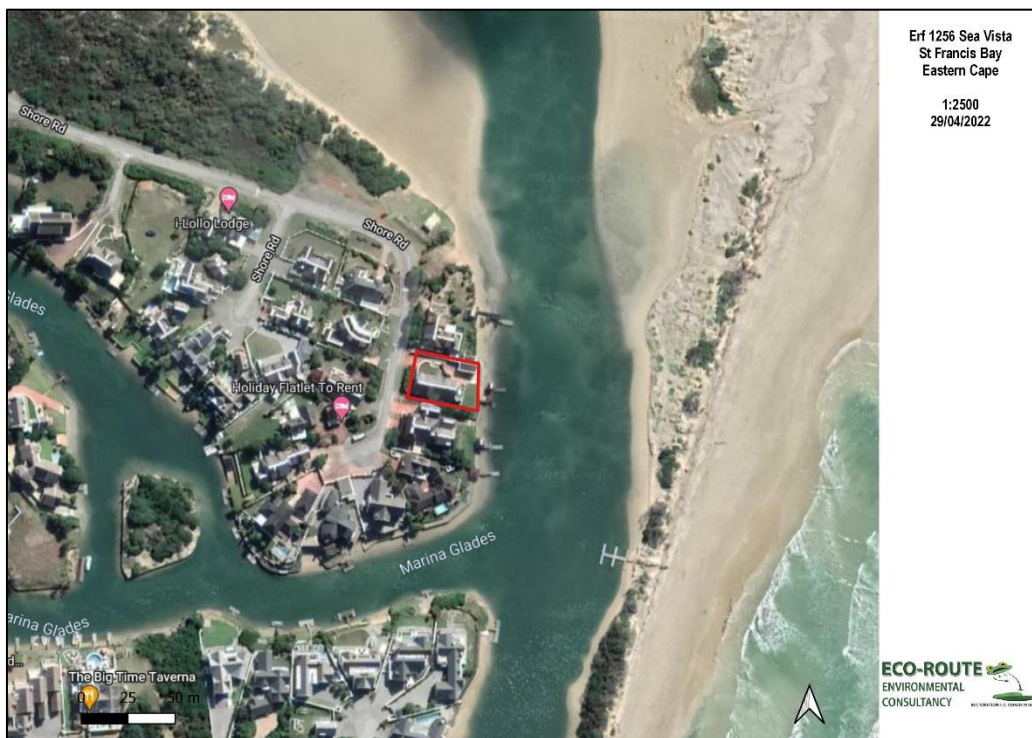


The Proposed Construction of a Residential Dwelling on Erf 1256, St Francis Bay, Kouga Municipality, Eastern Cape

DEDEA REF: EC08/C/LN1&3/M/45-2022

Draft Basic Assessment Report

30 Day Public Participation 13/10/2022 – 14/11/2022



October 2022

EAP: Janet Ebersohn
info@ecoroute.co.za

Fax: 086 402 9562

P.O. Box 1252
Sedgefield
6573

BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:

NEAS Number:

Date Received:

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| |

Basic assessment report in terms of the Environmental Impact Assessment Regulations, 2014 as amended, promulgated in terms of the National Environmental Management Act, 1998(Act No. 107 of 1998), as amended.

Kindly note that:

1. This **basic assessment report** is a standard report that may be required by a competent authority in terms of the EIA Regulations, 2014 as amended and is meant to streamline applications. Please make sure that it is the report used by the particular competent authority for the activity that is being applied for.
2. The report must be typed within the spaces provided in the form. The size of the spaces provided is not necessarily indicative of the amount of information to be provided. The report is in the form of a table that can extend itself as each space is filled with typing.
3. Where applicable **tick** the boxes that are applicable or **black out** the boxes that are not applicable in the report.
4. An incomplete report may be returned to the applicant for revision.
5. The use of “not applicable” in the report must be done with circumspection because if it is used in respect of material information that is required by the competent authority for assessing the application, it may result in the rejection of the application as provided for in the regulations.
6. This report must be handed in at offices of the relevant competent authority as determined by each authority **unless indicated otherwise by the Department.**
7. No faxed or e-mailed reports will be accepted **unless indicated otherwise by the Department.**
8. The report must be compiled by an independent environmental assessment practitioner (EAP).
9. Unless protected by law, all information in the report will become public information on receipt by the competent authority. Any interested and affected party should be provided with the information contained in this report on request, during any stage of the application process.
10. A competent authority may require that for specified types of activities in defined situations only parts of this report need to be completed.



SECTION A: ACTIVITY INFORMATION

Has a specialist been consulted to assist with the completion of this section?

NO

If YES, please complete form XX for each specialist thus appointed:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

Describe the activity, which is being applied for, in detail

Location & Development Description:

The proposed residential dwelling will be developed on Erf 1256 Sea Vista, a suburb of St Francis Bay, Eastern Cape (GPS coordinates: 34° 8'49.09"S|24°50'19.34"E).

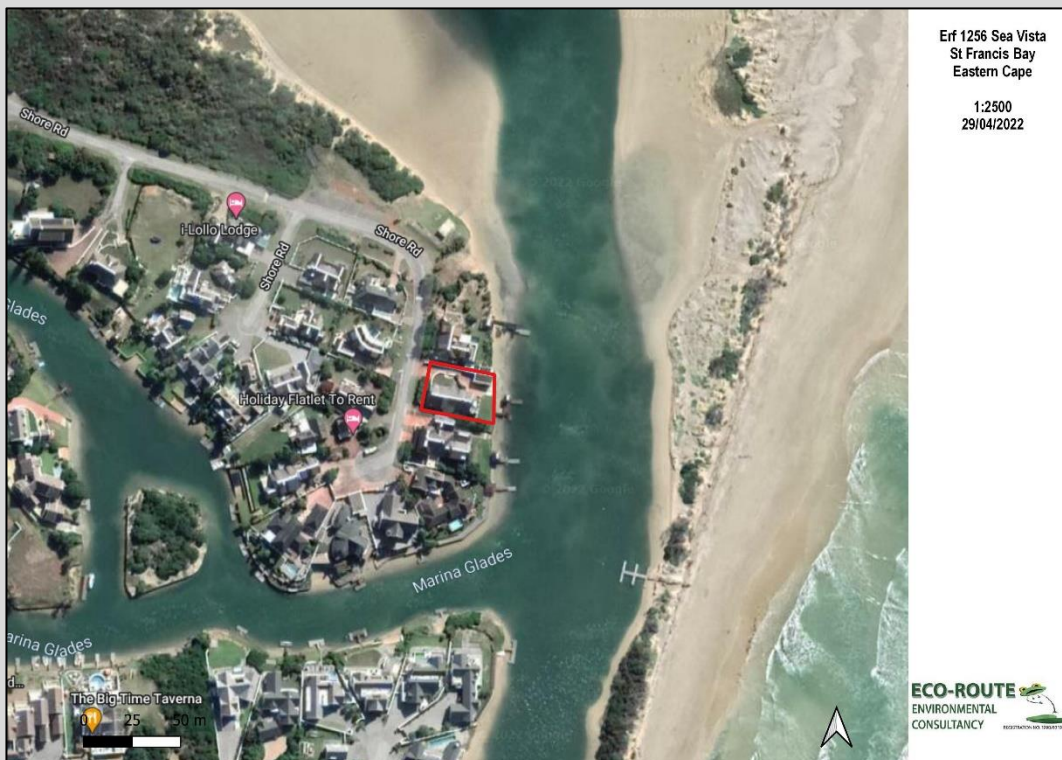


Figure 1: Locality map of Erf 1256, Sea Vista, St Francis Bay (1:2500)

Erf 1256 is zoned for Residential use. The property is 910m² in extent and currently has an existing residential dwelling which is to be demolished in preparation for a new residential dwelling to be constructed.

The dwelling footprint will be 455m², is located along the Marina Glades canal and falls within an Estuarine Functional Zone. The Estuarine Functional Zone (EFZ) is defined as the area in and around an estuary which includes the open water area, estuarine habitat (such as sand and mudflats, rock and plant communities), and the surrounding floodplain area, as defined by the area below the 5 m topographical contour (referenced from the indicative mean sea level).

The proposed residential development will entail the construction of a three-storey (lower ground, ground and first floor) house, associated decking and paving for vehicular access. The dwelling will occupy 50% of the site as opposed to the previous dwelling which occupied 30% of the property.

Access to Erf 1256 is via Shore Road, which lies to the west of the property.

The residential dwelling will mostly make use of municipal services. All effluent generated by the activity will be collected in conservancy tanks. Installation of the tank/s is to be in accordance with the relevant SANS and municipality specifications and to be located in such a manner as to facilitate access thereto by municipal vehicles used for the servicing of conservancy tanks. The integrity of the tanks is to be inspected on a regular basis to avoid potential leaks.

Terrestrial Biodiversity:

According to VegMap 2018, the vegetation on site is characterised as non-terrestrial vegetation. There are two areas; 1) to the west and the 2) to the east of the property which contain patches of mowed lawn. Half of the site (east) is classified as an ESA in terms of the Garden Route Biodiversity Spatial Plan.

Coastal Management:

A climate change assessment was undertaken by the Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans and Coasts. The assessment found that the property is located in an area that has moderate estuary flood risk but the area a bit further from the property boundary has very high estuary flood risk. During a storm event this property is at very high risk of flooding.

In addition, the property is located in an area that has moderate estuary erosion risk. Overtime, this property will be a moderate risk of eroding due to the dynamic coastal events.

2. FEASIBLE AND REASONABLE ALTERNATIVES

“alternatives”, in relation to a proposed activity, means different means of meeting the general purpose and requirements of the activity, which may include alternatives to—

- (a) the property on which or location where it is proposed to undertake the activity;
- (b) the type of activity to be undertaken;
- (c) the design or layout of the activity;
- (d) the technology to be used in the activity;
- (e) the operational aspects of the activity; and
- (f) the option of not implementing the activity.

Describe alternatives that are considered in this application. Alternatives should include a consideration of all possible means by which the purpose and need of the proposed activity could be accomplished in the specific instance taking account of the interest of the applicant in the activity. The no-go alternative must in all cases be included in the assessment phase as the baseline against which the impacts of the other alternatives are assessed. The determination of whether 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. 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.

A) Property and site alternatives

The preferred site/A1 is located at GPS co-ordinates: 34° 8'49.09"S|24°50'19.34"E. There are no other property or site alternatives being assessed as Erf 1256 is zoned for residential use and the applicant/landowner has the intention to utilise the property for a residential dwelling.

B) Activity alternatives

There are no activity alternatives. The EIA was commissioned for the sole purpose of investigating the construction of a residential dwelling.

C) Design or layout alternatives

Due to site constraints and strict design guidelines to abide by in order to keep the aesthetic of the surrounding area/community; only one design layout has been considered.

D) Technology alternatives

The development will incorporate the use of solar panels and rainwater harvesting.

E) Operational alternatives

There are no operational alternatives. The EIA was commissioned for the sole purpose of investigating the construction of a residential dwelling. In addition, the property is zoned for residential development only.

F) No-go option

The no-go option would result in the status quo. This option is not feasible as this approach would deny the applicant his lawful right to develop a residential dwelling on this property.

Paragraphs 3 – 13 below should be completed for each alternative.

3. ACTIVITY POSITION

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 should be in degrees and decimal minutes. The minutes should have 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.

List alternative sites if applicable.

Alternative:

- Alternative S1¹ (preferred or only site alternative)
- Alternative S2 (if any)
- Alternative S3 (if any)

Latitude (S):

Longitude (E):

| | | | |
|-----|--------|-----|---------|
| 34° | 8.818' | 24° | 50.320' |
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |

In the case of linear activities:

Alternative:

- Alternative S1 (preferred or only route alternative)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

Latitude (S):

Longitude (E):

| | | | |
|---|---|---|---|
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |

Alternative S2 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

| | | | |
|---|---|---|---|
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |

Alternative S3 (if any)

- Starting point of the activity
- Middle point of the activity
- End point of the activity

| | | | |
|---|---|---|---|
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |
| 0 | ' | 0 | ' |

For route alternatives that are longer than 500m, please provide an addendum with co-ordinates taken every 250 meters along the route for each alternative alignment.

4. PHYSICAL SIZE OF THE ACTIVITY

Indicate the physical size of the preferred activity/technology as well as alternative activities/technologies (footprints):

Alternative:

Size of the activity:

¹ "Alternative S.." refer to site alternatives.



Alternative A1² (preferred activity alternative)
Alternative A2 (if any)
Alternative A3 (if any)
or, for linear activities:

| |
|-------------------|
| 455m ² |
| m ² |
| m ² |

Alternative:
Alternative A1 (preferred activity alternative)
Alternative A2 (if any)
Alternative A3 (if any)

Length of the activity:

| |
|---|
| m |
| m |
| m |

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

Alternative A1 (preferred activity alternative)
Alternative A2 (if any)
Alternative A3 (if any)

Size of the site/servitude:

| |
|----------------|
| m ² |
| m ² |
| m ² |

5. SITE ACCESS

Does ready access to the site exist?
If NO, what is the distance over which a new access road will be built

| | |
|-----|----|
| YES | NO |
| m | |

Describe the type of access road planned:

n/a

Include the position of the access road on the site plan and required map, as well as an indication of the road in relation to the site.

6. SITE OR ROUTE PLAN

A detailed site or route plan(s) must be prepared for each alternative site or alternative activity. It must be attached as Appendix A to this document. Please refer to Appendix A.

The site or route plans must indicate the following:

- 6.1 the scale of the plan which must be at least a scale of 1:500;
- 6.2 the property boundaries and numbers of all the properties within 50 metres of the site;
- 6.3 the current land use as well as the land use zoning of each of the properties adjoining the site or sites;
- 6.4 the exact position of each element of the application as well as any other structures on the site;
- 6.5 the position of services, including electricity supply cables (indicate above or underground), water supply pipelines, boreholes, street lights, sewage pipelines, storm water infrastructure and telecommunication infrastructure;

² "Alternative A.." refer to activity, process, technology or other alternatives.

- 6.6 all trees and shrubs taller than 1.8 metres;
- 6.7 walls and fencing including details of the height and construction material;
- 6.8 servitudes indicating the purpose of the servitude;
- 6.9 sensitive environmental elements within 100 metres of the site or sites including (but not limited thereto):
 - rivers;
 - the 1:100 year flood line (where available or where it is required by DWA);
 - ridges;
 - cultural and historical features;
 - areas with indigenous vegetation (even if it is degraded or invested with alien species);
- 6.9 for gentle slopes the 1 metre contour intervals must be indicated on the plan and whenever the slope of the site exceeds 1:10, the 500mm contours must be indicated on the plan; and
- 6.10 the positions from where photographs of the site were taken.

7. SITE PHOTOGRAPHS

Colour photographs from the centre of the site must be taken in at least the eight major compass directions with a description of each photograph. Photographs must be attached under Appendix B to this form. It must be supplemented with additional photographs of relevant features on the site, if applicable. Please refer to Appendix B.

8. FACILITY ILLUSTRATION

A detailed illustration of the activity must be provided at a scale of 1:200 as Appendix C for activities that include structures. The illustrations must be to scale and must represent a realistic image of the planned activity. The illustration must give a representative view of the activity. Please refer to Appendix C.

9. ACTIVITY MOTIVATION

9(a) Socio-economic value of the activity

What is the expected capital value of the activity on completion?

| |
|-------------|
| R10 000 000 |
|-------------|

What is the expected yearly income that will be generated by or as a result of the activity?

| |
|-----|
| n/a |
|-----|

Will the activity contribute to service infrastructure?

| | |
|-----|----|
| YES | NO |
|-----|----|

Is the activity a public amenity?

| | |
|-----|----|
| YES | NO |
|-----|----|



| | |
|---|-----------------------|
| How many new employment opportunities will be created in the development phase of the activity? | Unknown at this stage |
| What is the expected value of the employment opportunities during the development phase? | R2 000 000 |
| What percentage of this will accrue to previously disadvantaged individuals? | 50% |
| How many permanent new employment opportunities will be created during the operational phase of the activity? | n/a |
| What is the expected current value of the employment opportunities during the first 10 years? | n/a |
| What percentage of this will accrue to previously disadvantaged individuals? | n/a |

9(b) Need and desirability of the activity

Motivate and explain the need and desirability of the activity (including demand for the activity):

Erf 1256 is zoned as Residential, and the construction of a primary dwelling is permitted in terms of the existing land use rights and the local municipal SDP.

Due to the presence of an existing residential dwelling, there are no vegetation Species of Conservation Concern or protected plant species present. This will result in a local negligible terrestrial biodiversity impact.

The applicant has every interest to abide by the local municipal and local committee guidelines to protect the adjacent canal which is formed by the Kouga River estuary.

The site was selected based on the existing land use rights and the land use character of the surrounding environment.

Indicate any benefits that the activity will have for society in general:

It is envisioned that the basic needs required to run the household will all make use of environmentally sustainable technology.

Indicate any benefits that the activity will have for the local communities where the activity will be located:

The proposed activity will create temporary employment opportunities and skills development for the local community during the construction phase.

10. APPLICABLE LEGISLATION, POLICIES AND/OR GUIDELINES

List all legislation, policies and/or guidelines of any sphere of government that are applicable to the application as contemplated in the EIA regulations, if applicable:

| Title of legislation, policy or guideline: | Administering authority: | Date: |
|---|--|--|
| Constitution of the Republic of South Africa. (Act 108 of 1996) | All State and Provincial Departments as well as Local Authorities that have been identified as relevant Competent Authorities. | Relevant Consideration |
| Environmental Conservation Act (Act 73 of 1989) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Environmental Management Act (Act 107 of 1998) | Department of Economic Development, Environmental Affairs & Tourism | Authorization – December 2022/January 2023 |
| National Environmental Management: Biodiversity Act (Act 10 of 2004) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Environmental Management: Integrated Coastal Management Act (Act 24 of 2008) | Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans & Coasts (O&C)/ Department of Economic Development, Environmental Affairs & Tourism | Comment/ Relevant Consideration |
| National Environmental Management: Protected Areas Act (Act 57 of 2003) | Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| National Water Act (Act 36 of 1998) | Department of Water and Sanitation | Relevant Consideration |
| Water Services Act (Act 108 of 1997) | Department of Water and Sanitation | Relevant Consideration |
| Sea Shore Act (Act 21 Of 1935) | Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans & Coasts (O&C)/ Department of Economic Development, Environmental Affairs & Tourism | Relevant Consideration |
| Conservation Of Agricultural Resources Act (Act 43 of 1983) | Department of Agriculture, Forestry and Fisheries | Relevant Consideration |
| National Heritage Resources Act (Act 25 of 1999) | Eastern Cape Provincial Heritage Resources Authority | Comment/ Relevant Consideration |

Listed Activities in terms of the NEMA EIA Regulations 2014, as amended:



| Detailed description of listed activities associated with the project | |
|--|---|
| Listed activity as described in GN R.324, 325, and 327 | Description of project activity that triggers listed activity – if activities in GN R. 324 are triggered, indicate the triggering criteria as described in the second column of GN R. 324 |
| <i>e.g. GN R.324 XX(x): The construction of a bridge within 32m of a water course</i> | <i>e.g. A bridge measuring 5 m in height and 10m in length, not wider than 8 meters will be built over the Vaal river</i> |
| <p>GN R.327 19</p> <p>The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse; but excluding where such infilling, depositing, dredging, excavation, removal or moving—</p> <p>(a) will occur behind a development setback;</p> <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan;</p> <p>(c) falls within the ambit of activity 21 in this Notice, in which case that activity applies;</p> <p>(d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</p> <p>(e) 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.</p> | <p>The proposed development of a residential dwelling will require the excavation of approximately more than 10 cubic metres of soil from Erf 1256. The property is adjacent to the Krom River estuary.</p> |
| <p>GN R.327 19A</p> <p>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—</p> <p>(i) the seashore;</p> <p>(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</p> <p>(iii) the sea; —</p> <p>but excluding where such infilling, depositing , dredging, excavation, removal or moving—</p> <p>(a) will occur behind a development setback;</p> | <p>The proposed development of a residential dwelling will require the excavation of more than 5 cubic metres of soil from Erf 1256. The property is adjacent to the Krom River estuary.</p> |



| | |
|--|---|
| <p>(b) is for maintenance purposes undertaken in accordance with a maintenance management plan; (c) falls within the ambit of activity 21 in this Notice, in which case that activity applies; (d) occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or (e) 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.</p> | |
| <p>GN R.327 31</p> <p>The decommissioning of existing facilities, structures or infrastructure for—</p> <p>(i) any development and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014; (ii) any expansion and related operation activity or activities listed in this Notice, Listing Notice 2 of 2014 or Listing Notice 3 of 2014; (iii) (iv) any phased activity or activities for development and related operation activity or expansion or related operation activities listed in this Notice or Listing Notice 3 of 2014; or (v) any activity regardless the time the activity was commenced with, where such activity: (a) is similarly listed to an activity in (i) or (ii) above; and (b) is still in operation or development is still in progress;</p> <p>excluding where—</p> <p>(aa) activity 22 of this notice applies; or (bb) the decommissioning is covered by part 8 of the National Environmental Management: Waste Act, 2008 (Act No. 59 of 2008) in which case the National Environmental Management: Waste Act, 2008 applies.</p> | <p>The existing dwelling on Erf 1256 St Francis Bay will be decommissioned in order to construct a new residential dwelling which will trigger activities listed in Listing Notice 1 and 3 of the EIA regulations 2014, as amended.</p> |
| <p>GN R.324 14</p> <p>The development of—</p> <p>(i) dams or weirs, where the dam or weir, including infrastructure and water surface area exceeds 10 square metres; or</p> | <p>The proposed new dwelling will be 442m² and will be adjacent to the Krom River Estuary.</p> |



| | |
|--|--|
| <p>(ii) infrastructure or structures with a physical footprint of 10 square metres or more;</p> <p>where such development occurs—</p> <p>(a) within a watercourse; (b) in front of a development setback; or (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse;</p> <p>excluding the development of infrastructure or structures within existing ports or harbours that will not increase the development footprint of the port or harbour.</p> <p>a. Eastern Cape ii. Inside urban areas: (aa) Areas zoned for use as public open space; (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority, zoned for a conservation purpose; or (cc) Areas seawards of the development setback line.</p> | |
|--|--|

11. WASTE, EFFLUENT, EMISSION AND NOISE MANAGEMENT

11(a) Solid waste management

Will the activity produce solid construction waste during the construction/initiation phase?

| | |
|---------|----|
| YES | NO |
| Unknown | |

If yes, what estimated quantity will be produced per month?

An estimate could not be made as a contractor has not been appointed at this stage. However, the quantity is expected to be medium – high as there will be demolition of an existing dwelling.

How will the construction solid waste be disposed of (describe)?

Construction waste will be sorted into piles of recyclable, hazardous and general waste.

Where will the construction solid waste be disposed of (describe)?

Construction solid waste will be transported to the nearest registered landfill site for disposal.

Will the activity produce solid waste during its operational phase?

| | |
|-----|----|
| YES | NO |
|-----|----|

Only household waste will be generated.



If yes, what estimated quantity will be produced per month?

Unknown

How will the solid waste be disposed of (describe)?

Solid waste will be separated into recyclable and non-recyclable for disposal by the Kouga Municipality.

Where will the solid waste be disposed if it does not feed into a municipal waste stream (describe)?

Solid waste will be collected by Kouga Municipality's waste collection services for recycling and/ or transported to the nearest registered landfill site for dumping if waste is non-recyclable.

If the solid waste (construction or operational phases) will not be disposed of in a registered landfill site or be taken up in a municipal waste stream, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Can any part of the solid waste be classified as hazardous in terms of the relevant legislation?

| | |
|-----|----|
| YES | NO |
|-----|----|

If yes, inform the competent authority and request a change to an application for scoping and EIA.

Is the activity that is being applied for a solid waste handling or treatment facility?

| | |
|-----|----|
| YES | NO |
|-----|----|

If yes, then the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

11(b) Liquid effluent

Will the activity produce effluent, other than normal sewage, that will be disposed of in a municipal sewage system?

| | |
|-----|----|
| YES | NO |
|-----|----|

If yes, what estimated quantity will be produced per month?

m³

Will the activity produce any effluent that will be treated and/or disposed of on site?

| | |
|-----|----|
| Yes | NO |
|-----|----|

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

Will the activity produce effluent that will be treated and/or disposed of at another facility?

| | |
|-----|----|
| YES | NO |
|-----|----|

If yes, provide the particulars of the facility:

| | |
|-----------------|--|
| 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:

| |
|------|
| None |
|------|

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?

| | |
|-----|----|
| YES | NO |
| YES | NO |

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the emissions in terms of type and concentration:

| |
|-----|
| N/A |
|-----|

11(d) Generation of noise

Will the activity generate noise?

| | |
|-----|----|
| YES | NO |
| YES | NO |

If yes, is it controlled by any legislation of any sphere of government?

If yes, the applicant should consult with the competent authority to determine whether it is necessary to change to an application for scoping and EIA.

If no, describe the noise in terms of type and level:

| |
|--|
| Noise associated with the construction phase of the development. Construction work will only be permitted during weekdays from 7:00 am to 5:00 pm. |
|--|

12. WATER USE

Please indicate the source(s) of water that will be used for the activity by ticking the appropriate box(es)

| | | | | | |
|------------------------------------|--------------------------------------|--------------------------------------|---|--------------------------------|--|
| <input type="checkbox"/> municipal | <input type="checkbox"/> water board | <input type="checkbox"/> groundwater | <input type="checkbox"/> river, stream, dam or lake | <input type="checkbox"/> other | <input type="checkbox"/> the activity will not use water |
|------------------------------------|--------------------------------------|--------------------------------------|---|--------------------------------|--|

If water is to be extracted from groundwater, river, stream, dam, lake or any other natural feature, please indicate

the volume that will be extracted per month:

| | |
|--------|----|
| litres | |
| YES | NO |

Does the activity require a water use permit from the Department of Water Affairs?

If yes, please submit the necessary application to the Department of Water Affairs and attach proof thereof to this application if it has been submitted.

13. ENERGY EFFICIENCY

Describe the design measures, if any, that have been taken to ensure that the activity is energy efficient:

The use of energy saving light bulbs and natural light incorporated into the architecture will contribute to energy saving.

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

Solar panels will be incorporated into the design of the activity.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

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

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

| |
|---|
| 1 |
|---|

- Paragraphs 1 - 6 below must be completed for each alternative.



3. Has a specialist been consulted to assist with the completion of this section?

| | |
|-----|----|
| YES | NO |
| | |

If YES, please complete form XX for each specialist thus appointed:

All specialist reports must be contained in Appendix D.

1. GRADIENT OF THE SITE

Indicate the general gradient of the site.

Alternative S1:

| | | | | | | |
|------|-------------|-------------|-------------|--------------|-------------|------------------|
| Flat | 1:50 – 1:20 | 1:20 – 1:15 | 1:15 – 1:10 | 1:10 – 1:7,5 | 1:7,5 – 1:5 | Steeper than 1:5 |
|------|-------------|-------------|-------------|--------------|-------------|------------------|

Alternative S2 (if any):

| | | | | | | |
|------|-------------|-------------|-------------|--------------|-------------|------------------|
| Flat | 1:50 – 1:20 | 1:20 – 1:15 | 1:15 – 1:10 | 1:10 – 1:7,5 | 1:7,5 – 1:5 | Steeper than 1:5 |
|------|-------------|-------------|-------------|--------------|-------------|------------------|

Alternative S3 (if any):

| | | | | | | |
|------|-------------|-------------|-------------|--------------|-------------|------------------|
| Flat | 1:50 – 1:20 | 1:20 – 1:15 | 1:15 – 1:10 | 1:10 – 1:7,5 | 1:7,5 – 1:5 | Steeper than 1:5 |
|------|-------------|-------------|-------------|--------------|-------------|------------------|

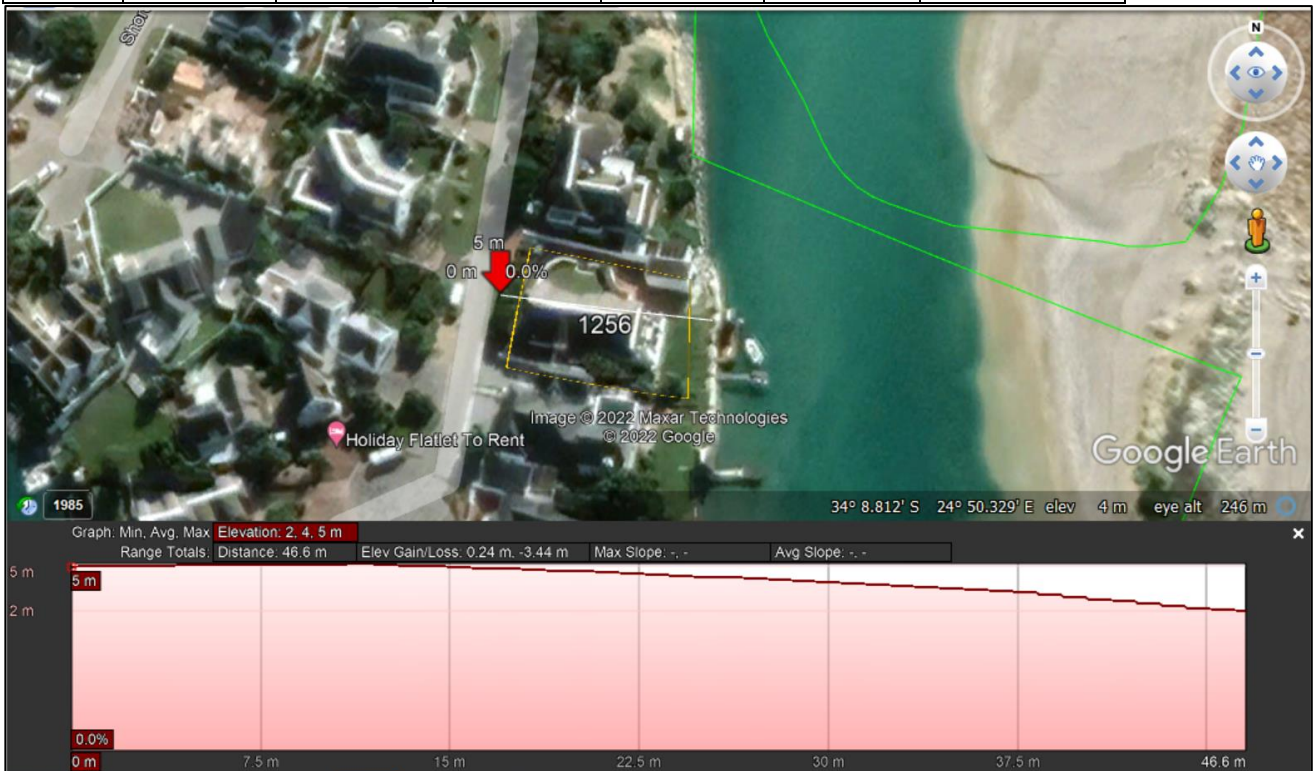


Figure 2: Elevation profile of Erf 1256, St Francis Bay, EC

2. LOCATION IN LANDSCAPE

Indicate the landform(s) that best describes the site:

- 2.1 Ridgeline
- 2.2 Plateau
- 2.3 Side slope of hill/mountain
- 2.4 Closed valley
- 2.5 Open valley
- 2.6 Plain**
- 2.7 Undulating plain / low hills
- 2.8 Dune
- 2.9 Seafront

3. GROUNDWATER, SOIL AND GEOLOGICAL STABILITY OF THE SITE

Is the site(s) located on any of the following (tick the appropriate boxes)?

| | Alternative S1: | | Alternative S2 (if any): | | Alternative S3 (if any): | |
|--|------------------------|----|---------------------------------|----|---------------------------------|----|
| Shallow water table (less than 1.5m deep) | YES | NO | YES | NO | YES | NO |
| Dolomite, sinkhole or doline areas | YES | NO | YES | NO | YES | NO |
| Seasonally wet soils (often close to water bodies) | YES | NO | YES | NO | YES | NO |
| Unstable rocky slopes or steep slopes with loose soil | YES | NO | YES | NO | YES | NO |
| Dispersive soils (soils that dissolve in water) | YES | NO | YES | NO | YES | NO |
| Soils with high clay content (clay fraction more than 40%) | YES | NO | YES | NO | YES | NO |
| Any other unstable soil or geological feature | YES | NO | YES | NO | YES | NO |
| An area sensitive to erosion | YES | NO | YES | NO | YES | NO |

If you are unsure about any of the above or if you are concerned that any of the above aspects may be an issue of concern in the application, an appropriate specialist should be appointed to assist in the completion of this section. (Information in respect of the above will often be available as part of the project information or at the planning sections

of local authorities. Where it exists, the 1:50 000 scale Regional Geotechnical Maps prepared by the Council for Geo Science may also be consulted).

4. GROUNDCOVER

Indicate the types of groundcover present on the site:

- 4.1 Natural veld – good condition ^E
- 4.2 Natural veld – scattered aliens ^E
- 4.3 Natural veld with heavy alien infestation ^E
- 4.4 Veld dominated by alien species ^E
- 4.5 Gardens
- 4.6 Sport field
- 4.7 Cultivated land
- 4.8 Paved surface
- 4.9 Building or other structure
- 4.10 Bare soil

The location of all identified rare or endangered species or other elements should be accurately indicated on the site plan(s).

| | | | | |
|--|---|--|--|-----------|
| Natural veld - good condition ^E | Natural veld with scattered aliens ^E | Natural veld with heavy alien infestation ^E | Veld dominated by alien species ^E | Gardens |
| Sport field | Cultivated land | Paved surface | Building or other structure | Bare soil |

If any of the boxes marked with an “E” is ticked, please consult an appropriate specialist to assist in the completion of this section if the environmental assessment practitioner doesn’t have the necessary expertise.

5. LAND USE CHARACTER OF SURROUNDING AREA

Indicate land uses and/or prominent features that currently occur within a 500m radius of the site and give description of how this influences the application or may be impacted upon by the application:

5.1 Natural area

5.2 Low density residential

5.3 Medium density residential

5.4 High density residential

5.5 Informal residential

5.6 Retail commercial & warehousing

5.7 Light industrial

5.8 Medium industrial ^{AN}

- 5.9 Heavy industrial ^{AN}
- 5.10 Power station
- 5.11 Office/consulting room**
- 5.12 Military or police base/station/compound
- 5.13 Spoil heap or slimes dam^A
- 5.14 Quarry, sand or borrow pit
- 5.15 Dam or reservoir
- 5.16 Hospital/medical centre
- 5.17 School
- 5.18 Tertiary education facility
- 5.19 Church
- 5.20 Old age home
- 5.21 Sewage treatment plant^A
- 5.22 Train station or shunting yard ^N
- 5.23 Railway line ^N
- 5.24 Major road (4 lanes or more) ^N
- 5.25 Airport ^N
- 5.26 Harbour
- 5.27 Sport facilities
- 5.28 Golf course
- 5.29 Polo fields
- 5.30 Filling station ^H
- 5.31 Landfill or waste treatment site
- 5.32 Plantation
- 5.33 Agriculture
- 5.34 River, stream or wetland**
- 5.35 Nature conservation area
- 5.36 Mountain, koppie or ridge
- 5.37 Museum
- 5.38 Historical building
- 5.39 Protected Area**
- 5.40 Graveyard
- 5.41 Archaeological site
- 5.42 Other land uses (describe)

If any of the boxes marked with an "N" are ticked, how will this impact / be impacted upon by the proposed activity.

If any of the boxes marked with an "An" are ticked, how will this impact / be impacted upon by the proposed activity.
If YES, specify and explain:

If YES, specify: n/a

If any of the boxes marked with an "H" are ticked, how will this impact / be impacted upon by the proposed activity.

If YES, specify and explain:

If YES, specify: n/a

6. CULTURAL/HISTORICAL FEATURES

| | | |
|--|---|----|
| 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: | N/A – please see attached Site Sensitivity Verification Report (Appendix G) | |
| If uncertain, conduct a specialist investigation by a recognised specialist in the field to establish whether there is such a feature(s) present on or close to the site. | | |
| Briefly explain the findings of the specialist: | N/A | |
| 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 submits the necessary application to SAHRA or the relevant provincial heritage agency and attach proof thereof to this application if such application has been made. | | |

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

Proof of advertisement in the St Francis Chronicles attached as Appendix G.

The person conducting a public participation process must take into account any guidelines applicable to public participation as contemplated in section 24J of the Act and must give notice to all potential interested and affected parties of the application which is subjected to public participation by—

- (a) fixing a notice board (of a size at least 60cm by 42cm; and must display the required information in lettering and in a format as may be determined by the competent authority) 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
 - (ii) any alternative site mentioned in the application;

- (b) giving written notice to—
 - (i) the owner or person in control of that land if the applicant is not the owner or person in control of the land;
 - (ii) the occupiers of the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iii) owners and occupiers of land adjacent to the site where the activity is or is to be undertaken or to any alternative site where the activity is to be undertaken;
 - (iv) the municipal councillor of the ward in which the site or alternative site is situated and any organisation of ratepayers that represent the community in the area;
 - (v) the municipality which has jurisdiction in the area;
 - (vi) any organ of state having jurisdiction in respect of any aspect of the activity; and
 - (vii) any other party as required by the competent authority;
- (c) placing an advertisement in—
 - (i) one local newspaper; or
 - (ii) any official *Gazette* that is published specifically for the purpose of providing public notice of applications or other submissions made in terms of these Regulations;
- (d) placing 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: Provided that this paragraph need not be complied with if an advertisement has been placed in an official *Gazette* referred to in subregulation 54(c)(ii); and
- (e) using reasonable alternative methods, as agreed to by the competent authority, in those instances where a person is desiring of but unable to participate in the process due to—
 - (i) illiteracy;
 - (ii) disability; or
 - (iii) any other disadvantage.

2. CONTENT OF ADVERTISEMENTS AND NOTICES

Proof of notice boards attached in appendix G.

A notice board, advertisement or notices must:

- (a) indicate the details of the application which is subjected to public participation; and
- (b) state—
 - (i) that the application has been submitted to the competent authority in terms of these Regulations, as the case may be;
 - (ii) whether basic assessment or scoping procedures are being applied to the application, in the case of an application for environmental authorisation;
 - (iii) the nature and location of the activity to which the application relates;
 - (iv) where further information on the application or activity can be obtained; and
 - (iv) the manner in which and the person to whom representations in respect of the application may be made.

3. PLACEMENT OF ADVERTISEMENTS AND NOTICES

Where the proposed activity may have impacts that extend beyond the municipal area where it is located, a notice must be placed in at least one provincial newspaper or national newspaper, indicating that an application will be submitted to the competent authority in terms of these regulations, the nature and location of the activity, where further information on the proposed activity can be obtained and the manner in which representations in respect of the application can be made, unless a notice has been placed in any *Gazette* that is published specifically for the purpose of providing notice to the public of applications made in terms of the EIA regulations.

Advertisements and notices must make provision for all alternatives.

4. DETERMINATION OF APPROPRIATE MEASURES

The practitioner must ensure that the public participation is adequate and must determine whether a public meeting or any other additional measure is appropriate or not based on the particular nature of each case. Special attention should be given to the involvement of local community structures such as Ward Committees, ratepayers associations and traditional authorities where appropriate. Please note that public concerns that emerge at a later stage that should have been addressed may cause the competent authority to withdraw any authorisation it may have issued if it becomes apparent that the public participation process was inadequate.

5. COMMENTS AND RESPONSE REPORT

Attached in Appendix E.

The practitioner must record all comments and respond to each comment of the public before the application is submitted. The comments and responses must be captured in a comments and response report as prescribed in the EIA regulations and be attached to this application. The comments and response report must be attached under Appendix E.

6. AUTHORITY PARTICIPATION

Authorities are key interested and affected parties in each application and no decision on any application will be made before the relevant local authority is provided with the opportunity to give input. The planning and the environmental sections of the local authority must be informed of the application at least 30 (thirty) calendar days before the submission of the application.

List of authorities informed:

Please refer to Appendix G.2 for a full I&AP register.

List of authorities from whom comments have been received:

Preliminary comments: The Department of Forestry, Fisheries, and the Environment (DFFE),
Branch Oceans & Coasts (O&C)

7. CONSULTATION WITH OTHER STAKEHOLDERS



Note that, for linear activities, or where deviation from the public participation requirements may be appropriate, the person conducting the public participation process may deviate from the requirements of that subregulation to the extent and in the manner as may be agreed to by the competent authority.

Any stakeholder that has a direct interest in the site or property, such as servitude holders and service providers, should be informed of the application at least 30 (thirty) calendar days before the submission of the application and be provided with the opportunity to comment.

Has any comment been received from stakeholders?

| | |
|-----|----|
| YES | NO |
|-----|----|

If "YES", briefly describe the feedback below (also attach copies of any correspondence to and from the stakeholders to this application):

| |
|--|
| Only a pre-application public participation has been undertaken. Any comments from stakeholders will be recorded in the Final BAR. |
|--|

SECTION D: IMPACT ASSESSMENT

The assessment of impacts must adhere to the minimum requirements in the EIA Regulations, 2014 as amended, and should take applicable official guidelines into account. The issues raised by interested and affected parties should also be addressed in the assessment of impacts.

1. ISSUES RAISED BY INTERESTED AND AFFECTED PARTIES

List the main issues raised by interested and affected parties.

Preliminary comments were received from The Department of Forestry, Fisheries, and the Environment (DFFE), Branch Oceans & Coasts (O&C). These comments have been addressed in Appendix E.

Response from the practitioner to the issues raised by the interested and affected parties (A full response must be given in the Comments and Response Report that must be attached to this report):

Comments received during the draft public participation will be included and addressed in the Final BAR.

2. IMPACTS THAT MAY RESULT FROM THE PLANNING AND DESIGN, CONSTRUCTION, OPERATIONAL, DECOMMISSIONING AND CLOSURE PHASES AS WELL AS PROPOSED MANAGEMENT OF IDENTIFIED IMPACTS AND PROPOSED MITIGATION MEASURES

List the potential direct, indirect and cumulative property/activity/design/technology/operational alternative related impacts (as appropriate) that are likely to occur as a result of the planning and design phase, construction phase, operational phase, decommissioning and closure phase, including impacts relating to the choice of site/activity/technology alternatives as well as the mitigation measures that may eliminate or reduce the potential impacts listed.

Impact Assessment Methods

Criteria are ascribed for each predicted impact. These include the intensity (size or degree scale), which also includes the type of impact, being either a positive or negative impact; the duration (temporal scale); and the extent (spatial scale), as well as the probability (likelihood). The methodology is quantitative, whereby professional judgement is used to identify a rating for each criterion based on a seven-point scale (Table 1) and the significance is auto-generated using a spreadsheet through application of the calculations.

For each predicted impact, certain criteria are applied to establish the likely **significance** of the impact, firstly in the case of no mitigation being applied and then with the most effective mitigation measure(s) in place.

These criteria include the **intensity** (size or degree scale), which also includes the **nature** of impact, being either a positive or negative impact; the **duration** (temporal scale); and the **extent** (spatial scale). These numerical ratings are used in an equation whereby the **consequence** of the impact can be calculated. Consequence is calculated as follows:

Consequence = type x (intensity + duration + extent)

To calculate the significance of an impact, the **probability** (or likelihood) of that impact occurring is applied to the consequence.

Significance = consequence x probability

Depending on the numerical result, the impact would fall into a significance category as negligible, minor, moderate or major, and the type would be either positive or negative.

Table 1: Assessment criteria for the evaluation of impacts

| Criteria | Numeric Rating | Category | Description |
|------------------------------|----------------|-------------------------------|---|
| Duration | 1 | Immediate | Impact will self-remedy immediately |
| | 2 | Brief | Impact will not last longer than 1 year |
| | 3 | Short term | Impact will last between 1 and 5 years |
| | 4 | Medium term | Impact will last between 5 and 10 years |
| | 5 | Long term | Impact will last between 10 and 15 years |
| | 6 | On-going | Impact will last between 15 and 20 years |
| | 7 | Permanent | Impact may be permanent, or in excess of 20years |
| Extent | 1 | Very limited | Limited to specific isolated parts of the site |
| | 2 | Limited | Limited to the site and its immediate surroundings |
| | 3 | Local | Extending across the site and to nearby settlements |
| | 4 | Municipal area | Impacts felt at a municipal level |
| | 5 | Regional | Impacts felt at a regional level |
| | 6 | National | Impacts felt at a national level |
| | 7 | International | Impacts felt at an international level |
| Intensity | 1 | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| | 2 | Very low | Natural and/ or social functions and/ or processes are slightly altered |
| | 3 | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| | 4 | Moderate | Natural and/ or social functions and/ or processes are moderately altered |
| | 5 | High | Natural and/ or social functions and/ or processes are notably altered |
| | 6 | Very high | Natural and/ or social functions and/ or processes are majorly altered |
| | 7 | Extremely high | Natural and/ or social functions and/ or processes are severely altered |
| P r o b a b i l i t y | 1 | Highly unlikely / None | Expected never to happen |
| | 2 | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| | 3 | Unlikely | Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur |
| | 4 | Probable | Has occurred here or elsewhere and could therefore occur |

| | | | |
|--|---|---|--|
| | 5 | Likely | The impact may occur |
| | 6 | Almost certain / Highly probable | It is most likely that the impact will occur |
| | 7 | Certain / Definite | There are sound scientific reasons to expect that the impact will definitely occur |

When assessing impacts, broader considerations are also considered. These include the level of confidence in the assessment rating; the reversibility of the impact; and the irreplaceability of the resource as set out in (Table 2, Table 3, and Table 4), respectively.

Table 2: Definition of confidence ratings.

| Category | Description |
|----------|--|
| Low | Judgement is based on intuition |
| Medium | Determination is based on common sense and general knowledge |
| High | Substantive supportive data exists to verify the assessment |

Table 3: Definition of reversibility ratings.

| Category | Description |
|----------|---|
| Low | The affected environment will not be able to recover from the impact - permanently modified |
| Medium | The affected environment will only recover from the impact with significant intervention |
| High | The affected environment will be able to recover from the impact |

Table 4: Definition of irreplaceability ratings.

| Category | Description |
|----------|--|
| Low | The resource is not damaged irreparably or is not scarce |
| Medium | The resource is damaged irreparably but is represented elsewhere |

| Project Phase | Planning, Design / Construction | | | |
|---------------------------|---|--|------------------------------|---|
| Impact | Soil and geological stability of the site | | | |
| Description of impact | Potential settlement issues and stability problems | | | |
| Mitigable | High | Mitigation exists and will considerably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> The in-situ soil conditions can be classified as sandy soil with low to moderate bearing capacity. The building foundations will be designed for a low bearing capacity of 100 kPa. The lower foundations will be strengthened by 300mm dia mini piles (Min depth of 2.5m) spaced at 2.5m c/c to prevent any horizontal slip and to reduce the foundation stresses. Battering or shoring of excavation sidewalls may be required. Lateral support systems may be required along site boundaries. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | On-going | Impact will last between 15 and 20 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | High | Natural and/ or social functions and/ or processes are notably altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Almost certain / Highly probable | It is most likely that the impact will occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | High | Substantive supportive data exists to verify the assessment | Low | Judgement is based on intuition |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environment will be able to recover from the impact |
| Resource irreplaceability | Medium | The resource is damaged irreparably but is represented elsewhere | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Moderate - negative | | Negligible - negative | |
| Comment on significance | Without mitigation, the geotechnical conditions of the site could result in cumulative impacts which may negatively impact neighbouring properties. Specific engineering inputs are to be implemented to avoid negative impacts. | | | |
| Cumulative impacts | Without mitigation, the geotechnical aspects of the site could result in significant destruction to the development site, but also to adjacent sites. These impacts may only become noticeable during storm events. | | | |

| Project Phase | Planning, Design / Construction | |
|-----------------------|---|--|
| Impact | Vulnerability to natural coastal hazards | |
| Description of impact | Risks associated with flooding, erosion, sea-level rise, and coastal storms | |
| Mitigable | High | Mitigation exists and will considerably reduce significance of impacts |



| | | | | |
|----------------------------------|---|--|------------------------------|---|
| Potential mitigation | <ul style="list-style-type: none"> • The extent of the construction must be marked out to satisfaction of the engineer and ECO. • Cognisance of weather conditions should govern all operations. • Stockpiles of suitable filling material must be established. • The stockpile must be kept near optimum moisture content and should be protected from rain and flooding to remain as close as possible to optimum moisture content to ensure proper compaction without having to add water when placed. • The material used for fill must be approved by the engineer and ECO. • All waste material must be discarded off site. • The proposed building will be constructed roughly 10m from the canal wall. The construction activities will have minimal impact on the canal wall. However, the canal wall will be conservatively designed for a surcharge load of 15kPa (this is to be undertaken with approval and instruction of the St Francis Bay Riparian Homeowners Association). • The Environmental Management and Maintenance Plan attached as Appendix F must be implemented during the construction, operational, and maintenance phases. • All designs, management and maintenance activities must be in-line with the approved regulations of the St Francis Bay Riparian Homeowners Association and St Francis Bay Aesthetics Committee. <p>It is important to note that although mitigation and management actions have been provided, an adaptive management approach will need to be followed, and continuous monitoring and evaluation must be undertaken to ensure that the recommended actions are appropriate or if changes are necessary.</p> | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Permanent | Impact may be permanent, or in excess of 20 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Very high | Natural and/ or social functions and/ or processes are majorly altered | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability | Almost certain / Highly probable | It is most likely that the impact will occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere |
| Confidence | Medium | Determination is based on common sense and general knowledge | Low | Judgement is based on intuition |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environment will be able to recover from the impact |
| Resource irreplaceability | Low | The resource is not damaged irreparably or is not scarce | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Moderate - negative | | Negligible - negative | |

| | |
|--------------------------------|---|
| Comment on significance | Without mitigation, the site is vulnerable to coastal hazards that are expected within the activity area. |
| Cumulative impacts | Without mitigation, this impact may result in destruction of the development property, neighbouring properties, as well as pollution of the adjacent canal. |

| Project Phase | Construction | | | |
|------------------------------|---|---|------------------------|--|
| Impact | Solid waste pollution | | | |
| Description of impact | The demolition and construction phase of the activity will produce waste in the form of building rubble, excavated soil as well as general waste (e.g. litter from workers on site). | | | |
| Mitigable | High | Mitigation exists and will considerably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • Construction material should be reused or recycled where possible; • Waste that cannot be reused or recycled should be disposed of in the correct manner at the nearest registered waste disposal site. • Any hazardous materials (e.g. paint, fuel, oil) must be disposed of immediately and in the correct manner. • General good house-keeping should be practiced on site; • If rubble is stored onsite it should be stored on designated portions of land. Designated areas for storage of rubble should be set aside at the onset of construction. • Litter must be controlled during construction e.g. adequate bins must be made available on site at all times. • Construction materials stored as part of the project must be secured (i.e. plastics must be covered to prevent being blown off site). Skips must be regularly emptied and must be covered. • The canal wall should be a no-go area during demolition and construction. Fences should be erected to stop the potential pollution of the canal during these activities. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Short term | Impact will last between 1 and 5 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Moderate | Natural and/ or social functions and/ or processes are moderately altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Probable | The impact has occurred here or elsewhere and could therefore occur | Unlikely | Has not happened yet but could happen once in the lifetime of the project, therefore there is a possibility that the impact will occur |
| Confidence | Medium | Determination is based on common sense and general knowledge | Low | Judgement is based on intuition |



| | | | | |
|----------------------------------|--|--|------------------------------|--|
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environment will be able to recover from the impact |
| Resource irreplaceability | Low | The resource is not damaged irreparably or is not scarce | Low | The resource is not damaged irreparably or is not scarce |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | | | | |
| Cumulative impacts | Without mitigation, this impact may result in pollution of the canal. Care must be taken during construction to avoid this impact. | | | |

| | | | | |
|----------------------------------|---|---|----------------------------------|---|
| Project Phase | Construction | | | |
| Impact | Noise pollution | | | |
| Description of impact | Noise caused by machinery and staff | | | |
| Mitigable | Low | Mitigation does not exist; or mitigation will slightly reduce the significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • Construction activities must only take place during normal working times between 07:00-17:00 on weekdays. • Machinery may be fitted with silences to dampen noise. • Staff must be reminded that they are working within a residential area and noise levels must be kept low. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Brief | Impact will not last longer than 1 year | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Very low | Natural and/ or social functions and/ or processes are slightly altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Almost certain / Highly probable | It is most likely that the impact will occur | Almost certain / Highly probable | It is most likely that the impact will occur |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | High | The affected environmental will be able to recover from the impact | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | Some extent of noise pollution during construction is expected; however, with mitigation the impact will be reduced. | | | |
| Cumulative impacts | No cumulative impacts exist. | | | |

| | | | | |
|----------------------------------|---|--|------------------------------|---|
| Project Phase | Construction | | | |
| Impact | Visual impact/ Sense of place | | | |
| Description of impact | Visual & aesthetic consequences of the proposed project | | | |
| Mitigable | Medium | Mitigation exists and will notably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> The proposed dwelling is replacing an existing dwelling within a residential area; therefore, there is little to be done to mitigate against visual pollution; however, shade cloth may be used to demarcate and reduce visual consequences caused by construction. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Negative | |
| Duration | Short term | Impact will last between 1 and 5 years | Short term | Impact will last between 1 and 5 years |
| Extent | Limited | Limited to the site and its immediate surroundings | Limited | Limited to the site and its immediate surroundings |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Very low | Natural and/ or social functions and/ or processes are slightly altered |
| Probability | Certain / Definite | There are sound scientific reasons to expect that the impact will definitely occur | Likely | The impact may occur |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Medium | The affected environment will only recover from the impact with significant intervention | High | The affected environmental will be able to recover from the impact |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - negative | |
| Comment on significance | Due to the surrounding area being residential, a low negative impact is expected and little can be mitigated against. | | | |
| Cumulative impacts | No cumulative impacts exist. | | | |

| | | | | |
|------------------------------|--|--|------------------------|---|
| Project Phase | Construction | | | |
| Impact | Employment | | | |
| Description of impact | Empowerment of the local community members living in the area relating to temporary employment opportunities | | | |
| Mitigable | Medium | Mitigation only exists to ensure that the positive impact is followed through. | | |
| Potential mitigation | <ul style="list-style-type: none"> Use existing social structures and communication channels to ensure social representation. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Positive | |
| Duration | Short term | Impact will last between 1 and 5 years | Short term | Impact will last between 1 and 5 years |
| Extent | Local | Extending across the site and to nearby settlements | Local | Extending across the site and to nearby settlements |

| | | | | |
|----------------------------------|--|---|----------------------------------|---|
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Low | Natural and/ or social functions and/ or processes are somewhat altered |
| Probability | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to result elsewhere | Almost certain / Highly probable | It is most likely that the impact will occur |
| Confidence | Low | Judgement is based on intuition | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Not relevant | | Not relevant | |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Negligible - negative | | Negligible - positive | |
| Comment on significance | Due to the proposed development being on a small-scale, there is a low difference in impacts between without mitigation and with mitigation. However, as the impact would be positive for the local community to be employed during construction, mitigation is recommended to ensure this occurs. | | | |
| Cumulative impacts | Minor upliftment for the local community. | | | |

Impacts foreseen during the operational phase:

| | | | | |
|------------------------------|---|---|------------------------|--|
| Project Phase | Operation | | | |
| Impact | Light Pollution | | | |
| Description of impact | Visual/ aesthetic consequences due to incorrect or excessive lighting, especially outdoor lighting | | | |
| Mitigable | Medium | Mitigation exists and will notably reduce significance of impacts | | |
| Potential mitigation | <ul style="list-style-type: none"> • Municipal by-laws need to be adhered to. • It is strongly advised that only downward facing lights are used on the outside of the house. | | | |
| Assessment | Without mitigation | | With mitigation | |
| Nature | Negative | | Positive | |
| Duration | Permanent | Impact may be permanent, or in excess of 20 years | Brief | Impact will not last longer than 1 year |
| Extent | Limited | Limited to the site and its immediate surroundings | Very limited | Limited to specific isolated parts of the site |
| Intensity | Low | Natural and/ or social functions and/ or processes are somewhat altered | Negligible | Natural and/ or social functions and/ or processes are negligibly altered |
| Probability | Probable | Has occurred here or elsewhere and could therefore occur | Rare / improbable | Conceivable, but only in extreme circumstances, and/or might occur for this project although this has rarely been known to |

| | | | | |
|----------------------------------|--|---|------------------------------|--|
| | | | | result elsewhere |
| Confidence | Medium | Determination is based on common sense and general knowledge | Medium | Determination is based on common sense and general knowledge |
| Reversibility | Low | The affected environment will not be able to recover from the impact - permanently modified | Medium | The affected environment will only recover from the impact with significant intervention |
| Resource irreplaceability | Not relevant | | Not relevant | |
| Significance | Minor - negative | | Negligible - positive | |
| Comment on significance | Lighting, specifically outdoor lighting is not only aesthetic, but it provides a level of security to property owners. Therefore, outdoor lighting is essential, but should be implemented in a way which does not cause negative impacts to neighbours. | | | |
| Cumulative impacts | Without mitigation the development would not be meeting design guidelines enforced by the municipality. Specifically design guidelines for the local area. | | | |

Decommissioning is not foreseen for this development.

3. ENVIRONMENTAL IMPACT STATEMENT

Taking the assessment of potential impacts into account, please provide an environmental impact statement that summarises the impact that the proposed activity and its alternatives may have on the environment after the management and mitigation of impacts have been taken into account, with specific reference to types of impact, duration of impacts, likelihood of potential impacts actually occurring and the significance of impacts.

Vulnerability to coastal dynamic: The coastal location of the proposed development indicates that it is inherently exposed to risks associated with natural and dynamic coastal processes. These risks provide significant impacts to the sustainability of any development within coastal areas. With inspection of coastal GIS mapping for South Africa (Coastal Viewer web application belonging to DFFE); the Climate Change Coastal Vulnerability Assessment shows that the property is located in an area that has moderate estuary flood risk, with the adjacent canal and “spit” area occurring within an area of high flood risk. The Kouga Local Municipality has undertaken coastal protection actions which include beach nourishment and revetment structures to prevent further sea breaching through the St Francis Bay beach spit during storm events. This action taken by the municipality aims to protect the homes occurring along the canals; therefore, the proposed dwelling should be protected from potential coastal hazards.

Soil and geological stability of the site: Battering or shoring of excavation sidewalls may be required. Lateral support systems may be required along site boundaries.

Solid waste pollution: The demolition and construction phase of the activity will produce construction waste in the form of building rubble, excavated soil as well as general waste (e.g. litter from workers on site). General good housekeeping must be in place. No solid waste must be left to enter the adjacent canal.

Stormwater: during demolition and construction, there is a possibility for stormwater to run off site and into the canal, causing construction waste to pollute the canal. Site suitable stormwater controls must be

in place during construction activities to mitigate this potential negative impact. An engineer and ECO will need to provide the required stormwater management methods during construction activities.

Alternative A2 (not supported)

An alternative in this case may only relate to technology alternatives as design, layout and activity alternatives are restricted to the following:

1. development activity – the property is zoned for residential development only.
2. design/layout alternatives – due to the site constraints and strict area design guidelines, there are no other alternatives.

An alternative to consider is to not make use of any green technology aspects in the design and function of the proposed dwelling.

This alternative would not be supported as it does not contribute to sustainable development practices.

No-go alternative (compulsory)

The No-go alternative assumes that the existing dwelling will not be demolished and the proposed new dwelling will not be constructed; therefore, the status quo will remain in place. It is to be noted that this is a residential Erf and the Applicant has the legal right to develop on this Erf.

SECTION E. RECOMMENDATIONS OF PRACTITIONER

To be completed in the Final BAR

Is the information contained in this report and the documentation attached hereto sufficient to make a decision in respect of the activity applied for (in the view of the environmental assessment practitioner)?

| | |
|-----|----|
| YES | NO |
| YES | NO |

Is an EMPr attached?

The EMPr must be attached as Appendix F.

If "NO", indicate the aspects that should be assessed further as part of a Scoping and EIA process before a decision can be made (list the aspects that require further assessment):

n/a

If "YES", please list any recommended conditions, including mitigation measures that should be considered for inclusion in any authorisation that may be granted by the competent authority in respect of the application:

To be completed in the Final BAR.

SECTION F: APPENDICES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s) - attached separately

Appendix B: Photographs- attached separately

Appendix C: Facility illustration(s) - attached separately

Appendix D: Specialist reports – no specialist studies were undertaken

Appendix E: Comments and responses report- attached separately

Appendix F: Environmental Management Programme (EMPr) - attached separately

Appendix G: Public Participation - attached separately

Appendix H: Screening Tool Report and Site Sensitivity Report - attached separately

Appendix I: Feedback from St Francis Bay Aesthetics Committee - attached separately