Eco Route
ENVIRONMENTAL CONSULTANCY
REGISTRATION NO. 1998/031976/23

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DRAFT BASIC ASSESSMENT REPORT

In terms of the **National Environmental Management Act** (Act No. 107 of 1998, as amended) & 2014 Environmental Impact Regulations as amended for:

Proposed expansion of development footprint on Residential Erf 631 located 100 metres inland of an estuary, St Francis Bay, Kouga Local Municipality

DEDEAT Reference: EC08/C/LN1/M/59-2024

For 30-day review and comment: 12 December 2024 – 4 February 2025

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DATE:	12 December 2024

Glossary of Terms

BAR	Basic Assessment Report – A tool used by the EAP to submit to the competent authority if listed activities is triggered in Regulations GNR 327 and GNR 324 as per NEMA to make a decision regarding a proposed development.
CBA	CBA Critical Biodiversity Area – Areas in a natural condition that are required to meet biodiversity targets, for species, ecosystems or ecological processes and infrastructure.
CMP	Coastal Management Plan
DEDEAT	Eastern cape Department of Economic Development, Environmental Affairs and Tourism
DFFE	Department of Forestry, Fisheries and the Environmental
DWS	Department of Water and Sanitation
EAP	Environmental Assessment Practitioner – An EAP and a specialist, appointed in terms of regulation 12(1) or 12(2) must – be independent. Have expertise in conducting environmental impact assessments or undertaking specialist work as required, including knowledge of the Act, these regulations and any guidelines that have relevance to the proposed activity. Ensure compliance with these Regulations Perform the work relating to the application in an objective manner, even if this results in views and findings that are not favourable to the application. Take into account, to the extent possible, the matters referred to in regulation 18 when preparing the application and any report, plan or document relating to the application; and Disclose to the proponent or applicant, registered and affected parties and the competent authority all material information in the possession of the EAP and, where applicable, the specialist, that reasonably has or may have the potential of influencing – Any decision to be taken with respect to the application by the competent authority in terms of these regulations; or The objectivity of any report, plan or document to be prepared by the EAP or specialist, in terms of these Regulations for submission to the competent authority; unless access to that information is protected by law, in which case it must be indicated that such protected information exists and is only provided to the competent authority. (2) In the event where the EAP or specialist does not comply with sub regulation (1)(a), the proponent or applicant must, prior to conducting public participation as contemplated in chapter 5 of these regulations, appoint another EAP or specialist to externally review all work undertaken by the EAP or specialist, at the applicants cost. (3) An EAP or specialist appointed to externally review the work of an EAP or specialist as contemplated in sub regulation (2), must comply with sub regulation (1).
ECO	Environmental Control Officer – A site agent who needs to ensure that all environmental authorisation and conditions are adhered to during the construction phase of the project.
EFZ	Estuarine Functional Zone
EIA	Environmental Impact Assessment
EMP	Estuary Management Plan
EMPr	Environmental Management Programme – can be defined as "an environmental management tool used to ensure that undue or reasonably avoidable adverse impacts of the construction, operation and decommissioning of a project are prevented; and that the positive benefits of the projects are enhanced".

ESA	Ecological Support Area – Areas that are not essential for meeting biodiversity targets, but that play an important role in supporting the functioning of PAs or CBAs, and are often vital for delivering ecosystem services.
GA	General Authorisations
IAP	Interested and Affected Party/ies - in relation to an application, means an interested and affected party whose name is recorded in the register opened for that application in terms of regulation 42.
KLM	Kouga Local Municipality
MMP	Maintenance Management Plan – means a maintenance management plan for maintenance purposes defined and adopted by the competent authority
NEMA	National Environmental Management Act (Act 107 of 1998) as amended 2017 – national environmental legislation that provides principles for decision-making on matters that affect the environment.
PA	Protected Area - A protected area is an area of land or sea that is formally protected by law and managed mainly for biodiversity conservation. Protected areas recognised in the National Environmental Management: Protected Areas Act (Act 57 of 2003) (hereafter referred to as the Protected Areas Act) are considered formal protected areas in the NPAES. This is a narrower definition of protected areas than the International Union for Conservation of Nature (IUCN) definition.1 The NPAES distinguishes between land-based protected areas, which may protect both terrestrial and freshwater biodiversity features, and marine protected areas.
SANBI	South African National Biodiversity Institute
SBDM	Sarah Baartman District Municipality

Section contained within Appendix 1 of EIA Regulations	**Description**	**Cross reference in BAR**
3a	Details of the EAP and CV	EMPr (Annexure 2)
3b	Location of Activities	Section A1
3c	Layout Plan	Section A1; Appendices A - C
3d	Description of the scope of the proposed activity including the triggered and specified activities, associated structures and infrastructure and the way the proposed development relates to the triggered activities	Section A1 - 8
3e	Description of the policy and legislative context within which the development is proposed and how is each one applicable to the proposed activity	Section A10
3f	The motivation for the need and desirability (including the development at that specific location)	Section A9
3g	The motivation for the preferred site, activity, and technology alternative	Section A1 - 8

3h (i)	Details of all the alternatives considered	Section A1 - 8
3h (ii)	Details of the Public Participation Process (PPP) undertaken in terms of regulation 41 of the Regulations, including copies of the supporting documents and inputs Section 5	Section C
3h (iii)	A summary of the issues raised by interested and affected parties, and an indication of the way the issues were incorporated, or the reasons for not including them Section 5	Section C, Appendix E
3h (iv)	The environmental attributes associated with the alternatives focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	Section B and Section D2
3h (v)	The impacts and risks identified for each alternative, including the nature, significance, consequence, extent, duration, and probability of the impacts, including the degree to which these impacts- (aa) can be reversed; (bb) may cause irreplaceable loss of resources; and (cc) can be avoided, managed, or mitigated;	Section D
3h (vi)	The methodology used in determining and ranking the nature, significance, consequences, extent, duration and probability of potential environmental impacts and risks associated with the alternatives	Appendix G2
3h (vii)	Positive and negative impacts that the proposed activity and alternatives will have on the environment and on the community that may be affected focusing on the geographical, physical, biological, social, economic, heritage and cultural aspects	Section D2
3h (viii)	Possible mitigation measures that could be applied and the level of residual risk	Section D2; Appendix F
3h (ix)	Outcome of the site selection matrix	Section D2; Appendix F
3h (x)	If no alternatives, including alternative locations for the activity,	Section A1 - 8

	were investigated, the motivation for not considering such	
3h (xi)	Concluding statement indicating the preferred alternatives, including the preferred location of the activity	Sections D4
3i	Full description of the process undertaken to identify, assess and rank the impacts the activity will impose on the preferred location through the life of the activity, including- (i) a description of all environmental issues and risks that were identified during the environmental impact assessment process; and (ii) an assessment of the significance of each issue, risk and an indication of the extent to which the issue and risk could be avoided or addressed by the adoption of mitigation measures	Sections D
3k	Summary of the findings and impact management measures identified in any specialist report complying with Appendix 6 to these Regulations and an indication as to how these findings and recommendations have been included in the final report	Sections D4
3l	Environmental impact statement containing a map and a summary of the positive and negative impacts of the proposed development and alternatives	Sections D4
3m	Based on the assessment, and where applicable, impact management measures from specialist reports, the recording of the proposed impact management objectives, and the impact management outcomes for the development for inclusion in the EMPr	Section D
3n	Any aspects which were conditional to the findings of the assessment either by the EAP or specialist which are to be included as conditions of the authorisation	Section D
3o	Description of any assumptions, uncertainties, and gaps in knowledge	Section A and Section D

	which relate to the assessment and mitigation measures proposed	
3p	Reasoned opinion as to whether the proposed activity should or should not be authorised, and if the opinion is that it should be authorised, any conditions that should be made in respect of that authorisation	Section D
3q	Where the proposed activity does not include operational aspects, the period for which the environmental authorisation is required, the date on which the activity will be concluded, and the post-construction monitoring requirements finalised	Section A
3r	Undertaking under oath or affirmation by the EAP	Application for EA (appendix 14)
3s	Details of any financial provisions for the rehabilitation, closure, and ongoing post decommissioning management of adverse environmental impacts	Not applicable

EXECUTIVE SUMMARY

Introduction

A residential house is in place on Erf 631 located at 9 Shore Road, St Francis Bay. Erf 631 is approximately 1549.9 m2 in extent and falls within the Kromme Estuarine Functional Zone. An existing house is in place on the Erf with a total existing floor area of 386m2; the owner is proposing to expand the development footprint on the Erf by approximately 267m2 (new garage, braai rooms, dwelling additions and balconies).

The proposed development triggers activities included in Listing Notice 1 of the Environmental Impact Assessment (EIA) Regulations, 2014 (as amended, 2017) published in terms of the National Environmental Management Act (Act 107 of 1998) and therefore an Environmental authorisation to be issued by the Eastern Cape Department of Economic development, Environmental Affairs and Tourism (DEDEAT) prior to commencement of construction. The Environmental Authorisation process requires a basic assessment to be carried out.

The draft basic assessment report will be distributed to all registered interested and affected parties for a 30-day review and comment period. The report will then be updated with all comments received and responses to the comments and the final basic assessment report will be submitted to the DEDEAT for decision making (107 days).

Location

Erf 631 is located at 9 Shore Road, St Francis Bay in Kouga Local Municipality, Eastern cape. The property falls within falls within the mapped Kromme Estuarine Functional Zone. The approximate central coordinates of the site: 34° 8'34.23"S; 24°49'52.08"E

Overview of proposed project

The following renovations are proposed:

- Convert existing garage to on suite bedroom (55m2) (N section of property - Shore Road / Kromme estuary side)
- New Garage 59m2 and paved driveway (N section of property - Shore Road / Kromme estuary side)
- 2nd floor adds to dwelling 141m2 (N section of property - Shore Road / Kromme estuary side)
- New Braai Room 55m2 (S section of property = Canal side)
- Decking (raised max 1.7 meters)
- New Balconies 12m2
- Replace thatch roofing with aluminium roof sheets

Total area 267m2 (Site plans available in Appendix A). All footprints fall within the building lines of the erf.

The maximum height of the building will be 8meters (7986 mm) (Refer to Appendix C); KLM architectural guidelines (Notice_1238_1113) included in Appendix C)

A combination of gas, heat pump and Eskom electricity is / will be used. Designs have incorporated orientation and insulation. Glazing and aluminium are proposed for the windows and door to assist with energy efficiency and withstanding coastal elements. All light fittings are proposed to be LED.

An existing 6.5m3 conservancy tank is in place; a new 110mm diameter gravity pipe will be installed to connect to the existing conservancy tank.

Based on the scope of work, the construction phase is expected to take a maximum of 12 months to complete.

Environmental Sensitivities

A screening tool has been developed by the Department of Forestry, Fisheries and Environmental Affairs (DFFE). The Screening Tool identifies related exclusions and/ or specific requirements including specialist studies applicable to the proposed site and/or development, based on the national sector classification and the environmental sensitivity of the site. A screening report was generated for the proposed project; the sensitivities identified and verified are provided below.

Table 1: Verification of environmental sensitivity identified in DFFE screening tool report

Theme	**Environmental sensitivity as per screening tool report**	**Verification of environmental sensitivity**	**Description**
Agricultural theme	High Sensitivity	Low sensitivity	Site is a residential erf located adjacent to a road (north) and canal (south). The site is not considered to have any agricultural potential. No further studies are deemed necessary
Animal Species	High Sensitivity	Low sensitivity	Sensitive fauna species included in the screening to *Aneuryphymus montanus* (Yellow-winged Agile Grasshopper), *Circus ranivorus* (African Marsh Harrier), *Hydroprogne caspia* (Caspian tern) and SS8. Erf 631 is entirely transformed with no suitable habitat; the erf is directly adjacent to shore road (north) and canals (south). No Endangered or Critically fauna species were found to be present on the site or are likely to be directly affected by the proposed activity. Sensitivity of fauna on the development site is verified as low. Impacts on fauna have been addressed in the assessment; no specific specialist study was deemed to be required.
Aquatic Biodiversity	Very High	Low	The DFFE screening tool reports indicates very high sensitivities for terrestrial and aquatic systems. The site is situated within the marine glades residential area of St Francis bay. The site falls within the Mzimvubu-Tsitsikamma water management area within the K90E quaternary catchment. The Kromme Estuary is located 60 meters north of the site. Mean annual precipitation is between 600 and 800 mm/year; Rainfall occurs all year round, with peaks during the summer months. The site is adjacent to the canal in the south. The site falls within the Kromme estuary mapped in terms of the National Biodiversity Assessment (NBA, 2018), National Wetlands Map (NWM5) the NFEPA, the National Vegetation Map (2018) and the National Estuary Map. The site is situated within an aquatic and terrestrial critical biodiversity area (CBA)1 as mapped in terms of the Eastern cape biodiversity conservation Plan (ECBCP,2022). The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012). The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in

Theme	Environmental sensitivity as per screening tool report	Verification of environmental sensitivity	Description
			place in northern and southern sections of the property between the 2 m and 3 m contour levels. The proposed development is not deemed to create any additional impacts on the estuary. Risk of flooding of the property is considered high due to location of the erf; however the proposed renovation will not increase the risk. Sensitivity of aquatic features on the development site is verified as low. Aspects related to aquatic systems have been addressed in the basic assessment, no specific specialist study was deemed to be required for the proposed renovation on an existing residential erf.
Archaeological and Cultural Heritage	Low sensitivity	Low sensitivity	The SBDM coastal zone is rich in archaeological, heritage and historical resources. The coastal zone between Klasies River in the west and Krom River in the east is one of the richest and most significant archaeological cultural landscapes in South Africa. The headland bypass dunefields between Oyster Bay and the Kromme River mouth are underlain by ferricretes, calcretes and fossilized dune sands which are situated on top of Table Mountain Sandstones. Due to the continuous movement of the dunes, many archaeological and paleontological sites are exposed while simultaneously others are covered (Binneman and Reichert, 2017; Draft SBDM CMP, 2019). Relatively large piles of marine shells (referred to as 'strandloper middens') dating back 600 years are found in the Kouga LM coastal zone, mostly within 300 m of the high water mark of the sea but can occur up to 5 km inland. A Notice of intention to develop has been submitted to the Eastern Cape Provincial Heritage Resources Authority; recommendations from the ECPHRA will be included in the EMPr: No specific specialist study is deemed to be required.
Paleontological	Medium sensitivity	Low sensitivity	
Plant Species Assessment	High sensitivity	Low sensitivity	Erf 631 is entirely transformed. No flora species protected under the NEMBA – Amendment of Critically Endangered, Endangered, Vulnerable and Protected Species List (14 December 2007), occur on site. There are several red listed flora species in the surrounding area and vegetation units that are known to have limited distributions. No endemic and range restricted flora species were recorded to be present; several species are known from the surrounding area but were not recorded on the Erf. One protected tree listed under the National Forests Act, 1998 (Act No. 84 of 1998) (updated 8 September 2017), occurs on site. PNCO (Provincial Nature Conservation Ordinance) permits are unlikely to be required, however NFA (National Forests Act) permits would be required should any of the Milkwood trees (Sideroxylon inerme) require removal at any stage. Sensitivity of

Theme	Environmental sensitivity as per screening tool report	Verification of environmental sensitivity	Description
			flora on the development site is verified as low. Aspects related to flora have been addressed in the basic assessment, however no specific specialist study was deemed necessary.
Terrestrial Biodiversity Impact	Very High Sensitivity	Low sensitivity	The DFFE screening tool reports indicates very high sensitivities for terrestrial systems. The site is situated within the marine glades residential area of St Francis bay. The site falls within the Kromme estuary mapped in terms of the National Biodiversity Assessment (NBA, 2018), National Wetlands Map (NWM5) the NFEPA, the National Vegetation Map (2018) and the National Estuary Map. The site is situated within a terrestrial critical biodiversity area (CBA)1 as mapped in terms of the Eastern cape biodiversity conservation Plan (ECBCP,2022). The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012). The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contour levels. The proposed development is not deemed to create any additional impacts on the estuary. Sensitivity of terrestrial biodiversity features on the development site is verified as low. Aspects related to terrestrial biodiversity will be addressed in the basic assessment, however no specific specialist study was deemed to be required.
Socio-Economic	NA	NA	Aspects related to socio-economic impacts will be addressed in the basic assessment, however no specific specialist study was deemed to be required.
Civil Aviation Assessment	Medium sensitivity	Low sensitivity	A civil aviation assessment / compliance statement is excluded as the proposed development will not have an impact on civil aviation aerodrome.
Defence theme	Low sensitivity	Low sensitivity	A defence them compliance statement is excluded as the proposed development will not have an impact on the defense theme.

Impact Assessment summary

Several impacts were identified for construction and operational phases and measures identified to avoid/ manage anticipated impacts. No negative impacts of high or very high significance were identified. The majority of impacts were assessed to be negative of low significance to negligible with recommended mitigation measures in place. The development is expected to have a positive impact on local employment and property value. The site currently provides limited value in terms of biodiversity conservation due to the small footprint located within the boundaries of a residential

erf. The existing development footprint of 386m2 will be expanded by approximately 267m2 and will occupy less than 50 % of the erf. The renovation will not result in any additional impacts that is not in place already, with exception of short-term construction impacts which are considered to be of low to negligible significance.

The table below summarises the significance of impacts assessed with and without mitigation in place.

Impact	**Without Mitigation**		**With mitigation**	
Archaeology and Paleontology Resources	Negative Impact		Positive Impact	
	Low	7	Low	7
Estuarine environment	Negative Impact		Negligible	
	Low	9	Negligible	5
Indigenous vegetation	Negative Impact		Negligible	
	Low	9	Negligible	5
Fauna	Negative Impact		Negligible	
	Low	10	Negligible	5
Alien Invasive Vegetation	Negative Impact		Negligible	
	Medium	13	Negligible	5
Soil erosion and stormwater management	Negative Impact		Negative Impact	
	Medium	11	Low	9
Dust	Negative Impact		Negative Impact	
	Medium	13	Low	7
Noise impacts on surrounding land users	Negative Impact		Negligible	
	Low	9	Negligible	5
Visual	Negative Impact		Negative Impact	
	Medium	11	Low	10
Hazardous materials	Negative Impact		Negative Impact	
	Medium	11	Low	10
General Waste materials	Negative Impact		Negative Impact	
	Medium	13	Low	10
Creation of temporary construction work and skills development	Positive Impact		Positive Impact	
	Low	10	Medium	11
Increase in property value	Positive Impact		Positive Impact	
	Low	10	Low	10
Fire prevention	Negative Impact		Negative Impact	
	Low	10	Low	9
Operational				
Estuarine Functional area	Negative Impact		Negligible	
	Low	9	Negligible	5
Fire Risk	Negative Impact		Negative Impact	
	Low	9	Low	8
Stormwater	Negative Impact		Negligible	
	Medium	11	Negligible	5

Conclusion

In terms of the National Environmental Management Act, 1998 (Act No. 107 of 1998) (NEMA) and the 2014 Environmental Impact Assessment (EIA) regulations (as amended, 2017), the proposed development requires an environmental authorisation to be issued by the Eastern Cape Department of Economic Development, Environmental Affairs and Tourism (DEDEAT) before development can commence. A basic assessment has been carried out as part of the environmental authorisation application process. The draft basic assessment report will be distributed to all registered interested and affected parties for a 30-day review and comment period. The report will then be updated with all comments received and responses to the comments and the final basic assessment report will be submitted to the DEDEAT for decision making.

CONTENTS

Province of the
EASTERN CAPE
ECONOMIC DEVELOPMENT,
ENVIRONMENTAL AFFAIRS & TOURISM

BASIC ASSESSMENT REPORT

(For official use only)

File Reference Number:	
NEAS Number:	
Date Received:	

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. This report is current as of 1 OCTOBER 2022. It is the responsibility of the applicant to ascertain whether subsequent versions of the form have been published or produced by the competent authority
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). The EAP must satisfy conditions 11 below.

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.

11.1 The Environmental Assessment Practitioner (EAP) must be registered in terms of S24H Regulations with the Registration Authority EAPASA as from 8 August 2022.

11.2. S24H (14) states that "only a person registered as an Environmental Assessment practitioner may perform tasks in connection with an application for an environmental authorisation contemplated in

(a)Chapter 5 of the Act read with the Environmental impact Assessment Regulations.

(b)Section 24G of the Act

(c) Chapter 5 of the National Environmental Management Waste Act 2008 (Act No 59 of 2008) read with the Environmental Impact Assessment Regulations

11.3. Tasks in regulation 14 may only be conducted by an EAP that is registered

11.4. Regulations 20 of S24H indicates the offences and penalties as indicated below:

"*20. Offences and penalties*

(1) A person is guilty of an offence if that person-

(a) contravenes regulation 14 of the Regulations; or

(b) pretends to be a registered environmental assessment practitioner or registered candidate environmental assessment practitioner.

(2) A person convicted of an offence in terms of subregulation (1) is liable to the penalties contemplated in section 49B(3) of the Act.".

Section 49B(3) of the Act states:

"A person convicted of an offence in terms of section 49A(1)(h), (l), (m), (n), (o) or (p) is liable to a fine or to imprisonment for a period not exceeding one year, or to both a fine and such imprisonment.".

SECTION A: ACTIVITY INFORMATION

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:

Any specialist reports must be contained in Appendix D.

1. ACTIVITY DESCRIPTION

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

A residential house is in place on Erf 631 located at 9 Shore Road, St Francis Bay. Erf 631 is approximately 1549.9 m2 in extent and falls within the Kromme Estuarine Functional Zone. An existing house is in place on the Erf with a total existing floor area of 386m2; a pool and paving area and fireplace are in place on the canal side with an estimated combined footprint of 100m2; the owner is proposing to expand the development footprint on the Erf by approximately 267m2. An estimated 153m2 (including balconies) will be developed on the second floor; the estimated ground floor expansion footprint is estimated at 176m2 (including decking and a new driveway). The existing thatch roof will be replaced with aluminium roof sheets.

The following renovations are proposed:

- Convert existing garage to on suite bedroom (55m2) (N section of property - Shore Road / Kromme estuary side)
- New Garage 59m2 and paved driveway (N section of property - Shore Road / Kromme estuary side)
- 2nd floor adds to dwelling 141m2 (N section of property - Shore Road / Kromme estuary side)
- New Braai Room 55m2 (S section of property = Canal side)
- Decking (raised max 1.7 meters)
- New Balconies 12m2
- New driveway
- Replace thatch roofing with aluminium roof sheets

All renovation footprints fall within the building lines of the erf.
Site plans available in Appendix A.

The maximum height of the building will be 8meters (7986 mm) (Refer to Appendix C); KLM architectural guidelines (Notice_1238_1113) included in Appendix C)

A combination of gas, heat pump and Eskom electricity is / will be used. Designs have incorporated orientation and insulation. Glazing and aluminium are proposed for the windows and door to assist with energy efficiency and withstanding coastal elements. All light fittings are proposed to be LED.

An existing 6.5m3 conservancy tank is in place; a new 110mm diameter gravity pipe will be installed to connect to the existing conservancy tank.

Based on the scope of work, the construction phase is expected to take a maximum of 12 months to complete.

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.

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:	**Latitude (S):**		**Longitude (E):**	
Alternative S1[1] (preferred or only site alternative)	34°	8.575'	24°	49.873'
Alternative S2 (if any)	o	‘	o	‘
Alternative S3 (if any)	o	‘	o	‘

In the case of linear activities:

Alternative:	**Latitude (S):**		**Longitude (E):**	
Alternative S1 (preferred or only route alternative)				
• Starting point of the activity	o	‘	o	‘
• Middle point of the activity	o	‘	o	‘
• End point of the activity	o	‘	o	‘
Alternative S2 (if any)				
• Starting point of the activity	o	‘	o	‘
• Middle point of the activity	o	‘	o	‘
• End point of the activity	o	‘	o	‘
Alternative S3 (if any)				
• Starting point of the activity	o	‘	o	‘
• Middle point of the activity	o	‘	o	‘
• End point of the activity	o	‘	o	‘

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:**
Alternative A1[2] (preferred activity alternative)	New Garage 59m2

[1] “Alternative S..” refer to site alternatives.
[2] “Alternative A..” refer to activity, process, technology or other alternatives.

	New Braai Room 55m2 New decking and stairs 22m2 New driveway 40m2 •Total additional footprint 176m2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

or, for linear activities:

Alternative:	**Length of the activity:**
Alternative A1 (preferred activity alternative)	m
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)	Erf 631 = 1549.9 m2
Alternative A2 (if any)	m^2
Alternative A3 (if any)	m^2

5. SITE ACCESS

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

Describe the type of access road planned:

The site is directly adjacent to shore road. A new driveway of approximately 40m2 will be required between Shore road and new garage.

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.

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;

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 infested 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.

Refer to Appendix A

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.

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.

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?	Unknown	
What is the expected yearly income that will be generated by or as a result of the activity?	NA	
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?	5	
What is the expected value of the employment opportunities during the development phase?	R500000	
What percentage of this will accrue to previously disadvantaged individuals?	80%	
How many permanent new employment opportunities will be created during the operational phase of the activity?	-	
What is the expected current value of the employment opportunities during the first 10 years?	NA	
What percentage of this will accrue to previously disadvantaged individuals?	NA	

9(b) Need and desirability of the activity

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

The homeowners would like to renovate their property to include additional dwelling areas, a new braai room and a new garage; additional decking and a new driveway will be required. The new garage will enable direct access to the home. The homeowners would like to replace the existing thatch roof with tiles and corrugated sheets to reduce fire risk and to allow for solar panels and rainwater collection. The extensions and modifications will improve their home and increase the value of their property.

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

Home improvement and increase in property value.

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

Construction work will be created; income will be generated for the suppliers of materials and services required during construction. Work opportunities (i.e., bricklayers, plasters, painters, roofers, electricians, plumbers, gas specialists) will be created. Local contractors, service providers and suppliers will be sourced from the local area (i.e., St Francis, Humansdorp, Jeffreys bay).

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:
National Environmental Management Act and Environmental Impact Assessment Regulations	DEDEAT / DFFE	1998 / 2017
Environmental Conservation Act (Act 73 of 1989)	DFFE	1989
Provincial Nature and Environmental Conservation Ordinance No 19 of 1974	DEDEAT	1974

National Heritage Resources Act 25 of 1999	SAHRA / ECHPA	2008
National Environmental Management: Integrated Coastal Management Act, 2008	DFFE	2019
Coastal Management Programme SBDM (draft)	SBDM	2020
Kouga Spatial Development Framework	KLM	2020

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
If yes, what estimated quantity will be produced per month?	20m^3	

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

Construction waste will be removed from the site by the appointed contractor to a registered waste disposal site. Where possible, construction waste material must be used as fill material.

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

Closest registered transfer site

Will the activity produce solid waste during its operational phase?	**YES**	NO
If yes, what estimated quantity will be produced per month?	2m^3	

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

General household waste collected by KLM.

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

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?	m^3	
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:

An existing 6.5m3 conservancy tank is in place; a new 110mm diameter gravity pipe will be installed to connect to the existing conservancy tank.

11(c) Emissions into the atmosphere

Will the activity release emissions into the atmosphere?	**YES**	NO
If yes, is it controlled by any legislation of any sphere of government?	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.

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

Renovations will be on a very small footprint (176m2). Dust will be generated during construction activities, particularly during high wind conditions, until rehabilitation is effective.
Mitigation measures to control dust generation are included in the EMPr (Appendix F) to ensure that dust generation is minimised.

11(d) Generation of noise

Will the activity generate noise?	**YES**	NO
If yes, is it controlled by any legislation of any sphere of government?	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.

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

Noise generated will mostly be from construction activities. All machinery will be within sound working order and will meet the necessary noise level requirements. Construction activities will be limited to daylight hours.

12. WATER USE

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

municipal	water board	groundwater	river, stream, dam or lake	other	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	
Does the activity require a water use permit from the Department of Water Affairs?	YES	NO

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:

- Construction is to be carried out during regular working hours to reduce the use of artificial lighting.
- Contractor will be advised to transport all construction materials on-site at the same time wherever possible; the collection of waste material must be conducted simultaneously with other collection / deliveries to reduce the amount of fuel usage

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

Designs indicate a combination of gas; heat pump and Eskom electricity is / will be used. The owner has also indicated that the new roof will allow for installation of solar panels. Designs have incorporated orientation and insulation. Glazing and aluminium are proposed for the windows and door to assist with energy efficiency and withstanding coastal elements. All light fittings are proposed to be LED.

SECTION B: SITE/AREA/PROPERTY DESCRIPTION

Important notes:

1. 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):	

2. 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

Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contours. The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012); The 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 site (as well as the majority of residential erven within the Marine Glades area) falls with the mapped EFZ.

Figure 1: Site is situated at between 2 – 4MASL; site falls within Kromme EFZ

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).

Geology of the area is the Schelm Hoek formation of the Algoa Group. Lithology is described as marine terrace conglomerate, coquinite, aeolianite, alluvial gravel, sand, silt, calc-tufa, minor gravel. Aquifer type is fractured; yield is 0.5 – 2 l/s. Depth to groundwater 14.14 mbgl.

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) – Kromme estuary; canals

In terms of the Kouga SDF (2020) the residential erf falls within the urban edge; surrounding landuses within 500 meters of the site includes Shore road (immediately adjacent) the Kromme estuary (north), residential erven and the canals which form the marina.

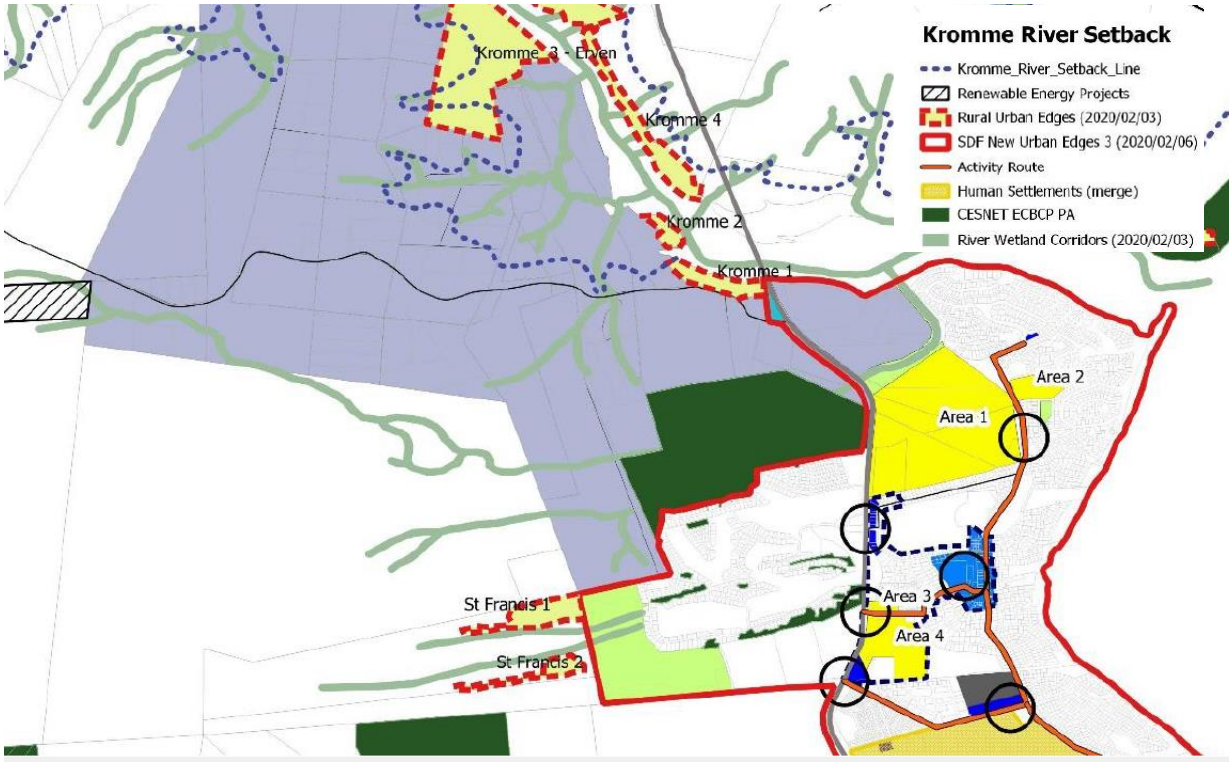

Figure 2: Site falls within urban edge (adapted from KLM SDF, 2020)

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:

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:

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:	There is a chance that archaeological / palaeontological sites may be exposed during clearing and excavation activities. A NID has been submitted to the Eastern cape Heritage Resources Authority. Guidance provided by the ECHRA will be included in the construction environmental management plan. Measures to prevent impacts on heritage resources are included in the EMPr (Appendix F)	
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:		
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.

Note: Permits will be applied for if required during excavation activities.

SECTION C: PUBLIC PARTICIPATION

1. ADVERTISEMENT

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

A notice board, advertisement or notices must:

(a) indicate the details of the application which is subjected to public participation;

(b) and 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

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.

Two notice boards were placed on site. Adverts were placed in The Kouga Express on 26 September 2024. Notices and Background Information Documents were sent to the landowner, adjacent landowners, relevant state departments, stakeholders and other identified potential IAPs. .

Refer to Appendix E: comments and Response Report

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:

Department	Email
ECPTA	Brian.Reeves@ecpta.co.za

Department	Email
	info@ecpta.co.za
DWS	TshatshuP@dws.gov.za BloemM@dws.gov.za jackv@dws.gov.za
DFFE Oceans and Coast	TMbambo@dffe.gov.za OCEIA@dffe.gov.za NJSithole@dffe.gov.za tmhlana@dffe.gov.za
ECHRA	ayanda.mncwabe-mama@ecsrac.gov.za lungiswam@ecphra.org.za
EC Roads	Randall.Moore@ectransport.gov.za; Monde.Manga@ectransport.gov.za
Dept of Agriculture (EC)	Ruffus.Maloma@drdar.gov.za
DEDEAT	Andries.Struwig@dedea.gov.za dayalan.govender@dedea.gov.za
SANBI	V.Zikishe@sanbi.org.za
KLM • Infrastructure and Engineering • Planning, Development and Tourism • Community Services • Environmental	jdutoit@kouga.gov.za abotha@kouga.gov.za> aswart@kouga.gov.za fkettledas@kouga.gov.za nsiwela@kouga.gov.za; ymlindazwe@kouga.gov.za; mengelbrecht@kouga.gov.za
Ward 12	ward12@kouga.gov.za

List of authorities from whom comments have been received:

DFFE Oceans and Coast ECHRA

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):

Comments have been received from: DFFE Oceans and Coast ECHRA Refer to Appendix E

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.

Comments have been received from: • DFFE Oceans and Coast • ECHRA The draft BAR will be distributed to registered IAPs for a 30-day comment and review period. The final BAR will be updated and submitted to the DEDEAT for consideration.

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 and response report provided in Appendix E. Mitigation measures have been included in the draft EMP (Appendix F)

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.

Alternative (preferred alternative)

Direct impacts: ***Indirect impacts:*** ***Cumulative impacts:***

---

1 Planning and Design Phase:

Alternative (preferred alternative)

Planning and design
Description
The proposed development is a proposed extension of a house located at Erf 631, Marine Glades, St Francis Bay. The Erf falls within the Kromme EFZ and within 100 meters of the Kromme estuary and therefore requires an environmental authorisation to be issued as part of the planning phase of the project. Part of the EA process is the draft EMPR which requires approval from the

CA (DEDEAT). If the EA is obtained, then the EMPr is legally binding, and the applicant must ensure that EM requirements are included in the budget and planning and construction process. If this is not done, then the EMPr will not be implemented and *"before mitigation"* impacts can be expected to occur.

Impact 1:	**Inadequate planning for EM requirements**
Nature of impact:	Direct / Indirect / cumulative as applicable **Fauna, Flora, Waste, social - Poor environmental management planning and / or lack of budget for environmental management will result in unmitigated impacts.**
Description of impact	Without correct planning and budget for EMPr requirements, direct and indirect impacts can be expected from waste, dust, noise, impacts on paleontology, fauna and flora have a higher likelihood of occurring, and visual impacts can be expected. (The management and mitigation of environmental impacts are addressed in the EMPr (refer to Appendix F).
Impact Rating	As per impacts identified for planning, construction / operational phase as applicable without / with mitigation
Mitigation Measures	Planning – Planning Team • Ensure an Environmental Management File is put in place to contain all documents / report which pertain to the relevant conditions of the planning, construction and operational phases (e.g. EA, EMPr, permits, waste disposal certificates, audit reports etc.) • Ensure all preconstruction requirements are in place prior to construction • Ensure layouts, designs and accompanying engineering drawing approved • Method statements for construction phase are to be compiled by the project team and be aligned to mitigation measures and conditions of the Environmental Authorisation (if attained) • Construction team site officer to assist with daily environmental management on site and compliance with the CEMP and conditions of the EA (if attained) • Appoint a suitably qualified external environmental control officer to ensure environmental management requirements are met by carrying out monthly external audits. • Suitable budget to be assigned to environmental management requirements for construction and operational phase • Operational management plans are to be aligned to mitigation measures and conditions of the Environmental Authorisation (if attained)

2 Construction Phase - Alternative Layout 1 (preferred)

Heritage, archaeology and paleontology	
The screening tool report indicates a low sensitivity for heritage and archaeology and a medium sensitivity for palaeontology. The erf is a residential erf with an existing house and renovations of a braai room and garage are proposed. The sensitivities of the development site is verified as low. However, it must be noted that the SBDM coastal zone is rich in archaeological, heritage and historical resources with the coastal zone between Klasies River and Krom River being one of the richest and most significant archaeological cultural landscapes in South Africa. The headland bypass dunefields between Oyster Bay and the Kromme River mouth are underlain by ferricretes, calcretes and fossilized dune sands which are situated on top of Table Mountain Sandstones. Due to the continuous movement of the dunes, many archaeological and paleontological sites are exposed while simultaneously others are covered (Binneman and Reichert, 2017; Draft SBDM CMP, 2019). Relatively large piles of marine shells (referred to as 'strandloper middens') dating back 600 years are found in the Kouga LM coastal zone, mostly within 300 m of the high-water mark of the sea but can occur up to 5 km inland. A chance find procedure is therefore recommended and relevant training provided to contractors.	
Impact 1:	**Impact on archaeology and paleontology resources**
Nature of impact:	Direct
Description of impact	Excavation activities can unearth archaeological / palaeontological resources and result in unnecessary disturbance if measures are not in place.; the ECPHRA has noted that the development does not trigger Section 38 (1) of the NHRA (National Heritage Resources Act of 1999) and have requested a NID (Notice of Intent to Develop) with detailed kml files, to make an informed comment. A NID to develop has been submitted. The FBAR will be updated with any additional measures provided by the ECPHRA
Impact Rating	

Impact Status	Negative Impact	Positive Impact

	Impact Criteria	Without mitigation		With mitigation	
	Spatial	Activity	1	Activity	1
	Duration	Very short	1	Very short	1
	Frequency	rare	1	Rare	1
	Intensity	Low	1	Low	1
	Severity	Negligible	3	Negligible	3
	Consequence	Negligible	4	Negligible	4
	Probability	Plausible	3	Plausible	1
	Impact Significance	**Low**	**7**	**Low**	**7**
	Mitigation	Possible			
	Confidence	High			
Mitigation Measures	Construction – Planning Team • Notice of commencement of development and a project specific heritage chance finds procedure (CFP) to be submitted to ECPHRA by the responsible individual (ECO), before construction starts. • Heritage induction / Pre-construction training and proof thereof to be shared with ECPHRA; Archaeological Sites may include: o Dense accumulations of marine shell – evidence of prehistoric shell midden o Concentrations of shell associated with pieces of bone, pottery and stone artefacts o Concentrations of fossilized bone o Concentrations of blue and white china, pieces of irons, coins etc. o Human remains including burials Construction – Construction Team • Monitoring during excavations to be done on ongoing basis and any sites exposed to be reported to the ECO (photographs, coordinates) who must report the find to the ECPHRA. Steps provided by ECPHRA regarding the find to be followed.				
No-go alternative	**Negligible impact**				

Aquatic, Terrestrial, fauna and flora and AIS
Terrestrial and Aquatic
Description
The DFFE screening tool reports indicates very high sensitivities for terrestrial and aquatic systems. The site is situated within the marine glades residential area of St Francis bay. The site falls within the Mzimvubu-Tsitsikamma water management area. The site falls within the Kromme estuary mapped in terms of the National Biodiversity Assessment (NBA, 2018), National Wetlands Map (NWM5) the NFEPA, the National Vegetation Map (2018) and the National Estuary Map. The site is situated within an aquatic and terrestrial critical biodiversity area (CBA)1 as mapped in terms of the Eastern cape biodiversity conservation Plan (ECBCP,2022). The 5-meter contour line has been used to delineate the Estuary functional Zone (EFZ) in the National Biodiversity Assessment: Estuary Technical Report (2012). The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contour levels. The estuary is completely saline due to almost absolute attenuation of fresh water as a result of the construction of two large dams within the Kromme River catchment area (Wooldridge, 2007). The Churchill Dam (capacity of 33, 3 x 106 m3) is situated 50 km from the mouth; the Mpofu Dam (capacity of 100 X 106 m3) is situated 4km from the tidal head of the Kromme Estuary (CSIR, 1992); several small farm dams further reduce fresh water supply to the estuary. The combined capacity of these two dams is greater than the mean annual runoff (MAR) for the catchment area of the Kromme River, thus greatly reducing the volume of freshwater reaching the Kromme Estuary. Development along the Estuary includes a marina which was initiated in 1969 on the southern side near the inlet and extended in 2001, and a road bridge which was constructed across the estuary in 1976, roughly 3km from the inlet, neither of these developments appear to interfere with the tidal hydraulics of the system. (Reddering and Esterhuysen, 1983). The entire area is verified as very high sensitivity in terms of terrestrial and aquatic sensitivities as it is located within the Kromme EFZ; however, the proposed extensions is not expected to result in any additional impacts to the estuarine environments, other than that which is already in place.

Figure 3: Erf is located within Aquatic CBA1; Kromme estuary (ECBCP, 2019)

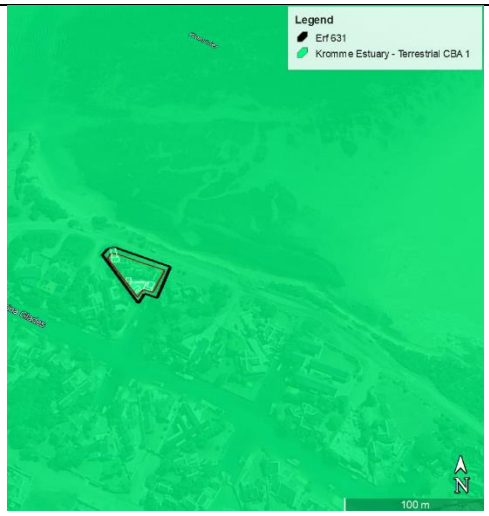

Figure 4: Erf is located within Terrestrial CBA1; Kromme estuary (ECBCP, 2019)

Figure 5: Erf is located within Estuarine Functional Zone (NatVeg Map, 2019)

Impact:	**Estuarine environment (Aquatic and terrestrial CBA)**
Nature of impact:	**Direct / Cumulative**
Description of impact	The proposed renovations are not expected to result in an additional impact on the estuary functional zone. Strict prevention of any construction work outside the boundary of the erf must be ensured.
Impact Rating	

Impact Status	Negative Impact		**Negligible**	
Impact Criteria	Impact significance			
	Without mitigation		With mitigation	
Spatial	Site	2	Activity	1
Duration	Very short	1	Very short	1
Frequency	Infrequent	2	Rarely	1
Intensity	Low	1	Low	1
Severity	Low	4	Negligible	3
Consequence	Low	6	Negligible	4

Probability	Plausible	3	Slim	1
Impact Significance	**Low**	**9**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Flora

The DFFE screening tool reports indicates high sensitivities for flora species. Erf 631 is entirely transformed. No flora species protected under the NEMBA – Amendment of Critically Endangered, Endangered, Vulnerable and Protected Species List (14 December 2007), occur on site. No endemic and range restricted flora species were recorded to be present. Milkwood trees (*Sideroxylon inerme) (*protected tree listed under the National Forests Act, 1998 (Act No. 84 of 1998) (updated 8 September 2017), and *carpobrotus edulis* (protect in terms of the Provincial Nature Conservation Ordinance, 1974) occur in the front garden (adjacent to shore road); the carpobrotus are planted below the existing retaining wall offering the property additional protection against erosion. The new driveway from Shore road is recommended to be designed in such a way so as to prevent removal of the trees; permits will be required for trimming of protect trees to facilitate the construction and use of the new driveway. Sensitivity of flora on the development site is verified as low.

Figure 6: Photo showing retaining wall, Carpobrotus edulis and Milkwood trees

Figure 7: Photo showing Milkwood trees

Figure 8: Photo showing driveway area between Milkwood trees

Impact 2:	**Indigenous vegetation**
Nature of impact:	Direct
Description of impact	The development footprint is small (maximum 200m2). The proposed expansion will not have any impact on any indigenous vegetation as it will be within a transformed erf and the specific extensions will take place on a lawned area. Any plants removed can be bagged and kept for landscaping post-construction. Milkwoods are recommended to be incorporated into the driveway design to avoid removal of the trees. Measures must be put in place to ensure disturbance to vegetation outside erf is prevented.

Impact Rating

Impact Status	Negative Impact		**Negligible**	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity	1	Activity	1
Duration	Very short	1	Very short	1
Frequency	Seldom	2	Rare	1
Intensity	Low	2	Low	1
Severity	Low	5	Negligible	3
Consequence	Low	6	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Low**	**9**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Fauna

The DFFE screening tool reports indicates high sensitivities for fauna species. Erf 631 is entirely transformed, adjacent to shore road, canal and residential houses and provides no natural habitat for sensitive species identified in the surrounding natural estuarine environment. Sensitivity of fauna on the development site is verified as low.

Impact 3:	**Fauna**
Nature of impact:	Direct
Description of impact	The project footprint is relatively small, and the site is transformed and situated directly adjacent to residential erven and Shore road. Any disturbance or displacement associated with increased activity or habitat destruction as a direct result of the activity is unlikely. With mitigation measures the impact on fauna is rated as negligible.

Impact Rating

Impact Status	Negative Impact	Negligible

Impact Criteria	Without mitigation		With mitigation	
Spatial	Local	3	Activity	1
Duration	Very short	1	Very short	1
Frequency	Rare	1	Rare	1
Intensity	Medium	3	Low	1
Severity	Low	5	Negligible	3
Consequence	Low	8	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Medium**	**11**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Impact 4:	**Alien Invasive Vegetation**
Nature of impact:	Direct / cumulative
Description of impact	Alien invasive plants seed quickly on construction sites which can negatively impact immediate and adjacent areas, resulting in a bigger cumulative impact in the area. This is expected to have negligible impact with mitigation in place.

Impact Rating

Impact Status	Negative Impact		Negligible	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Site	2	Activity	1
Duration	Short – medium	3	Very short	1
Frequency	Seldom	3	Rare	1
Intensity	Low	1	Low	1
Severity	Low	7	Negligible	3
Consequence	Low	9	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Medium**	**12**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Mitigation Measures

Pre-construction / Planning – Planning / Design Team

- Design driveway to minimise disturbance to trees; ensure erosion protection measures are incorporated into driveway design (i.e. retaining walls on either side); make use of additional *carpobrotus edulis* vegetation in rehabilitation around driveway area.
- ECO to carry out search of indigenous vegetation prior to start of construction. Any
- Any permits required for disturbance / removal sensitive flora species / protected trees to be in place prior to construction. Allow 2-3 months for this process. (DEDEAT – PCNO permits / EC DFFE – protected trees permit)
- Any SCC and protected trees that must not be disturbed by construction activities must be marked and cordoned off.
- Any plants that will be kept for landscaping to be identified, removed, bagged and placed in area which will not be disturbed by construction prior to start of construction.
- Make use of building method & materials that can withstand the harsh coastal elements.

Construction – Construction Team

- Keep construction activities within perimeter of erf; No go-areas includes sensitive estuarine area beyond Shore road / canal area. Adequate construction screening / netting to be used to clearly indicate the northern and southern boundary and clearly marked as no-go area.
- Any plants kept for landscaping to be replanted when construction areas are completed; similarly, lawn and topsoil to be stripped (max 300 mm) and stockpiled neatly and replaced on open areas when construction areas are completed.
- Contractual fines to be imposed on any employee who is found attempting to remove indigenous flora from surrounding estuarine areas.
- No stockpiling / laydown areas / waste management is to occur outside the erf.

	• Materials used during construction must be sourced and transported responsibly to minimise the risk new invasive plants.
	• Any alien invasive plant species and weeds must be removed as soon as detected and placed in bag for offsite disposal.
	• Record of permits for removal / transplanting of sensitive species of conservational concern / protected trees to be kept on record in EM file for audit purposes.
	• No animals are to be harmed or killed during construction activities. Contractual fines to be imposed on any employee who is found attempting to harm fauna on site or in surrounding areas.
	• If any animals are seen on site, a photo or a video should be taken if possible (to assists in identification) and all fauna encountered on site should be reported to the ECO immediately. This is particularly important when:
	  • An animal is harmed or compromised in any way during construction.
	  • Ground-dwelling animals /nests / eggs are unearthed during earthworks (e.g. moles).
	  • Any animal with limited mobility is found on site (e.g. tortoises, moles, chameleons).
	  • Any potentially dangerous animal is encountered. This includes any potentially venomous animal (e.g. snakes, scorpions)
	  • For any assistance with snake removals/relocations, identifications or bite treatment contact the African Snakebite Institute.
	• Put in place soil management, noise management and waste management mitigation measures

No go alternative	Baseline conditions remain the same – The direct impact of the property on the estuarine functional zone and surrounding area is considered negligible. The property is situated within the Marine Glades area where the majority of this residential area has been planned within the Kromme Estuary Functional Zone. A cumulative impact has resulted on the functioning of the estuary and coastal dynamic processes; this is outside the scope of this assessment.

Soil and Stormwater Management				
Description				
Geology of the area is the Schelm Hoek formation of the Algoa Group. Lithology is described as marine terrace conglomerate, coquinite, aeolianite, alluvial gravel, sand, silt, calc-tufa, minor gravel. Aquifer type is fractured; yield is 0.5 – 2 l/s. Depth to groundwater 14.14 mbgl. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contours.				
Impact 1:	**Soil erosion and stormwater management**			
Nature of impact:	Direct			
Description of impact	The following construction activities will take place: • Removal of vegetation (lawned areas) within construction footprint • Stockpiling of construction materials • Stockpiling of topsoil • Stockpiling of subsoil • Construction of buildings, decking and pool • Rehabilitation of disturbed areas • Removal of thatch roof The soils on site are highly susceptible to erosion. Removal of vegetation puts underlying soil at risk of wind / water erosion. Improper management of construction sites can accelerate soil erosion. The impact is of low significance with mitigation measures in place.			
Impact Rating				
Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity	1	Activity	1
Duration	Very short	1	Very short	1

Frequency	Regular	4	Seldom	3
Intensity	Low	1	Low	1
Severity	Low	6	Negligible	5
Consequence	Low	7	Negligible	6
Probability	Probable	4	Plausible	3
Impact Significance	**Medium**	**11**	**Low**	**9**
Mitigation	Possible			
Confidence	High			

Impact 2: **Dust**

Nature of impact: Direct

Description of impact: The soils on site are highly susceptible to erosion. Improper management of construction sites can result in dust impacts. The impact is of low significance with mitigation measures in place.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Local	3	Activity	1
Duration	Short – medium	3	Very short	1
Frequency	Seldom	3	Rare	1
Intensity	Low	1	Low	1
Severity	Low	7	Negligible	3
Consequence	Low	10	Negligible	4
Probability	Plausible	3	Plausible	3
Impact Significance	**Medium**	**13**	**Low**	**7**
Mitigation	Possible			
Confidence	High			

Mitigation Measures

Construction Planning

- Shade cloths, designated laydown and topsoil and stockpile areas
- Appropriate stormwater management methods must be assessed prior to construction clearance and will need to take into consideration the susceptibility of the area to erosion. Stormwater management methods may include silt traps, sand bags, swales, branch packing. Stormwater discharge must be directed to municipal stormwater management system and no sediment to enter the system. Measures to be put in place as required (e.g. Swales) to ensure runoff from the area does not remove vegetation / erode soil.

Construction – Construction Team

- Topsoil should be cleared in a phased manner as per sequence of construction activities
- Topsoil removed (maximum 300mm depth) (including lawn and vegetation) must be suitably stockpiled within boundaries of the erf on a level area at no more than 1 meter in height in an area that will not be disturbed by construction for use in rehabilitation and landscaping on the site. Topsoil must be stored with removed vegetation and covered with tarpaulin / shade cloth to prevent loss of soil/ erosion / dust generation.
- Subsoil stockpiles must be stockpiled within boundary of the erf; subsoil stockpiles must not be higher than 1.5m. they should be placed on flat areas and covered with tarpaulin / shade cloth to prevent erosion / dust generation. Excavated materials to be re used as far as possible (i.e. as fill material); excavation materials not re-used are to be removed off site as quickly as possible and disposed at an appropriately licensed waste site.
- All stockpiles must be situated on a level area on site. 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.
- Cognisance of rainfall events should govern all operations. Construction activities should be timed to avoid periods of high rainfall and should be avoided during wet weather conditions
- To prevent dust - During strong wind conditions it may be necessary to halt operations until conditions improve; Exposed areas should be wetted during windy / dry conditions
- Suitable netting / screening must be provided at erf boundary to prevent disturbance beyond the erf from laydown of materials, waste generation and any hazardous substances that may be used.
- Allow a maximum disturbance footprint of 2m around infrastructures

Post construction – Construction Team

	• Construction site must be cleared of all waste material, rubble, and debris associated with the construction phase at regular intervals during, and at the conclusion of the construction phase. • Site preparation – remove all non-native weeds from the site of revegetation to reduce competition with native plant species. • The rehabilitation of the 2m disturbance footprint with topsoil, lawn, any plants rescued on the site and mulch must occur as soon as possible after the conclusion of construction.
No go alternative	Baseline conditions remain the same – negligible impacts on soil due to erosion / stormwater runoff on site

Impact Status	Negligible Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1
Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

Noise

The project area is located in a quiet residential area within an existing development footprint. Surrounding land uses include residential houses, a road, canals and the estuary. Ambient noise level in the area is very low.

Impact 1:	Noise impacts on surrounding land users
Nature of impact:	Direct
Description of impact	Sources of noise during construction phase include construction personnel, vehicles and machinery used for clearing of vegetation, levelling, and excavation. Any noise generated is likely to be experienced by those close to the construction activity. With mitigation measures in place, the noise impacts will be short-lived and considered to be negative and of low significance.
Impact Rating	

Impact Status	Negative Impact		**Negligible**	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity	1	Activity	1
Duration	Very short	1	Very short	1
Frequency	Seldom	2	Rare	1
Intensity	Low	2	Low	1
Severity	Low	5	Negligible	3
Consequence	Low	6	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Low**	**9**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Mitigation Measures	Construction – Planning Team • Working hours to be restricted to daytime hours (i.e. 7:30 am – 5:30pm) • No major construction work to take place after hours or on Sundays or on public holidays. • A complaints register should be kept to document complaints and the corrective action taken. Construction – Construction Team • No loud music to be allowed on site. • All vehicles and machinery must be kept in good working condition.
No go alternative	Baseline conditions remain the same – negligible noise impacts

Impact Status	Negligible Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1

Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

Visual

The project area is located in a quiet residential area within an existing development footprint. Surrounding land uses include residential houses, a road, canal and the estuary.

Impact 1:	Visual impacts on surrounding land users
Nature of impact:	Direct
Description of impact	Construction will take approximately 12 months to complete. Receptors of visual impacts during construction includes the neighbouring residents in the area. The impact is negative of low significance with mitigation. No visual impacts during operational phase is anticipated; the extensions have been designed to fit in with surrounding land uses.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity specific	1	Activity specific	1
Duration	Very short	1	Very short	1
Frequency	Often	5	Often	5
Intensity	Low	1	Low	1
Severity	Low	7	Low	6
Consequence	Low	8	Low	7
Probability	Plausible	3	Slight	2
Impact Significance	**Medium**	**11**	**Low**	**9**
Mitigation	Possible			
Confidence	High			

Mitigation Measures

Construction – Planning Team

- A complaints register should be kept to document complaints and the corrective action taken.

Construction – Construction Team

- Put in place waste management measures
- Put in place soil management measures
- Put in place terrestrial / aquatic mitigation measures

No go alternative

Baseline conditions remain the same – negligible visual impacts

Impact Status	Negative Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1
Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

Waste and hazardous materials management

Solid waste is deposited at registered sites in Hankey and in Humansdorp, while drop-off zones have been established at Jeffreys Bay, St Francis Bay and Oyster Bay (KLM SDF, 2020)

Construction materials and waste generated needs to be carefully managed to ensure impacts on the environment are reduced.
Hazardous materials that may be used:

- Fuels, oils, oil-based paints, turpentine etc

Waste streams:

- Subsoils not reused
- Construction rubble (broken bricks, cement, concrete spills)
- General waste items (thatch from roof, paper, tins, plastic, metals, organic)
- Hazardous waste (resulting from any spillage of hazardous materials)

Impact	**Hazardous materials**
Nature of impact:	**Direct**
Description of impact	Contamination of soil (and subsequent impacts on vegetation) during construction must be prevented by effective site management. Various hazardous materials could result in an impact, if allowed to be released into environment. Without mitigation, localised contamination of soil is possible. Should the construction site be managed properly, the introduction of any pollutants would likely be limited. This would result in an overall low intensity, with a low consequence and overall low significance. Mitigation measures are recommended for management of hazardous materials.

Description of impact

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity specific	1	Activity specific	1
Duration	Very short	1	Very short	1
Frequency	Often	5	Often	5
Intensity	Low	1	Low	1
Severity	Low	7	Low	7
Consequence	Low	8	Low	8
Probability	Plausible	3	Slight	2
Impact Significance	**Medium**	**11**	**Low**	**10**
Mitigation	Possible			
Confidence	High			

Impact	General Waste materials
Description of impact	Impact on fauna, flora, soil, people and nearby estuarine environment is possible if waste materials are released into environment.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Local	3	Site specific	2
Duration	Very short	1	Very short	1
Frequency	Often	5	Often	5
Intensity	Low	1	Low	1
Severity	Low	7	Low	7
Consequence	Low	10	Low	9
Probability	Plausible	3	Slim	1
Impact Significance	**Medium**	**13**	**Low**	**10**
Mitigation	Possible			
Confidence	High			

Mitigation Measures

Construction – Planning

- An incident/complaints register must be established and maintained on-site.
- Suitable storage, drip trays, ablution facilities, bins, skip to be provided as required
- Waste management plan to deal with all waste streams
- Waste management area on site, with erf boundary
- Identify closest registered waste site
- Maintain records of disposal / ablution service

Construction - Construction Team

- Under no circumstances may solid waste be burnt or buried on site / surrounding area

- Waste management must follow waste hierarchy – avoid, reduce, reuse, recycle, dispose
- No Littering
- Contractors must monitor construction vehicles to ensure that they are not overly full – thus increasing the likelihood of spillage of debris on the site. Ensure any debris spilled onto roads is cleared up.
- No fuel to be stored on site;
- Do not leave machinery / vehicles running unnecessarily. Service machines and vehicles regularly to prevent unnecessary fumes and leaks.
- Ensure cleaning materials, volatile materials and other hazardous materials (e.g. chemicals) are securely stored within a suitable sealable non-corrosive container. Ensure lids are secure to avoid unnecessary release into the environment
- If machinery using fuels and oil required for construction (i.e. generators, compactors):
- Refuelling must take place with drip tray.
- Drip trays must be placed under such equipment when standing
- In the event of a major spill or leak of contaminants, the relevant administering authority must be immediately notified as per the notification of emergencies/incidents.
- Spill kit in place - Any spills must receive the necessary clean-up action. Appropriate arrangements to be made for appropriate collection and disposal of all cleaning materials, absorbents, and any contaminated soils. This must be stored in separate designated container on site for offsite disposal at licensed waste disposal site.
- Spilled cement or concrete must be cleaned up as soon as possible and disposed of at a suitably licensed waste disposal site.
- Ablution facility to be provided as necessary at a ratio of 1:10; ablution facility must be secured to prevent being blown over and must be regularly serviced. Service slips to be kept on record by site manager for audit purposes.
- Specific area within erf must be designated for the temporary management of various waste streams. Bins / skip must be available for collection, separation and storage of waste streams - i.e. general refuse, construction waste (wood and metal scrap), contaminated waste. Area to be designated for storage of excess subsoils, construction rubble.
- Where possible, construction and general wastes on-site must be reused or recycled.
- All solid waste collected must be disposed of at a registered waste disposal site on a regular basis; waste materials particularly thatch roof must be removed from site as quickly as possible and not stockpiled on site. A certificate of disposal must be obtained by the construction site manager and kept on file and be made available for review at any time.
- Corrective action must be undertaken immediately if a complaint is received.

Post Construction - Construction Team

- Upon the completion of construction, the area will be cleared of all construction materials.

No go alternative

Baseline conditions remain the same – negligible pollution impacts as a result of existing waste management.

Impact Status	Negative Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1
Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

Energy efficiency	
The increasing use of renewable resources by homeowners, businesses, organizations etc will cumulatively reduce reliance on rapidly depleting non renewable resources.	
Impact 1:	**Non-renewable resources**
Nature of impact:	Direct / cumulative
Description of impact	Designs indicate a combination of gas; heat pump and Eskom electricity is / will be used. Energy efficient measures (e.g. glazing) are incorporated into the design. LED light fittings are proposed. Solar panels are

	recommended to be incorporated into new roof design. The proposed development is expected to have a negligible impact on non-renewable energy resources.
Mitigation Measures	**Planning** • Solar panels recommended to be incorporated into new roof. • Incorporated orientation and insulation into design and materials. • All light fittings are recommended to be LED. • Contractor is to adhere to energy efficiency specifications / requirements provided by architect and be used in conjunction with the approved building plans; • The contractor may propose alternative materials & specifications to achieve or improve the overall energy efficiency of the design through consultation with the Architect. **Construction** • Construction is to be carried out during regular working hours to reduce the use of artificial lighting. • Contractor will be advised to transport all construction materials on-site at the same time wherever possible; the collection of waste material must be conducted simultaneously with other collection / deliveries to reduce the amount of fuel usage
No go alternative	Baseline conditions will remain the same. A cumulative negative impact results from combined use of non-renewable resources for electricity. Reduction of demand on non-renewable energy sources is required at all levels of society. Solar panels are recommended to be installed to augment power supply to the house; the current impact of the household on non-renewable resources is considered very low to negligible.

Socio-economic

The project area is located in the Marine Glades area in St Francis Bay in the Kouga Local Municipality. According to the KLM SDF, 2020:

- The 2016 Community Survey estimated the population size of the Kouga at 112 941 with approximately 5% (5 647) residing in St Francis Bay.
- KLM GDP was R10.5 billion in 2016 and contributed 31% to the Sarah Baartman District Municipality GDP of R34.2 billion.
- In 2006 the unemployment rate for Kouga was 13.4% and increased overtime to 14.7% in 2016.
- Property - The value of the current valuation roll is R26,936,500,845, whilst the total value of the new 2018 roll is R27,347,788,250, which constitutes an increase of 1.53% (IDP)

Impact 1	Creation of temporary construction work and skills development
Nature of impact:	**Direct**
Description	An estimated 15 employment opportunities will be created during the construction phase. The expected value of the project is estimated at R8000 000. Local labour (local reputable contractor) should be sourced from the local St Franics Bay community as far as possible to prevent conflict and enhance the benefits of employment creation to the immediate area . Materials and any required professional services should also be sourced locally as far as possible. The project will offer temporary employment to contractors which is a positive social impact.
Imapct Rating	

Impact Status	Positive Impact		Positive Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Local	3	Local	3
Duration	Very short	1	Very short	1
Frequency	Rare	1	Rare	5
Intensity	Low	1	Low to medium	2
Severity / Degree	Negligible	3	Low	4
Consequence	Low	6	Low	7
Probability	Possible	4	Possible	4
Impact Significance	**Low**	**10**	**Medium**	**11**
Mitigation	Possible			
Confidence	High			

Impact 2	Increase in property value

Description	The house is located in Shore road in a quiet residential area of Marine Glades, St Francis Bay. The proposed extensions are expected to result in an increase in the value of the property and therefore will increase the KLM rates earned from the property.

Impact Rating

Impact Status	Positive Impact		Positive Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Local	3	Local	3
Duration	Very short	1	Very short	1
Frequency	Rare	1	Rare	1
Intensity	Low	1	Low	1
Severity	Negligible	3	Negligible	3
Consequence	Low	6	Low	6
Probability	Possible	4	Possible	4
Impact Significance	**Low**	**10**	**Low**	**10**
Mitigation	Possible			
Confidence	High			

Mitigation Measures

Construction Team

- Use local reputable contractor
- Use local materials, where possible.
- Do not pay any cash wages on site to minimise criminal risk to employees

No go alternative

No creation of temporary employment opportunities and no added value to property resulting in negative long term financial impact on landowners.

Impact Status	Negative Impact	
Spatial	Site	2
Duration	Long term	5
Frequency	Rare	1
Intensity	Low	1
Severity	Medium	7
Consequence	Medium	9
Probability	Plausible	3
Impact Significance	Medium	11
Confidence	High	

Fire prevention

The project area is located in adjacent to the estuarine environment and canals; the roof is currently thatch. Fires have occurred in the St Francis Bay area in the recent past. The fire risk is considered medium; with roof change the fire risk is considered low.

Impact	Fire
Nature of impact:	**Direct**
Description	The specific site and project is considered a medium risk for fire during construction.

Imapct Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Site specific	2	Activity specific	1
Duration	Very short	1	Very short	1
Frequency	Rare	1	Rare	1
Intensity	Low – medium	2	Low	1
Severity	Low	4	Low	6
Consequence	Low	6	Low	7
Probability	Possible	4	Slight	2
Impact Significance	**Low**	**10**	**Low**	**9**
Mitigation	Possible			
Confidence	High			

Mitigation Measures	• No cigarette butts or burning substances are permitted to be released into the environment. All cigarette butts to be extinguished first and then disposed of in a waste receptacle provided. • Fire response measures to be in place (I,e fire extinguisher) • If a fire is detected it must be attended to immediately. • Ensure emergency numbers are on hand for fire response in the area. • Put in place waste management measures
No go alternative	Baseline conditions remain the same – medium risk for fires in area

Impact Status	Negative Impact	
Spatial	Local	3
Duration	Very short	1
Frequency	Rare	1
Intensity	Medium	3
Severity	Low	5
Consequence	Medium	8
Probability	Plausible	3
Impact Significance	Medium	11
Confidence	High	

3 Operational Phase - Alternative site 1 (preferred site / activity and technology alternative)

Estuarine functional area

The site (as well as the majority of residential erven within the Marine Glades area) falls within the mapped EFZ. Residential erf 631 is located between 2 – 4 MASL. The lowest area is in the south, adjacent to the canal. Retaining walls are in place in northern and southern sections of the property between the 2 m and 3 m contour levels.

Impact 1:	**Disturbance to adjacent coastal public property and risk to house**
Nature of impact:	**Direct / Cumulative**
Description of impact	The proposed extension is not expected to result in any additional impacts to the estuarine environments, other than that which is already in place.

Impact Rating

Impact Status	Negative Impact		**Negligible**	
Impact Criteria	Impact significance			
	Without mitigation		With mitigation	
Spatial	Site	2	Activity	1
Duration	Very short	1	Very short	1
Frequency	Infrequent	2	Rarely	1
Intensity	Low	1	Low	1
Severity	Low	4	Negligible	3
Consequence	Low	6	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Low**	**9**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Mitigation Measures	• Any precautionary measures that may be required as a result of dynamic coastal processes, must be implemented within the boundaries of the property • No AIS permitted in landscaping; remove any AIS found within erf as soon as detected for disposal at license waste site
No go alternative	• Baseline conditions remain the same – The direct impact of the property on the estuarine functional zone and surrounding area is considered negligible. The property is situated within the Marine Glades area where the majority of this residential area has been planned within the Kromme Estuary Functional Zone. A cumulative impact has resulted on the functioning of the estuary and coastal dynamic processes; this is outside the scope of this assessment.

Fire Risk

The project area is located in adjacent to the estuarine environment and canals; the roof is currently thatch. Fires have occurred in the St Francis Bay area in the recent past. The fire risk is considered medium; with roof change the fire risk is considered low.

Nature of impact:	Direct
Description of impact	With roof change the fire risk is considered low.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Impact significance			
	Without mitigation		With mitigation	
Spatial	Site	2	Site	2
Duration	Very short	1	Very Short	1
Frequency	Rare	1	Rare	1
Intensity	Medium	3	Med / Low	2
Severity	Low	5	Low	4
Consequence	Low	7	Low	6
Probability	Slight	2	Slight	2
Impact Significance	Low	9	Low	8
Mitigation	Possible			
Confidence	High			

Mitigation Measures

- No fires beyond bound of erf permitted.
- Fire emergency number on hand

No go alternative

Baseline conditions remain the same – medium risk for fires in area

Impact Status	Negative Impact	
Spatial	Local	3
Duration	Very short	1
Frequency	Rare	1
Intensity	Medium	3
Severity	Low	5
Consequence	Medium	8
Probability	Plausible	3
Impact Significance	Medium	11
Confidence	High	

Visual

The project area is located in a quiet residential area within an existing development footprint. Surrounding land uses include residential houses, a road, canal and the estuary.

Impact 1:	Visual impacts on surrounding land users
Nature of impact:	Direct
Description of impact	The maximum height of the building will be 8meters (7986 mm) and thatch roof will be replaced with aluminium roof sheets. Glazing and aluminium are proposed for the windows and door. The planned renovation will fit in with the character and the surrounding area; negligible operational visual impacts are expected to occur as a result of the planned renovations.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Without mitigation		With mitigation	
Spatial	Activity	1	Activity	1
Duration	Very Short	1	Very Short	1
Frequency	Rare	1	Rare	1
Intensity	Low	1	Low	1
Severity	Negligible	3	Negligible	3
Consequence	Negligible	4	Negligible	4
Probability	Slim	1	Slight	1
Impact Significance	Negligible	5	Negligible	5

	Mitigation	Possible
	Confidence	High
Mitigation Measures	Planning Team • KLM architectural guidelines (Notice_1238_1113) to be followed	
No go alternative	Baseline conditions remain the same – negligible visual impacts	

Impact Status	Negative Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1
Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

Stormwater management and soil erosion

Existing drainage is currently on the southern section of the property; the site is fairly flat with a steep gradient beyond the eastern permitter of the erf. Icreased hard surfaces will increase the runoff generated on site which could lead to ongoing damage to vegetation and soil erosion if managed incorrectly. Ensure correct planning and design is carried out to effectively manage stormwater and the drainage on site.

Nature of impact:	Direct
Description of impact	Ineffective stormwater management resulting in disturbance to vegetation and soil erosion
Impact Rating	

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Impact significance			
	Without mitigation		With mitigation	
Spatial	Local	3	Activity	1
Duration	Very short	1	Very Short	1
Frequency	Infrequent	2	Rare	1
Intensity	Medium	3	Low	1
Severity	Low	6	Negligible	3
Consequence	Low	9	Negligible	4
Probability	Slight	2	Slim	1
Impact Significance	Medium	11	Negligible	5
Mitigation	Possible			
Confidence	High			

Mitigation Measures	• The site should be left in a stable state at the end of construction phase and all disturbed areas should be effectively mulched and indigenous vegetation replanted. • Stormwater tanks to be installed to capture water from roofing structures. • The rainwater and gutter system to be designed by an approved competent person.
No go alternative	Negligible

Impact Status	Negative Impact	
Spatial	Activity	1
Duration	Very Short	1
Frequency	Rare	1
Intensity	Low	1
Severity	Negligible	3
Consequence	Negligible	4
Probability	Slim	1
Impact Significance	Negligible	5
Confidence	High	

4 Decommissioning and closure Phase (Alternative (preferred alternative))

This phase is not applicable to the proposed development.

3. CLIMATE CHANGE ASSESSMENT

Climate change issues must be considered as part of the EIA process Please consider the Climate Change guideline. EAP must determine:
a)The potential impact of climate change on society and the economy, whether the impact is negative or positive, considering that society needs to be at the centre of the proposed development;
b)The potential alternatives of the proposed development, alternatives that will have less impact on climate change (environment and generation of waste included), the society and economy;
c)whether, and to what extent, the proposed development will result in the release of greenhouse gas (GHG) emissions;
d)whether the proposed development is necessary to achieve long term decarbonisation goals;
e)the impact of the development on social, economic, natural and built environment that are crucial for climate change, adaptation and resilience;
f) the projected impact of climate change on proposed development; and surrounding environment, and implications for the development.
g)Explanation of how the impacts is likely to be exacerbated or minimised as result of climate change and what measures are likely to be implemented to accommodate and manage (adapt to) the anticipated worst scenario where applicable
h) whether, and to what extent, the impacts identified in (a) -(g) can be mitigated.

Climate Change
The site is located in St Franics bay which receives year-round rainfalls, although more winter rainfall occurs. Average temperate are 12 – 14 deg Celsius in winter and 18 – 20 deg Celsius in summer. A study carried out (Fitchett *et al*., 2016) modelled the sea-level rise for St Francis Bay and Cape St Francis and plotted areas likely to be affected by consequent flooding. Digital elevation modelling showed that the sea-level rise projected for 2050 is modelled to result in the permanent opening of the Kromme River Estuary which will result in an increase in salinity of the estuary and heightened flood risk for the Kromme river. Sea-level rises were projected for the years 2050 and 2100, using sea-level rise projections of 0.4 m for 2050 and 1.6 m for 2100, based on an average rate of change of 0.3 mm/year along the south coast of South Africa. The results of the Digital elevation modelling (DEM) predicted a considerable reduction of the beach area, with extensive coastal squeeze, by 2050, with the worst effect being predicted for the Sea Vista area of St Francis Bay. By 2100, the DEM projected inundation of low-lying regions of the two towns. Careful management of flooding is required at a strategic level to safeguard the entire residential area from flood and erosion risk, this is however beyond the scope of this assessment and proposed extensions. It is noted that a coastal protection scheme has been proposed by the St Francis Property Owners NPC on behalf of the KLM. With reference to the EIR (EC08/C/LN2/M/01-2021) prepared by CES the following relevant information is noted: - Residential areas of Marine Glades falls within low sensitivity area - Maintenance of the sandbank adjacent to S1 (sandbank is directly north of Erf 631) may provide a buffer to the marina complex and to the spit revetment and groyne during a flood event, providing a more resilient estuarine system The majority of the Marine Glades area is within the EFZ and therefore identified as a high-risk development area (KLM SDF, 2020). Possible impacts of climate change including flooding, sea-level rise and storm surges. The specific site is situated adjacent to a section of the estuary which is characterised by a large sand bank (Figure 9 below); this may offer protection to the property during floodings and storm surges.

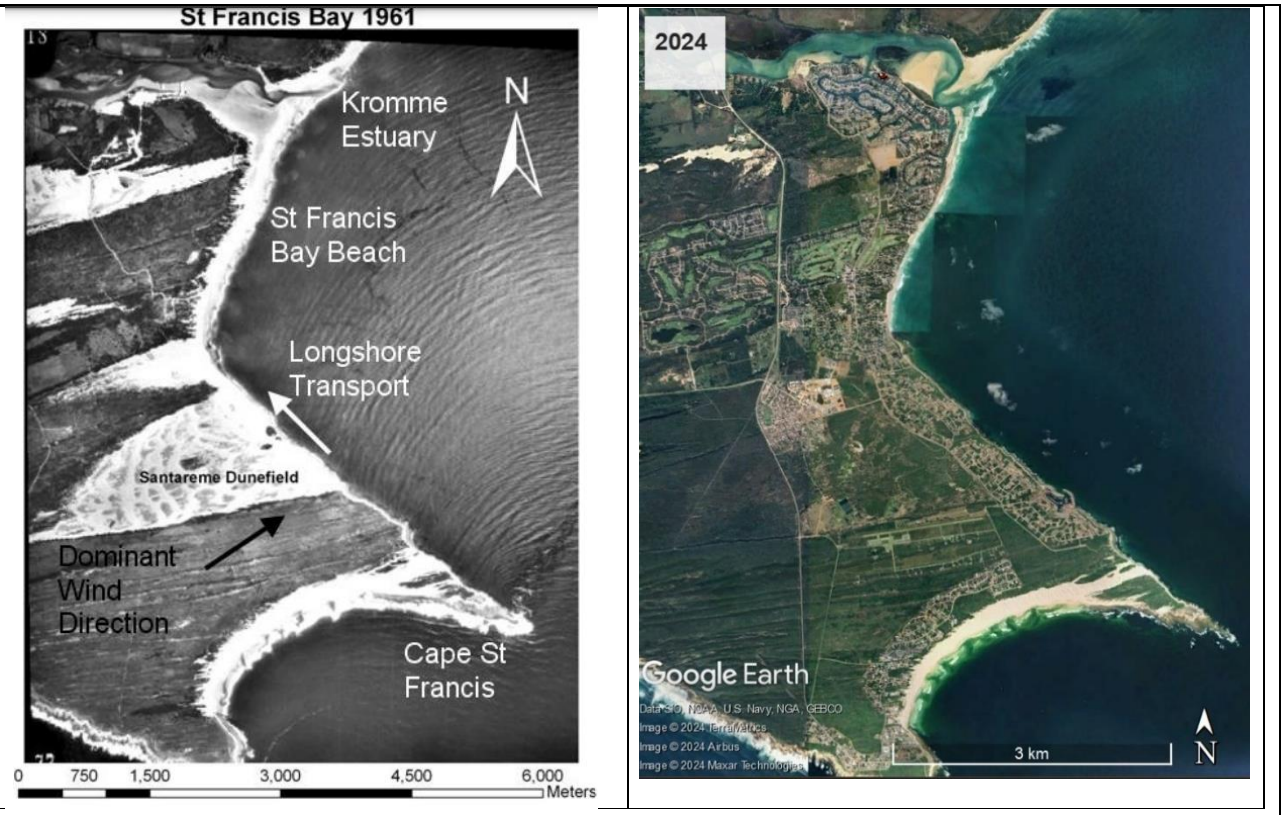

Figure 9: Sandbank north of Erf 631 (1961 and 2024): (image on left extracted from MSC study compiled by Anderson, 2008)

Impact 1:	**Impact of development on climate change**
Nature of impact:	**Direct / Cumulative**
Description of impact	The site has an existing house which is proposed to be extended; solar panels should be included as part to the new roof design to augment supply demand (from non-renewable resources) of the residency; the impact of this development on climate change is negligible.

Impact Rating

Impact Status	Negative Impact		Negative Impact	
Impact Criteria	Impact significance			
	Without mitigation		With mitigation	
Spatial	Site	2	Activity	1
Duration	Very short	1	Very short	1
Frequency	Infrequent	2	Rarely	1
Intensity	Low	1	Low	1
Severity	Low	4	Negligible	3
Consequence	Low	6	Negligible	4
Probability	Plausible	3	Slim	1
Impact Significance	**Low**	**9**	**Negligible**	**5**
Mitigation	Possible			
Confidence	High			

Impact 2:	**Risk of climate change on property**
Nature of impact	**Cumulative** (combined effect of changes to the environment caused by multiple human activities over space and time)
Description of impact	The site (2 – 4 MASL) is adjacent to shore road which is adjacent to the estuary functional zone in the North, and adjacent to the canal in the south. Retaining walls are in the southern and northern sections of the property between the 2 m and 3-meter contour levels. All renovations are proposed on the 3 m level with exception of the driveway between the new garage and shore road. No changes to existing risk will occur as a result of the proposed renovation. The sand bank may offer protection to the property during future floodings and storm surges. The long term effects of climate change to the area is difficult to predict; sea level rise and associated flooding can be expected, however strategically planned human interventions could in the future mitigate associated impacts.

Impact Rating

Impact Status	Negative Impact	Negative Impact

	Impact Criteria	Impact significance			
		Without mitigation		With mitigation	
	Spatial	Local	3	Local	3
	Duration	Long term	6	Long term	6
	Frequency	Rare	1	Rare	1
	Intensity	Medium High	4	Medium High	4
	Severity	Medium High	11	Medium High	11
	Consequence	Medium High	14	Medium High	14
	Probability	Plausible	3	Plausible	3
	Impact Significance	Medium High	**17**	Medium High	**17**
	Mitigation	Difficult			
	Confidence	Medium			
Mitigation Measures	• As per mitigation measures for construction and operational phase				

4. 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.

Several impacts were identified for construction phase, and a few were identified in operational phase. Measures were identified to avoid / manage anticipated impacts. No negative impacts of high or very high significance were identified. The majority of impacts were assessed to be negative of low significance to negligible with mitigation measures in place. The development is expected to have a positive impact on local employment and property value.
The site currently provides limited value in terms of biodiversity conservation due to the small footprint located within the boundaries of a residential erf. The footprint of 400m2 will be expanded by approximately 173m2 and will occupy less than 50 % of the erf. The renovation will not result in any additional impacts that is not in place already, with exception of short-term construction impacts which are considered to be of low to negligible significance.

Alternative A (preferred alternative)

The table below summarises the significance of impacts assessed with and without mitigation in place.

Impact	**Without Mitigation**		**With mitigation**	
Archaeology and Paleontology Resources	Negative Impact		Positive Impact	
	Low	7	Low	7
Estuarine environment	Negative Impact		Negligible	
	Low	9	Negligible	5
Indigenous vegetation	Negative Impact		Negligible	
	Low	9	Negligible	5
Fauna	Negative Impact		Negligible	
	Low	10	Negligible	5
Alien Invasive Vegetation	Negative Impact		Negligible	
	Medium	13	Negligible	5
Soil erosion and stormwater management	Negative Impact		Negative Impact	
	Medium	11	Low	9
Dust	Negative Impact		Negative Impact	
	Medium	13	Low	7
Noise impacts on surrounding land users	Negative Impact		Negligible	
	Low	9	Negligible	5
Visual	Negative Impact		Negative Impact	
	Medium	11	Low	10
Hazardous materials	Negative Impact		Negative Impact	
	Medium	11	Low	10

General Waste materials	Negative Impact		Negative Impact	
	Medium	13	Low	10
Creation of temporary construction work and skills development	Positive Impact		Positive Impact	
	Low	10	Medium	11
Increase in property value	Positive Impact		Positive Impact	
	Low	10	Low	10
Fire prevention	Negative Impact		Negative Impact	
	Low	10	Low	9
Operational				
Estuarine Functional area	Negative Impact		Negligible	
	Low	9	Negligible	5
Fire Risk	Negative Impact		Negative Impact	
	Low	9	Low	8
Stormwater	Negative Impact		Negligible	
	Medium	11	Negligible	5

No-go alternative (compulsory)

The 'no-go' option assumes the site remains in its current state, and there will be no temporary construction impacts or long term positive impact for the landowners.

SECTION E. RECOMMENDATIONS OF PRACTITIONER

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	■
Is an EMPr attached?	YES	■

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):

Not applicable

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:

All recommended mitigation measures (EMPr) should be contained in an authorisation.

SECTION F: APPENDICES

The following appendixes must be attached as appropriate:

Appendix A: Site plan(s)

Appendix B: Photographs

Appendix C: Facility illustration(s)

Appendix D: Specialist reports – Site verification report

Appendix E: Comments and responses report

Appendix F: Environmental Management Programme (EMPr)

Appendix G: Other information – Impact Assessment Methodology

References

Baird, Dan, J. F. K. Marais, and Tris Wooldridge. 1981. “The Influence of a Marina Canal System on the Ecology of the Kromme Estuary, St Francis Bay.” South African Journal of Zoology 16 (1): 21–34. https://doi.org/10.1080/02541858.1981.11447729.

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