



Corner Athol Fugard Terrace and Castle Hill, Central, Port Elizabeth 6001
Private Bag X5001, Greenacres, Port Elizabeth 6057 | Republic of South Africa

Tel: 041 508 5844 | Fax: 041 508 5865 | E-mail: Nicole.Gerber@dedea.gov.za | www.dedea.gov.za

Reference: EC08/C/LN2/M/01-2021
Enquiries: N. Gerber

The Municipal Manager: Kouga Municipality
P.O. Box 21
Jeffrey's Bay
6330

E-mail: jreed@kouga.gov.za; cduplessis@kouga.gov.za; nsiwela@kouga.gov.za

Attention: Mr. Charl du Plessis

APPLICATION FOR AUTHORISATION IN TERMS OF SECTION 24 OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, ACT 107 OF 1998 TO UNDERTAKE A LISTED ACTIVITY AS SCHEDULED IN THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014, AS AMENDED: PROPOSED COASTAL PROTECTION SCHEME, ST FRANCIS BAY, WITHIN THE KOUGA MUNICIPAL AREA.

With reference to the above-mentioned application (Reference number EC08/C/LN2/M/01-2021), please be advised that **the Department has decided to grant authorisation. The Environmental Authorisation and reasons for the decision are attached herewith.**

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended, you are instructed to notify all registered interested and affected parties, in writing and within fourteen (14) days of the date of the Department's decision in respect of your application.

1. The written notification referred to above must -
 - 1.1 Specify the date on which the Environmental Authorisation was issued;
 - 1.2 Inform interested and affected parties of the appeal procedure provided for in terms of the National Appeal Regulations, 2014, as contained in GN R. 993 of 08 December 2014; and
 - 1.3 Advise interested and affected parties that a copy of the Environmental Authorisation and reasons for the decision will be furnished on request.
2. Should you decide to appeal, you must submit your appeal to the appeal administrator, as indicated in the table contained in point 3 below, and serve a copy of the appeal to the applicant, if not the appellant, any registered interested and affected party and any organ of state with

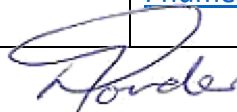
interest in the matter within twenty (20) days as described in Regulation 4 of the National Appeal Regulations, 2014.

3. Any appeal against the decision contained in this Authorisation must be addressed in writing, to the MEC for Economic Development, Environmental Affairs & Tourism (hereinafter referred to as “the MEC”) in terms of Regulation 4(1) of the NEMA Appeal Regulations 2014 and within 20 (twenty) days after the appellant has been notified in terms of paragraphs 1.1 and 1.2, of the decision.
4. An Appeal Submission must be made on a form obtainable from the Departmental Appeal Administrator and/or the Departmental website on www.dedea.gov.za or relevant Regional Office; and
5. The Appellant must also serve a copy of the appeal to the regional office that processed the application.
6. In the event that an appeal is lodged, copies of such appeal must be served on the applicant (if not the appellant), all registered interested and affected parties as well as juristic state departments (organ of state with interest in the matter) within 20 days of having been notified in accordance with the requirements stipulated in paragraphs 1.1 and 1.2 of the decision.

Only appeals on environmental grounds can be considered. All appeals should be accompanied by relevant supporting documentation.

7. The address to which the **originals** of any such an appeal and any other documents pertaining to the appeal must be mailed is outlined below. Please note that originals may also be delivered per hand or courier.

Department	Economic Development, Environmental Affairs and Tourism
Attention	General Manager: Environmental Affairs
Postal Address	Private Bag X0054, BHISHO , 5605
By Hand	Old Safety and Liaison Building (Global Life Complex) Opposite Engen Garage, Bhisho, 5605
In order to facilitate efficient administration of appeals copies of the notice of intention to appeal and any subsequent appeal documentation must also be submitted as follows:	
Manager: Mr S. Gqalangile - Environmental Impact Management per e-mail:	Siyabonga.Gqalangile@dedea.gov.za
CC: Ms Phumeza Gxala – Admin support for Mr Gqalangile	Phumeza.Gxala@dedea.gov.za



8. In the event that an appeal is lodged with regard to this Environmental Authorisation, no listed activities as described in this Environmental Authorisation may commence prior to the resolution of the appeal and prior to the Department's written confirmation of compliance with all conditions that must be met before construction can commence, whichever event is the latter.
9. Please note that due to the restrictions imposed by the Covid-19 pandemic, all documents and correspondence should be submitted or sent to I & AP's electronically where possible.



DAYALAN GOVENDER

**DEPUTY DIRECTOR: ENVIRONMENTAL AFFAIRS
CACADU REGION**

DATE: 20 August 2021

CC: CES - Coastal and Environmental Services (Pty) Ltd
P.O. Box 934
Grahamstown
6139

E-mail: g.shaw@cesnet.co.za



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Cell #: 073 022 9765 | Fax: 041 508 5865 | E-mail: Nicole.Gerber@dedea.gov.za | www.dedea.gov.za

Environmental Authorisation

AUTHORISATION NOTICE REGISTER NUMBER	Provincial Reference Number: EC08/C/LN2/M/01-2021 NEAS Reference: ECP/EIA/0001005/2021																																																																																																																																																																																																																																																																										
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HOLDER OF AUTHORISATION	Kouga Local Municipality																																																																																																																																																																																																																																																																										
LOCATION OF ACTIVITY	The activity occurs within coastal public property in St Francis Bay, the beach and spit area, and within the confines of the Kromme River estuary, encompassing these erven - Erf 720; Erf 1343; Erf 623; Erf 2257; Erf 185; Erf 53; Erf 184; Erf 625, within the Kouga Local Municipal area.																																																																																																																																																																																																																																																																										
CO-ORDINATES OF CORNER POINTS OF STUDY AREA FOR ACTIVITY	<table border="1"> <thead> <tr> <th>Coordinate No.</th> <th colspan="3">Latitude (S) (DDMMSS)</th> <th colspan="3">Longitude (E) (DDMMSS)</th> </tr> </thead> <tbody> <tr><td>1</td><td>34</td><td>8</td><td>26.04</td><td>24</td><td>50</td><td>43.41</td></tr> <tr><td>2</td><td>34</td><td>8</td><td>18.45</td><td>24</td><td>50</td><td>7.81</td></tr> <tr><td>3</td><td>34</td><td>8</td><td>19.93</td><td>24</td><td>49</td><td>26.52</td></tr> <tr><td>4</td><td>34</td><td>8</td><td>30.21</td><td>24</td><td>48</td><td>59.97</td></tr> <tr><td>5</td><td>34</td><td>8</td><td>19.67</td><td>24</td><td>48</td><td>28.20</td></tr> <tr><td>6</td><td>34</td><td>7</td><td>45.77</td><td>24</td><td>48</td><td>3.11</td></tr> <tr><td>7</td><td>34</td><td>7</td><td>48.66</td><td>24</td><td>47</td><td>54.17</td></tr> <tr><td>8</td><td>34</td><td>8</td><td>11.67</td><td>24</td><td>48</td><td>6.31</td></tr> <tr><td>9</td><td>34</td><td>8</td><td>29.39</td><td>24</td><td>48</td><td>21.50</td></tr> <tr><td>10</td><td>34</td><td>8</td><td>39.91</td><td>24</td><td>48</td><td>48.86</td></tr> <tr><td>11</td><td>34</td><td>8</td><td>41.85</td><td>24</td><td>49</td><td>21.79</td></tr> <tr><td>12</td><td>34</td><td>8</td><td>32.16</td><td>24</td><td>49</td><td>32.95</td></tr> <tr><td>13</td><td>34</td><td>8</td><td>33.00</td><td>24</td><td>49</td><td>54.04</td></tr> <tr><td>14</td><td>34</td><td>8</td><td>42.63</td><td>24</td><td>50</td><td>6.30</td></tr> <tr><td>15</td><td>34</td><td>8</td><td>45.67</td><td>24</td><td>50</td><td>15.49</td></tr> <tr><td>16</td><td>34</td><td>8</td><td>46.52</td><td>24</td><td>50</td><td>20.00</td></tr> <tr><td>17</td><td>34</td><td>8</td><td>48.11</td><td>24</td><td>50</td><td>20.07</td></tr> <tr><td>18</td><td>34</td><td>8</td><td>49.64</td><td>24</td><td>50</td><td>24.43</td></tr> <tr><td>19</td><td>34</td><td>9</td><td>11.82</td><td>24</td><td>50</td><td>16.95</td></tr> <tr><td>20</td><td>34</td><td>9</td><td>12.63</td><td>24</td><td>50</td><td>15.75</td></tr> <tr><td>21</td><td>34</td><td>9</td><td>14.45</td><td>24</td><td>50</td><td>15.54</td></tr> <tr><td>22</td><td>34</td><td>9</td><td>14.90</td><td>24</td><td>50</td><td>14.55</td></tr> <tr><td>23</td><td>34</td><td>9</td><td>22.00</td><td>24</td><td>50</td><td>10.55</td></tr> <tr><td>24</td><td>34</td><td>9</td><td>22.78</td><td>24</td><td>50</td><td>8.86</td></tr> <tr><td>25</td><td>34</td><td>9</td><td>28.92</td><td>24</td><td>50</td><td>5.39</td></tr> <tr><td>26</td><td>34</td><td>9</td><td>29.44</td><td>24</td><td>50</td><td>5.43</td></tr> <tr><td>27</td><td>34</td><td>9</td><td>29.48</td><td>24</td><td>50</td><td>4.64</td></tr> <tr><td>28</td><td>34</td><td>9</td><td>29.21</td><td>24</td><td>50</td><td>4.28</td></tr> <tr><td>29</td><td>34</td><td>9</td><td>29.27</td><td>24</td><td>50</td><td>1.78</td></tr> <tr><td>30</td><td>34</td><td>9</td><td>29.10</td><td>24</td><td>50</td><td>1.39</td></tr> <tr><td>31</td><td>34</td><td>9</td><td>29.50</td><td>24</td><td>49</td><td>53.28</td></tr> <tr><td>32</td><td>34</td><td>9</td><td>35.46</td><td>24</td><td>49</td><td>50.56</td></tr> <tr><td>33</td><td>34</td><td>9</td><td>33.58</td><td>24</td><td>49</td><td>59.49</td></tr> <tr><td>34</td><td>34</td><td>9</td><td>32.79</td><td>24</td><td>59</td><td>59.24</td></tr> <tr><td>35</td><td>34</td><td>9</td><td>32.59</td><td>24</td><td>50</td><td>0.19</td></tr> <tr><td>36</td><td>34</td><td>9</td><td>33.34</td><td>24</td><td>50</td><td>0.46</td></tr> <tr><td>37</td><td>34</td><td>9</td><td>32.88</td><td>24</td><td>50</td><td>3.28</td></tr> </tbody> </table>	Coordinate No.	Latitude (S) (DDMMSS)			Longitude (E) (DDMMSS)			1	34	8	26.04	24	50	43.41	2	34	8	18.45	24	50	7.81	3	34	8	19.93	24	49	26.52	4	34	8	30.21	24	48	59.97	5	34	8	19.67	24	48	28.20	6	34	7	45.77	24	48	3.11	7	34	7	48.66	24	47	54.17	8	34	8	11.67	24	48	6.31	9	34	8	29.39	24	48	21.50	10	34	8	39.91	24	48	48.86	11	34	8	41.85	24	49	21.79	12	34	8	32.16	24	49	32.95	13	34	8	33.00	24	49	54.04	14	34	8	42.63	24	50	6.30	15	34	8	45.67	24	50	15.49	16	34	8	46.52	24	50	20.00	17	34	8	48.11	24	50	20.07	18	34	8	49.64	24	50	24.43	19	34	9	11.82	24	50	16.95	20	34	9	12.63	24	50	15.75	21	34	9	14.45	24	50	15.54	22	34	9	14.90	24	50	14.55	23	34	9	22.00	24	50	10.55	24	34	9	22.78	24	50	8.86	25	34	9	28.92	24	50	5.39	26	34	9	29.44	24	50	5.43	27	34	9	29.48	24	50	4.64	28	34	9	29.21	24	50	4.28	29	34	9	29.27	24	50	1.78	30	34	9	29.10	24	50	1.39	31	34	9	29.50	24	49	53.28	32	34	9	35.46	24	49	50.56	33	34	9	33.58	24	49	59.49	34	34	9	32.79	24	59	59.24	35	34	9	32.59	24	50	0.19	36	34	9	33.34	24	50	0.46	37	34	9	32.88	24	50	3.28
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40	34	9	48.87	24	49	55.27
41	34	9	49.48	24	49	44.79
42	34	9	50.12	24	49	46.54
43	34	9	52.91	24	49	46.71
44	34	9	53.24	24	49	45.02
45	34	9	53.80	24	49	45.10
46	34	9	53.43	24	49	46.68
47	34	9	52.66	24	49	47.94
48	34	9	51.49	24	49	53.99
49	34	9	54.93	24	49	53.60
50	34	9	56.22	24	49	53.66
51	3	9	56.11	24	49	53.02
52	34	9	56.96	24	49	52.57
53	34	9	57.73	24	49	53.12
54	34	10	0.52	24	49	52.68
55	34	10	0.88	24	49	54.11
56	34	10	2.84	24	49	54.15
57	34	10	4.96	24	49	54.63
58	34	10	9.53	24	49	58.91
59	34	10	12.09	24	50	0.07
60	34	10	16.58	24	50	4.85
61	34	10	16.34	24	50	6.69
62	34	10	9.80	24	50	1.03
63	34	10	5.08	24	49	57.22
64	34	10	2.27	24	49	56.45
65	34	9	54.63	24	49	57.28
66	34	9	51.46	24	4	55.76
67	34	9	42.92	24	50	1.81
68	34	9	31.98	24	50	7.44
69	34	9	28.87	24	50	9.10
70	34	9	23.88	24	50	12.82
71	34	9	23.58	24	50	12.65
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DEFINITIONS:

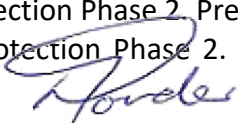
The following definitions are applicable to this Environmental Authorisation:

“AIS” - Alien Invasive Species.

“Audit” – as used in the context of this Environmental Authorisation refers to an audit of compliance with conditions contained in this Environmental Authorisation and the requirements/stipulations of a Construction and/or Operational Environmental Management Programme and not to an Environmental Audit undertaken in terms of an accredited environmental management system by a certified environmental management systems auditor.

“Advisian Design Reports” – contained in Appendix F of the FEIR and including the following reports:

- St Francis Bay Estuary Hydrodynamic Modelling Study. C00729-01-PMT-PRE-0004.
- St Francis Bay Beach Long-Term Coastal Protection Phase 2. Supplementary Shoreline Modelling Report.
- St. Francis Bay Beach Long-Term Coastal Protection Phase 2. Preliminary Design Report 22/02/2018.
- St. Francis Bay Beach Long-Term Coastal Protection Phase 2. Spit Protection: Preliminary Design Report 04/02/2019.



“CFO” – Chief Financial Officer of the KLM.

“Commencement” – Any physical activity on site that can be viewed as associated with the construction of the coastal protection scheme, inclusive of sand sourcing, dredging and beach nourishment activities, as described under Section 2 of this Environmental Authorisation, inclusive of initial site preparation and establishment of a site construction camp.

“DFFE: O & C” - The National Department of Forestry, Fisheries and the Environment, Oceans and Coasts Directorate.

“DWS” – The Department of Water and Sanitation.

“EIA Regulations” – These are the 2014 Environmental Impact Assessment Regulations as amended and published in Government Notice R326 of 07 April 2017 in terms of Chapter 5 of the National Environmental Management Act, Act 107 of 1998 as amended.

“EAP” – refers to the appointed Environmental Assessment Practitioner represented by Coastal & Environmental Services (CES).

“ECO” – Environmental Control Officer.

“EMC” – Environmental Monitoring Committee.

“EMPr” - Environmental Management Programme.

“EO” – KLM appointed Environmental Officer.

“FEIR” - Final Environmental Impact Assessment Report titled “Proposed Coastal Protection Scheme, St Francis Bay, Kouga Local Municipality, Eastern Cape Province”, dated May 2021 and received 03 May 2021 compiled by Coastal & Environmental Services (CES).

“ICM Act” – National Environmental Management: Integrated Coastal Management Act, Act No. 24 of 2008, as amended.

“KLM” – Kouga Local Municipality.

“MMP” – Maintenance Management Plan.

“NEMBA” - National Environmental Management: Biodiversity Act, Act 10 of 2004.

“NWA” - The National Water Act, Act 36 of 1998.

“OEMPr” - the Operational EMPr to be submitted for approval prior to completion of the development project.

“PNCO” - Provincial Nature Conservation Ordinance, Ordinance 19 of 1974.

“The Department” – The Department of Economic Development, Environmental Affairs and Tourism, Eastern Cape Province.

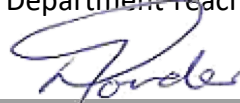
“SCC” - Species of Conservation Concern.

“SFPO NPC” – St Francis Property Owners Non-Profit Company.

“ToPS” - Threatened or Protected Species in terms of NEM: BA.

1. Decision

The Department is satisfied, on the basis of information available to it and subject to compliance with the conditions of this Environmental Authorisation that the applicant should be allowed to undertake the activity specified below. Details regarding the basis on which the Department reached this decision are set out in Section 5 of this Authorisation.



2. Activities and regulations for which authorisation has been granted

By virtue of the powers conferred on it by the National Environmental Management Act, Act 107 of 1998 and the Environmental Impact Assessment Regulations, 2014 as amended, the Department hereby authorises the Kouga Local Municipality, being the legal or natural person who has applied for this Authorisation, with the following contact details:

Name	Mr Charl du Plessis		
Address	P.O. Box 21, Jeffrey’s Bay, 6330		
Telephone	042 200 2200	Fax	N/A
Cell	N/A	E-mail	jreed@kouga.gov.za ; cduplessis@kouga.gov.za ; nsiwela@kouga.gov.za

To undertake the following activity (hereafter referred to as “the activity”), in terms of the scheduled activities or activities listed in the table below:

Detailed description of activity

The St Francis Property Owners Non-Profit Company (SFPO NPC), on behalf of the Kouga Local Municipality (KLM), has initiated the proposal for the implementation of a coastal protection scheme for St Francis Bay beach. The project site is located along the coastal areas of St Francis Bay, approximately 100 km west of Port Elizabeth, within the Kouga Local Municipality (KLM), in the Eastern Cape Province, as indicated in the figure below:



	TITLE:	Legend
	LOCALITY MAP:	
Drawn by: Justin Green Date: December 2020 CES Project Code: P40760385 Scale: 1:25 000	PROJECT:	
	ST FRANCIS BAY COASTAL PROTECTION SCHEME	

Figure 1.1: Location of the proposed project (nourishment and groyne) together with the proposed priority and secondary sand sourcing areas.

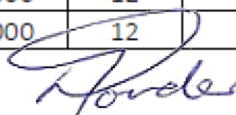
NOTE: All figures and tables are extracted from the FEIR as submitted by CES.

The proposed coastal protection scheme project entails sand material sourcing from the Kromme River, beach nourishment of St Francis Bay beach and the development of coastal structures to retard the erosion of St Francis Bay beach. The project stretches over coastal public property in St Francis Bay, the beach and spit area, and within the confines of the Kromme River estuary, encompassing these erven - Erf 720; Erf 1343; Erf 623; Erf 2257; Erf 185; Erf 53; Erf 184; Erf 625. The sand sourcing will be from the Kromme River Estuary, which is defined by the Chief Surveyor-General as "parks". The sand sourcing areas for the beach nourishment are located within or adjacent to the Kromme River estuary and the land is defined as "Humansdorp Administrative Area 5".

The below table indicates the surveyor general designations of the land portions:

Table 2.1: Properties Associated with the Proposed Project (as defined by the Chief Surveyor-General)

DESCRIPTION OF AFFECTED FARM PORTION			
Property Name and Number	21 digit SG Code	Ward	Municipality/ Province
A portion of Humansdorp Administrative Region 5	C034	12	Kouga Local Municipality
Parks 720 1076655	C03400140000072000000	12	Kouga Local Municipality
Parks 1343 1073783	C03400140000134300000	12	Kouga Local Municipality
Parks 623 1073698	C03400140000062300000	12	Kouga Local Municipality
Parks 2257 1073784	C03400140000225700000	12	Kouga Local Municipality
Parks 185 1073697	C03400140000018500000	12	Kouga Local Municipality
Parks 53 1077075	C03400140000005300000	12	Kouga Local Municipality
Parks 184 1073696	C03400140000018400000	12	Kouga Local Municipality
Parks 625 1076606	C03400140000062500000	12	Kouga Local Municipality



The cadastral layout is included below:

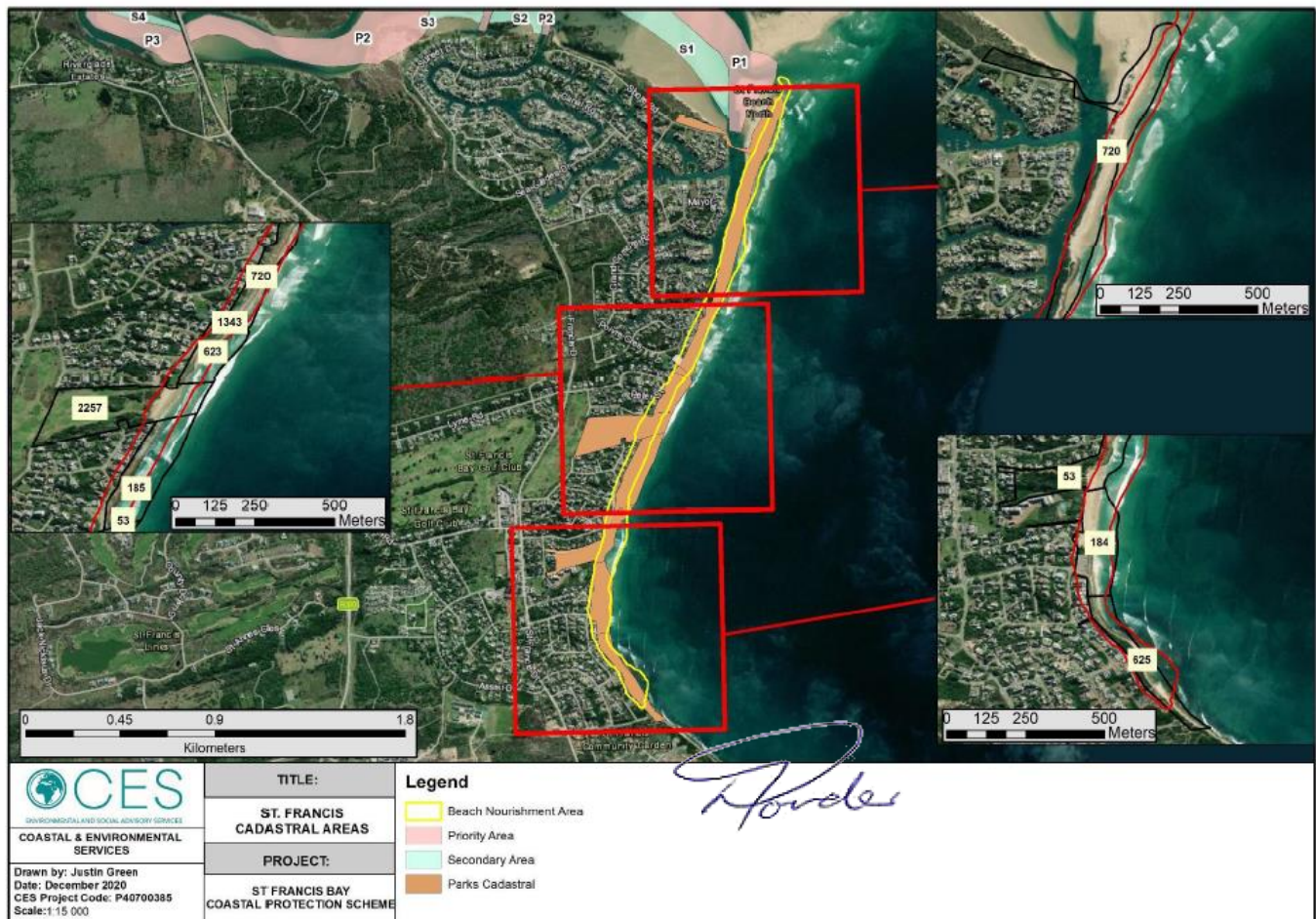


Figure 2.1: Locality map of the proposed project properties.

The scope of works for the preferred alternative consists of beach nourishment via the placement of large volumes of sand on the beach, together with the construction of short stub groynes at various localities along this stretch of coastline, as well as the integration and construction of revetments. This entails the following specific activities:

- **Sand sourcing (see Table 2.2 and Figure 2.5 below):**
 - Sand will be sourced from within the Kromme River estuarine functional zone and is proposed to be sourced from areas identified as priority and secondary areas. The approach for the priority and secondary areas is to target those areas of lower sensitivity (ecological and social) as well as those closest to where the material is required (i.e. the spit and beaches). It is envisaged that sand will be dredged from the priority areas first;
 - **However, conditions of this Environmental Authorisation will require extensive monitoring of the impacts of the dredging on the estuary, as well as the suspension of dredging should the dredging prove more deleterious to the estuary than modelled and predicted;**
 - **Should dredging be suspended, an alternative sand source must be secured, such as from Oyster Bay, as per the approved Oyster Bay Dune Management Plan authorised by the Department;**

Hovde

- The priority and secondary areas have been identified through considerations of both the ecological and social importance of the features of the estuary including the sand banks, the estuarine channel and the vegetated banks;
- The volume of sand required for the beach nourishment is calculated at approximately 854 000 m³ for capital nourishment, which will be transported either via dredger, truck or a pipeline and pumping system, whilst the total volume of sand available for extraction in both the priority and the secondary areas equates to 1 074 000 m³;
- The engineer estimates indicate that the sand “lost” to longshore drift annually (which occurs in a northerly direction) will be approximately halved, but that the majority of this sand is transported back into the estuary, which can then be utilised again for maintenance purposes;
- The volume of sand required for maintenance will differ throughout the various phases but will be approximately a maximum of 25 000 m³ to 50 000 m³ per annum.

Table 2.2: Potential sand available from each source area (assuming 1m deep excavations from the channel and 2m deep excavations from the intertidal areas). See Figure 2.5 for locations

Priority / Secondary Area	Label	Area (m ²)	Depth (m)	Volume (m ³)
Priority Area	P1	167 000	1	167 000
Secondary Area	S1	108 000	2	216 000
<i>Subtotal</i>				383 000
Priority Area	P2	296 000	1	296 000
Secondary Area	S2	19 000	2	38 000
	S3	20 000	2	40 000
<i>Subtotal</i>				374 000
Priority Area	P3	57 000	1	57 000
	P4	42 000	1	42 000
Secondary Area	S4	35 000	2	70 000
	S5	74 000	2	148 000
<i>Subtotal</i>				317 000
Priority Areas				562 000
Secondary Areas				512 000
GRAND TOTAL				1 074 000

The total initial volume of sand required for each phase is included in the table below:

Table 2.3: Total initial nourishment requirements of each phase of the coastal protection scheme.

Nourishment Phase	Estimated Initial Sand Volume Required (m ³)
Phase 1	259 000 - 361 000
Phase 2	166 000 -247 000
Phase 3	167 000 - 205 000
Phase 4	78 000 - 134 000
Phase 5	182 000 - 235 000

The volume of sand required for the maintenance during the operational period is included in the table below:

Table 2.4: Anticipated annual maintenance requirements at the completion of each phase of the coastal protection scheme.

Nourishment Phase	Cumulative maintenance requirement	
	From	To
Annual Maintenance at Completion of Phase 1	8 000	16 000
Annual Maintenance at Completion of Phase 2	13 250	26 550
Annual Maintenance at Completion of Phase 3	17 550	35 200
Annual Maintenance at Completion of Phase 4	20 350	40 850
Annual Maintenance at Completion of Phase 5	24 950	50 050

Figure 2.5 Potential areas to be used to source sand material.



Rowles

- **Beach Nourishment:**
 - Artificially nourishing the beach through depositing dredged sand from the estuary in order to establish a minimum horizontal dry beach width of 40 m measured from the back of the beach;
 - The sand deposited for beach nourishment will provide protection from erosion as the wave energy will be dissipated over this widened sand beach before reaching the extent of the current erosion area;
 - Annual maintenance will be required to maintain the required beach level, as indicated above.

- **Stub groynes:**
 - A total of six stub groynes will be constructed along the length of the beach in order to retain the sand in the nearshore and beach area following the implementation of beach nourishment, and to promote increased sedimentation;
 - The stub groynes will extend from the back end of the beach and reach a length of between 170m and 200m offshore (see **Figure 2.6 and Figure 2.7 below**);
 - These stub groynes will be angled perpendicular to the shoreline (except groyne 5 which is oblique), and will be shorter than full length groynes which are generally used for erosion prevention;
 - These shorter (stub) groynes will allow a certain percentage of sediment to pass between each groyne via the northerly longshore drift;
 - Maintaining this sand movement will mitigate for the potential of accelerated erosion “downstream” of the groynes, particularly of the northern most groyne;
 - The nourishment of the shoreline in the lee of the northern most groyne will be included as part of the project in addition to this natural movement of sediment;
 - Annual maintenance will be required in order to re-nourish the beaches, and the volume required will be monitored;
 - A maximum of approximately 44 300 m³ of rock material will be required for the proposed stub groynes, which will be sourced from a licenced local quarry (subject to the availability and grading of rock material).

- **Revetment structures:**
 - The revetment structures constructed under the previous environmental authorisation for the St Francis Beach (Ref. no. EC08/C/LN1&3/M/21-2015), will be integrated within the long-term coastal protection scheme consisting of stub groynes and beach nourishment to be of the last line of defence against wave action, should the proposed re-nourished beach not be sufficient;
 - The design and suitability of the existing revetment structures (inclusive of the emergency structures erected in 2020 in relation to the protection of the spit) will be reassessed for the integration into the coastal protection scheme;
 - The protection of the spit will be undertaken by construction of new revetments and correction of the emergency revetments where needed;
 - These revetments must conform to the authorised structures under the previous environmental authorisation (Ref. no. EC08/C/LN1&3/M/21-2015) and the rock revetment

structure contained in the Advisian Design Report - St. Francis Bay Beach Long-Term Coastal Protection Phase 2. Spit Protection: Preliminary Design Report 04/02/2019.

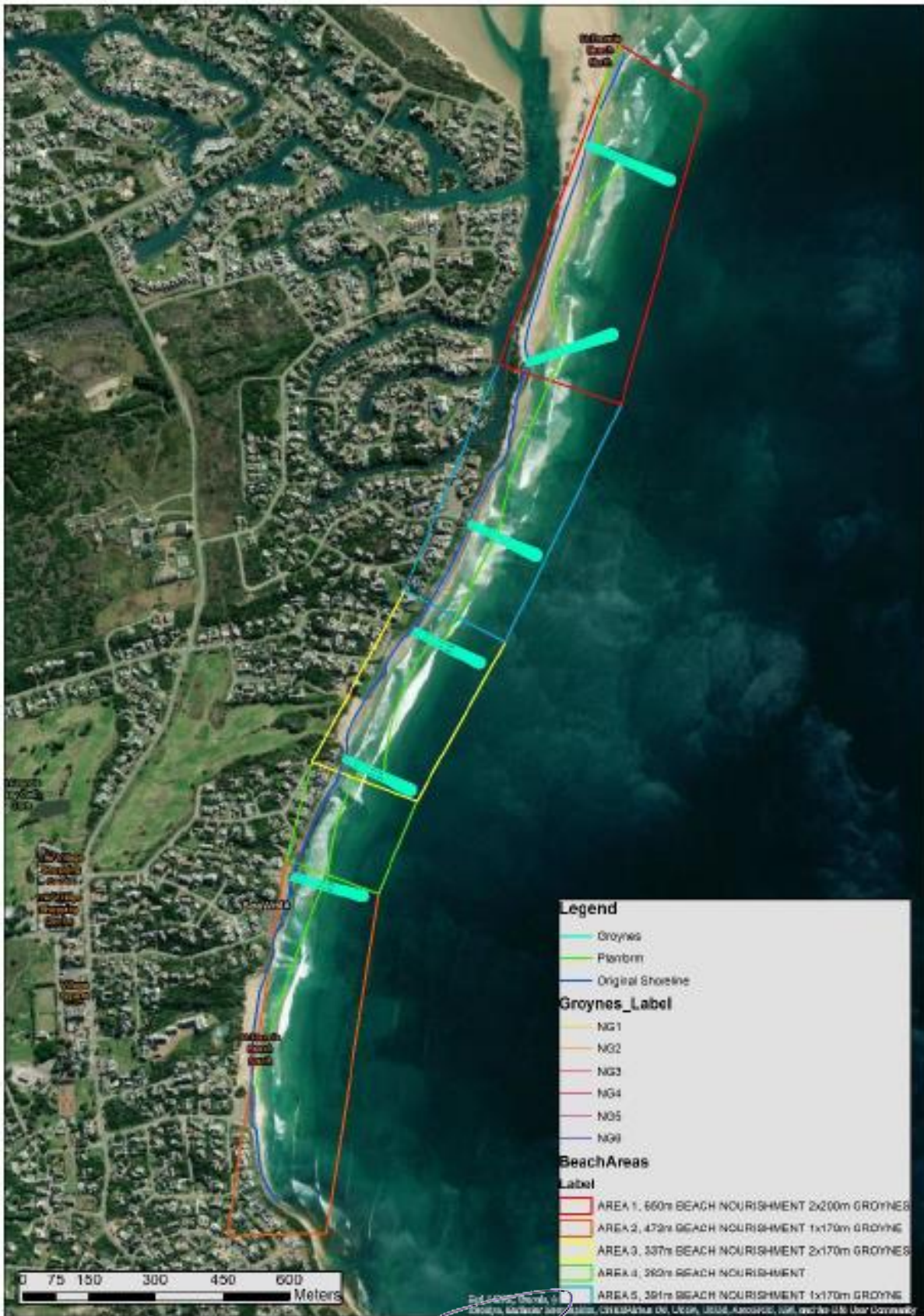


Figure 2.6: Proposed layout for the stub groynes.



Figure 2.7: General layout of proposed coastal protection infrastructure.


Advisian
Water Group

Coordinate System:
WGS 1984 UTM Zone 35S

Original Shoreline
Platform (Alternative)
Groynes (Alternative)

0 50 100 200 300 400 500
Metres

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNR/Airphoto, USDA, USAES, AeroGRID, IGN, and the GIS User Community



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The development of the coastal protection scheme will be done in phases, as financing for each becomes available. This phased approach will ensure that construction of infrastructure in any phase will only commence when sufficient funding for that particular phase has been secured, thus negating the risk of partially constructed infrastructure. The advantage associated with a phased approach is that the performance of the first groyne(s) can be assessed, and any desired adjustments can be made to groynes constructed in the subsequent phases.

The phases are based on the 5 areas as indicated in the figures above:

- Area 1 – a 650 m length of beach with two (2) 200 m long groynes, one at each end. The long shore drift is northwards, and therefore the northernmost groynes will be constructed first to intercept the transported sand (Figure 2.7);
- Area 2 – a 470 m length of beach with one (1) groyne of 170 m long;
- Area 3 – a 340 m length of beach with two (2) groynes of 170 m in length;
- Area 4 – a 280 m length of beach with no groynes;
- Area 5 – a 390 m length of beach with a 170 m long groyne.

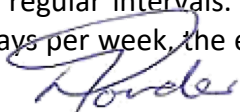
NOTE: This Environmental Authorisation requires that the revetments must be constructed as a first priority for the protection of the spit and must be done in conjunction with the first phase which is the construction of the stub groynes for Area 1.

The duration of construction for each phase will be as follows:

- **Groyne construction:**
 - Phase 1: 3 Months
 - Phase 2: 2 Months
 - Phase 3: 3 Months
 - Phase 5: 2 Months
 - Without phasing: 8 Months
- **Beach nourishment:**
 - Phase 1: 8 Months
 - Phase 2: 5 Months
 - Phase 3: 4 Months
 - Phase 4: 3 Months
 - Phase 5: 5 Months
 - Without phasing: 16 Months
- **Revetment structures:**
 - 3 Months

Annual maintenance of the infrastructure will be required to ensure that the beach width and level remain stable. This will entail dredging of sand from the Kromme Estuary and the canal system, which will not be continuous but will be performed from time to time, influenced by the requirement for sand on the beach. The point sources for the sand will change, depending on where dredging is required to ensure navigability of the estuary and canal system.

Ad hoc maintenance of the groynes and revetment may also be required over the design life of the infrastructure, but this is not expected to happen at regular intervals. Assuming that dredging for the operational phase will take place 8 hours per day, 5 days per week, the expected duration of this part of the work is:



- At completion of Phase 1: Between 2 and 4 weeks
- At completion of Phase 2: Between 3 and 5 weeks
- At completion of Phase 3: Between 4 and 7 weeks
- At completion of Phase 4: Between 4 and 8 weeks
- At completion of Phase 5: Between 5 and 10 weeks

Dredging for maintenance purposes will take place from areas in the river and canals where build-up of sand has taken place and dredging in any particular area in the river and canals will probably be limited to a period of less than two weeks. Maintenance dredging will take place as required for each of the phases as they are completed.

Listed Activities in terms of the NEMA EIA Regulations 2014 as amended (GN R. 327 of 07 April 2017) as contained in the application form and in the FEIR.

R. 327 - 17	Development – (i) in the sea; (iii) within the littoral active zone; (v) if no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of – (c) embankments; (d) rock revetments or stabilising structures including stabilizing walls; or (e) infrastructure or structures with a development footprint of 50 square metres or more.
Note:	
<ol style="list-style-type: none"> 1. Activity 17, sub-activity (i) was not included in the activity list by the EAP, but the Department deems that this sub-activity applies due to the definition of “sea” as included in GN R. 327 – the stub groynes extend into the sea; and 2. Activity 17, sub-activity (iv) was included in the activity list by the EAP, but there are no development setbacks adopted by the Department. 	
R. 327 – 18	The planting of vegetation or placing of any material on dunes or exposed sand surfaces of more than 10 square metres, within the littoral active zone, for the purpose of preventing the free movement of sand, erosion or accretion.
Note: The above activity pertains to the beach nourishment; placement of sand on the exposed sand surfaces.	
R. 327 – 19	The infilling or depositing of any material of more than 10 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 cubic metres from a watercourse.
R. 327 – 19A	The infilling or depositing of any material of more than 5 cubic metres into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 5 cubic metres from – (i) the seashore; (ii) The littoral active zone, an estuary or a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever distance is greater;

	(iii) the sea.
Note: Activity 19A, sub-activity (iii) was not included in the activity list by the EAP, but the Department deems that this sub-activity applies due to the definition of “sea” as included in GN R. 327 – the stub groynes extend into the sea.	
R. 327 – 27	The clearance of an area of 1 hectares or more, but less than 20 hectares of indigenous vegetation
R. 327 – 48	The expansion of – (i) infrastructure or structures where the physical footprint is expanded by 100 square metres or more; where such expansion occurs – (a) within a watercourse; or (c) If no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse
Note: Activity 48, sub-activity (i) (b) was included in the activity list by the EAP, but there are no development setbacks adopted by the Department.	
R. 327 – 52	The expansion of structures in the coastal public property where the development footprint will be increased by more than 50 square metres.
R. 327 – 54	The expansion of facilities – (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; or (v) If no development setback exists, within a distance of 100 metres inland of the high-water mark of the sea or an estuary, whichever is the greater; in respect of – (c) embankments; (d) rock revetments or stabilising structures including stabilising walls; or (e) infrastructure or structures where the development footprint is expanded by 50 square metres or more.
Note: Activity 54, sub-activity (iv) was included in the activity list by the EAP, but there are no development setbacks adopted by the Department.	
R. 327 – 55	Expansion— (i) in the sea; (ii) in an estuary; (iii) within the littoral active zone; or (v) if no development setback exists, within a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever is the greater; in respect of — (c) inter- and sub-tidal structures for entrapment of sand.

Note:

Activity 55, sub-activity (iv) was included in the activity list by the EAP, but there are no development setbacks adopted by the Department.

R. 327 – 65	The expansion and related operation of – (ii) any other structure or infrastructure; on or along the seabed, where the expansion will constitute an increased development footprint.
R. 327 – 67	Phased activities for all activities— (i) listed in this Notice, which commenced on or after the effective date of this Notice or similarly listed in any of the previous NEMA notices, which commenced on or after the effective date of such previous NEMA Notices.

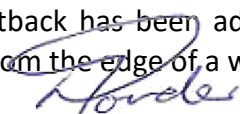
Listed Activities in terms of the NEMA EIA Regulations 2014 as amended (GN R. 325 of 07 April 2017) as contained in the application form and in the FEIR.

R. 325 – 14	The development and related operation of— (iii) any other structure or infrastructure — on, below or along the seabed.
R. 325 – 23	The reclamation of an island or parts of the sea.
R. 325 – 26	Development – (i) in the sea; (ii) in an estuary; (iii) Within the littoral active zone; or (v) if no development setback exists, within a distance of 100 metres inland of the highwater mark of the sea or an estuary, whichever is the greater; in respect of – (c) inter- and sub-tidal structures for entrapment of sand.

Note:

Activity 26, sub-activity (iv) was included in the activity list by the EAP, but there are no development setbacks adopted by the Department.

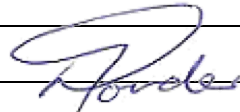
Listed Activities in terms of the NEMA EIA Regulations 2014 as amended (GN R. 324 of 07 April 2017) as contained in the application form and in the FEIR.

R. 324 – 12	The clearance of an area of 300 square metres or more of indigenous vegetation a. <u>Eastern Cape</u> ii. Within critical biodiversity areas identified in bioregional plans; iii. Within the littoral active zone or 100 metres inland from the high water mark of the sea, whichever distance is the greater, iv. Outside urban areas, within 100 metres inland from an estuarine functional zone.
R. 324 – 14	The development of – (ii) infrastructure or structures with a physical footprint of 10 square metres or more; where such development occurs – (a) within a watercourse; (c) if no development setback has been adopted, within 32 metres of a watercourse, measured from the edge of a watercourse.  a. Eastern Cape i. <u>Outside urban areas:</u>

	<p>(ff) Critical biodiversity areas or ecosystem service areas as identified in systematic biodiversity plans adopted by the competent authority or in bioregional plans.</p> <p>(ii) Areas seawards of the development setback line or within 1 kilometre from the high-water mark of the sea if no such development setback line is determined; or</p> <p>(jj) In an estuarine functional zone, excluding areas falling behind the development setback line.</p>
<p>Note: Activity 14, sub-definition (b) regarding where development occurs, was included in the activity list by the EAP, but there are no development setbacks adopted by the Department.</p>	
<p>R. 324 – 26</p>	<p>Phased activities for all activities—</p> <p>i. listed in this Notice and as it applies to a specific geographical area, which commenced on or after the effective date of this Notice; or</p> <p>ii. similarly listed in any of the previous NEMA notices, and as it applies to a specific geographical area, which commenced on or after the effective date of such previous NEMA Notices—</p> <p>where any phase of the activity was below a threshold but where a combination of the phases, including expansions or extensions, will exceed a specified threshold.</p>

At the locality defined in the Table below, and hereafter referred to as “the property”:

District	Sarah Baartman
Municipal Area	Kouga Municipal Area
Farm Name	N/A
Farm Number and Portion	N/A



SG 21 Digit Code/s	SG 21 Digit Code(s)																			
	C	0	3	4																
	C	0	3	4	0	0	1	4	0	0	0	0	0	7	2	0	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	1	3	4	3	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	0	6	2	3	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	2	2	5	7	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	0	1	8	5	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	0	0	5	3	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	0	1	8	4	0	0	0	0
	C	0	3	4	0	0	1	4	0	0	0	0	0	6	2	5	0	0	0	0
	1		2			3							4					5		
Properties Associated with the Proposed Project (as defined by the Chief Surveyor-General).																				
Description of affected farm portion																				
Property Name and Number				21 digit SG Code								Ward				Municipality/ Province				
A portion of Humansdorp Administrative Region 5				C034								12				Kouga Local Municipality				
Parks 720 1076655				C03400140000072000000								12				Kouga Local Municipality				
Parks 1343 1073783				C03400140000134300000								12				Kouga Local Municipality				
Parks 623 1073698				C0340014000062300000								12				Kouga Local Municipality				
Parks 2257 1073784				C03400140000225700000								12				Kouga Local Municipality				
Parks 185 1073697				C03400140000018500000								12				Kouga Local Municipality				
Parks 53 1077075				C0340014000005300000								12				Kouga Local Municipality				
Parks 184 1073696				C03400140000018400000								12				Kouga Local Municipality				
Parks 625 1076606				C03400140000062500000								12				Kouga Local Municipality				
Erf Number and Township Extension or Suburb	Erf 720; Erf 1343; Erf 623; Erf 2257; Erf 185; Erf 53; Erf 184; Erf 625, St Francis Bay																			
Co-ordinates	As per page 1 and 2 of this Environmental Authorisation																			
Physical address	St Francis Bay Beach and Spit, including the Kromme River Estuary, within the Kouga Local Municipal area.																			

This Environmental Authorisation is granted subject to the conditions set out below.

3. Conditions

The Department of Economic Development, Environmental Affairs and Tourism may from time to time review this Environmental Authorisation and on good grounds and after written notice to the holder thereof, suspend or amend such Environmental Authorisation.

3.1. Duration of authorisation

3.1.1. The beach nourishment, construction of the stub groynes, as well as construction and integration of the rock revetments (including the re-design and correction of emergency revetments), as described in Section 2 of this Authorisation Notice, must commence within a period of 36 (thirty-six) months from the date of issue of this Authorisation.

3.1.2. Construction to be completed within 7 (seven) years from date of commencement.

3.1.3. If commencement and completion of the activity does not occur within the above-mentioned periods, this Environmental Authorisation lapses and a new application for environmental

authorisation in terms of the 2014 EIA Regulations, as amended, must be made in order for the activity to be undertaken.

- 3.1.4. An application for the amendment of the Environmental Authorisation to extend the validity thereof may be submitted to the Department on condition that the Environmental Authorisation is valid on the date of receipt of such amendment application. If no such request for amendment is received prior to the expiry of this Environmental Authorisation, the Environmental Authorisation will be deemed to have lapsed.
- 3.1.5. On receipt of any such application for amendment, the Department reserves the right to request such information as it may deem necessary to consider the application for amendment which may include but not limited to:
- 3.1.5.1. An updated EMPr and/or MMP; and
- 3.1.5.2. Such public participation process as may be deemed necessary at the time of the application for extension.
- 3.1.6. Conditions relating to the operation of the project are valid in perpetuity.


3.2. Standard conditions

- 3.2.1. Authorisation is subject to the conditions contained in this Environmental Authorisation which conditions form part of the Environmental Authorisation and are binding on the holder thereof.
- 3.2.2. This Environmental Authorisation applies only to the activities and property described therein.
- 3.2.3. This Environmental Authorisation does not negate the holder thereof of his/her responsibility to **comply with any other statutory requirements** that may be applicable to the undertaking of the activity, including but not limited to:
- 3.2.3.1. The National Environmental Management: Integrated Coastal Management Act, Act 24 of 2008;
- 3.2.3.2. The National Water Act, Act 36 of 1998;
- 3.2.3.3. The National Environmental Management: Biodiversity Act, Act 10 of 2004;
- 3.2.3.4. The Provincial Nature Conservation Ordinance, Ordinance 19 of 1974;
- 3.2.3.5. The Conservation of Agricultural Resources Act (43 of 1983);
- 3.2.3.6. The Subdivision of Agricultural Land Act (No. 70 of 1970);
- 3.2.3.7. The National Heritage Resources Act, Act 25 of 1999; and
- 3.2.3.8. The Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA).
- 3.2.4. The holder of this Environmental Authorisation, the Kouga Local Municipality, shall be responsible for ensuring compliance with the conditions by any person acting on his or her behalf, including but not limited to, an agent, sub-contractor, employee or person rendering a service to the holder of this Environmental Authorisation.
- 3.2.5. Should any environmental damage be detected, that in the opinion of this Department, is the result of the development, then the applicant shall be required to make good that damage to the satisfaction of the said authority at his/her own expense, this without limiting the generality of the provisions of Section 28 of the National Environmental Management Act, Act 107 of 1998.

- 3.2.6. The KLM will be held liable in the event of non-compliance by any contractor and/or subcontractor involved in this activity.
- 3.2.7. In the event of any dispute as to what constitutes environmental damage, this Department's opinion will prevail.
- 3.2.8. This authorisation applies strictly to the project description as outlined in Section 2 of this Authorisation. Should the applicant wish to amend any component or aspect of the project hereby authorised, then approval will be required from this Department. The Department will advise what information is required as well as the process that must be followed in order to apply for an amendment to this Environmental Authorisation or, if needed, for authorisation in terms of the applicable EIA Regulations promulgated in terms of the National Environmental Management Act, Act 107 of 1998.
- 3.2.9. The Department will advise what information is required as well as the process that must be followed in order to apply for an amendment to this Environmental Authorisation or, if needed, for authorisation in terms of the applicable EIA Regulations promulgated in terms of the National Environmental Management Act, Act 107 of 1998.
- 3.2.10. This Environmental Authorisation is issued to the applicant described above. Should the applicant wish to transfer this Environmental Authorisation to another person (whether legal or natural), such transfer is to be affected by means of an amendment to the Environmental Authorisation. Such amendment to be applied for in terms of the relevant provisions contained in the EIA Regulations that may be applicable at the time.
- 3.2.11. This Environmental Authorisation must be made available to any interested and affected party who has registered their interest in the proposed development. The applicant is responsible for ensuring that a copy of this Environmental Authorisation is given to any such interested and affected party including the neighbouring landowners within 14 (fourteen) days of receiving this Environmental Authorisation.
- 3.2.12. This Environmental Authorisation or a certified copy thereof, must be kept on site at all times during construction and operational maintenance activities. Such must be produced to any authorised official of the Department who requests to see it and must be made available for inspection by any employee or agent of the holder of the authorisation who works or undertakes work at the site.
- 3.2.13. Where any of the applicant's contact details change, including the name of the responsible person, the physical or postal address and/or telephonic details, the applicant must notify the Department as soon as the new details become known to the applicant.
- 3.2.14. In all cases, the holder of the Environmental Authorisation must notify the Department, in writing, within 30 days if a condition of this authorisation is not adhered to. Any notification in terms of this condition must be accompanied by reasons for the non-compliance.
- 3.2.15. Non-compliance with a condition of this Environmental Authorisation may result in criminal prosecution or other actions provided for in the National Environmental Management Act, Act 107 of 1998 and the regulations.

3.3. Project-specific conditions in relation to the design phase

- 3.3.1. An external peer review of the detailed design specifications must be undertaken, and such review submitted to the Department prior to commencement of construction. Any proposed design modifications must be signed off by an independent registered marine structural engineer and an application for amendment must be submitted to the Department prior to the commencement of any construction.

- 3.3.2. The detailed final design specifications of the groynes and revetments, as well as the contractor/sub-contractor method statements for all aspects of the coastal protection scheme, must be submitted to the Department for endorsement prior to the commencement of construction. Such must include the ECO's comments on the construction method statements, as well as the ECO's own method statements for controlling environmental impacts and implementing mitigation measures as presented in the consultant's FEIR and the CEMPr. Such method statements are to be specific to each phase and also specifically address access as per the Access Management Plan included in Condition 3.4.19.6.1.
- 3.3.3. Rock revetments must conform to those authorised in the previous Environmental Authorisation with Reference Number EC08/C/LN1&3/M/21-2015 and the rock revetment structure contained in the Advisian Design Report - St. Francis Bay Beach Long-Term Coastal Protection Phase 2. Spit Protection: Preliminary Design Report 04/02/2019;
- 3.3.4. The Kouga Municipality must take responsibility for appointing the following persons prior to the commencement of construction:
- 3.3.4.1. The KLM are to appoint / designate an Environmental Officer (EO) that will coordinate and oversee implementation of and adherence to the CEMPr, as well as the OEMPr and MMP inclusive of oversight of any project specific Environmental Control Officer that may be appointed;
- 3.3.4.2. The KLM to ensure that the Environmental Officer referred to in Condition 3.3.4.1 has the necessary knowledge and experience with regard to coastal processes and with overseeing civil works such as will be carried out as envisaged in this EA, the CEMPr, OEMPr and the MMP and that such individual has thoroughly familiarised him/herself with the content of the EA and related documents.
- 3.3.4.3. A suitably qualified and SACNASP registered marine ecologist must be appointed as the Environmental Control Officer (ECO), who must be stationed on-site during construction, rehabilitation and whilst operational maintenance is being implemented to oversee the implementation and adherence to all the conditions contained in this Environmental Authorisation, provisions of the CEMPr and all contractors/sub-contractors method statements, as well as the OEMPr and MMP;
- 3.3.4.4. A suitably qualified independent marine structural engineer and suitably qualified and knowledgeable marine structural construction company/contractor must be appointed to carry out the works as proposed in the consultant's FEIR and the specialist design reports by Advisian;
- 3.3.4.5. It is imperative that only a suitably qualified and competent contractor with a proven track record in coastal protection construction is appointed by the KLM and suitable construction supervision is maintained by the engineer and overseen by the ECO. The Department requires that such contractors are not appointed or employed by private individuals or any other outside parties. The Kouga Municipality will be held liable in the event of non-compliance with any condition of this Environmental Authorisation or any stipulation of the CEMPr by any contractor or sub-contractor associated with construction, repair and maintenance activities associated with the implementation of this project. All appointed contractors and/or sub-contractors are to submit a detailed timetable of construction activities and the proposed inspection timetables by both the ECO and the appointed engineer;
- 3.3.4.6. A suitably qualified Rehabilitation Specialist: 

- 3.3.4.7. Once the above appointments are finalised, full contact details, qualifications and references of all these persons/companies are to be submitted to the Department for endorsement prior to the commencement of any construction/repair/maintenance works on site.
- 3.3.5. The ECO is amongst others responsible for the following:
- 3.3.5.1. A Pre-Commencement Audit of the conditions of this Environmental Authorisation and provisions of the CEMPr and all contractors/sub-contractors method statements, as well as the OEMPr and MMP, especially any pre-commencement conditions that must be adhered to, in order to ensure that all requirements of the Environmental Authorisation are met, which must be submitted prior to the notice of commencement;
 - 3.3.5.2. Ensuring that the CEMPr, OEMPr and MMP are implemented and strictly adhered to inclusive of the relevant conditions contained within this Environmental Authorisation;
 - 3.3.5.3. To keep record of all activities on site, problems identified, transgressions noted as well as a schedule of tasks undertaken by the ECO;
 - 3.3.5.4. To keep and maintain a detailed incident and complaints register (inclusive of any spillages of hazardous substances and other materials) indicating how these issues were addressed (including any rehabilitation measures implemented) and preventative measures implemented to avoid re-occurrence of such incidents;
 - 3.3.5.5. To keep copies of all reports submitted to the Department on site; and
 - 3.3.5.6. To obtain and keep record of all documentation, permits, licences and authorisations relevant to the project on site.
- 3.3.6. An EMC to be established by the KLM that will serve as a vehicle of communication and reporting to relevant stakeholders and I&AP's. The EMC are to be established prior to commencement of any activities as authorised in this Environmental Authorisation or within a period of 6 months, whichever comes first.
- 3.3.7. The terms of reference, inclusive of the composition of the EMC to be approved by the Department.
- 3.3.8. The Environmental Officer shall be responsible to compile quarterly audit reports for submission to the Department.
- 3.3.9. The audit reports referred to in Condition 3.3.8 to include a close-out report where activities have been completed during the period of reporting.
- 3.4. Project-specific conditions in relation to the construction phase**
- 3.4.1. Fourteen days' written notice must be given to the Department that the activity will commence. Commencement for the purposes of this condition includes site preparation. The notice must include a date on which it is anticipated that the activity will commence.
 - 3.4.2. Construction phases must adhere to those detailed in Section 2, with the construction and correction of the spit revetments being undertaken in conjunction with phase 1 activities.
 - 3.4.3. Sufficient finances must be secured prior to the commencement of each phase, the confirmation of which to be submitted to the Department by the CFO of the KLM.
 - 3.4.4. The footprint areas to be affected by dredging and construction activities for the construction of the coastal protection structures as detailed in Section 2 of this Environmental Authorisation, is to occur at the listed co-ordinates specified and within the dredging areas identified (Figure 2.5) and

authorised within the ambit of this Environmental Authorisation, with specific cognisance being taken of Condition 3.2.8.

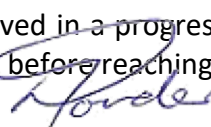
- 3.4.5. Dredging must be suspended should the dredging prove more deleterious to the estuary than modelled and predicted, as per the outcomes of the detailed monitoring undertaken in terms of the CEMPr as contained in Condition 3.4.19.
- 3.4.6. An alternative sand source must be secured if dredging is suspended in terms of Condition 3.4.5 above. This sand source could be obtained from Oyster Bay, as per the approved Oyster Bay Dune Management Plan authorised by the Department.
- 3.4.7. Baseline data collection must be collected prior to the commencement of construction, the outcomes of which must be used to inform subsequent monitoring. Such must include, but is not limited to, the following:
- 3.4.7.1. Sediment contaminant testing and analysis particularly for *E. coli* and other harmful bacterial contaminants, as well as heavy metals. This sampling must be undertaken by the dredging contractor periodically throughout the dredging process and submitted to ECO to send for testing; and
- 3.4.7.2. Ground truthing the distribution of the habitats identified as part of the FEIR and specialist studies, followed by monitoring of the sensitive habitats in close proximity to the dredging activities to determine die-back as a result of smothering, dredging, loss of habitat. Should these areas be determined to be reducing correction measure should be implemented. This should be carried out by a suitably qualified specialist with the emphasis being on the ability to accurately replicate the activity during the construction phase.
- 3.4.8. The construction phase is to be audited on an ongoing basis by the ECO. The findings of such audits are to be consolidated by the EO and submitted to this Department on a quarterly basis. A final post construction and rehabilitation audit is to be conducted and submitted to this Department within three months of the completion of the construction. All audit reports must include photographic records for the dredging and construction sites.
- 3.4.9. The ECO is to monitor the adherence of the contractors to their method statements and the Conditions of the CEMPr and this Environmental Authorisation.
- 3.4.10. Any non-compliance must be reported to DEDEAT within 72 hours. Provision for penalties and fines is to be made by the ECO for any non-compliance or transgressions, and all contractors and subcontractors are to be held liable, in conjunction with the Kouga Municipality, and will be required to rectify any damages to the environment on site.
- 3.4.11. No construction camp site and any material lay down area is allowed within the 1:100-year floodline of the estuary, or within the littoral active zone. The construction site camp and any lay down areas must be approved by the ECO after consulting with DEDEAT.
- 3.4.12. The construction site and any lay down areas must be clearly demarcated and all construction activities to be confined to the area so demarcated inclusive of the storage of any construction material.
- 3.4.13. Any recommendations / mitigatory measures contained in the FEIR and its appendices and not explicitly covered under the conditions contained in this Environmental Authorisation, are regarded as conditions in terms of this Environmental Authorisation. In the event that any such recommendation / mitigatory measure is contradictory to a condition contained in this Environmental Authorisation, such condition will be deemed to take precedence.

- 3.4.14. Further to Condition 3.4.13, the ECO to compile a detailed record of all Conditions, inclusive of recommendations / mitigatory measures contained in the FEIR and appendices, in tabular format for inclusion in the Construction EMPr and Operational Phase EMPr as applicable.
- 3.4.15. Any further changes to the structures as authorised will be subject to further approval from this Department. For the purposes of this condition, this specifically refers to enlargement, extension, or expansion of any footprint area to accommodate authorised structures and associated infrastructure but excludes regular or routine maintenance to be undertaken in terms of the OEMPr as per Condition 4.1.1.
- 3.4.16. Any approval required in terms of Condition 3.4.15 to be considered in terms of the EIA Regulations applicable at the time if relevant or else by any such process as the Department may prescribe in terms of this condition provided that such process must be in line with the applicable Environmental Assessment Processes prescribed by law.
- 3.4.17. The relevant conditions of this Environmental Authorisation shall form part of any contracts entered into between the applicant and any contractor(s) and or any sub-contractor(s).
- 3.4.18. Further to Condition 3.4.17, a performance-based requirement with regard to environmental impact management must be included in all contracts related to any activity relating to this Environmental Authorisation inclusive of incentives and penalties.
- 3.4.19. The Construction Environmental Management Programme (CEMPr) contained in the consultant's FEIR must be amended to include the following:
- 3.4.19.1. Applicable conditions contained in this Environmental Authorisation;
 - 3.4.19.2. All comments, recommendations and requirements of DEFF: O & C must be incorporated into the CEMPr and clearly marked as such;
 - 3.4.19.3. All recommendations, mitigation measures, responsibilities, key actions, and other provisions contained in both the consultant's FEIR, the Advisian Design Reports and other specialist reports contained in the appendices of the FEIR;
 - 3.4.19.4. A regular monitoring programme should be implemented to include the following:
 - 3.4.19.4.1. Monitoring the habitat distribution on a regular basis, at least quarterly, to ensure that any suspended sediment that may be settling is not settling in sensitive habitats at a rate unsustainable for the continuation of that particular habitat. This should be done through the collection of fixed-point photographs and updated distribution mapping;
 - 3.4.19.4.2. A bi-annual monitoring report comparing the monitoring against the baseline data that was collected prior to construction, including comment on the observations and whether they are in line with the impacts identified during the EIA. Should the impacts observed through the monitoring differ from that of the EIA and particularly if adverse, an assessment of whether dredging must be suspended as included in Condition 3.4.5 above, or whether additional mitigation measures should be implemented must be submitted to DEDEAT;
 - 3.4.19.4.3. Beach profiles must be completed along the St Francis Bay beach, preferably at the same locations that have been measured in the specialist studies;
 - 3.4.19.4.4. Extensive monitoring of the impacts of the dredging on the estuary must include regular bathymetric surveys of the entire estuary area should be

- undertaken pre-dredging, once dredging commences, and post-dredging, in order provide information on the sediment distribution, accumulation and transport within this dynamic estuarine system, which can be used to assess the impacts on the flow patterns, impacts to the estuary mouth and volumes of sediment entering this flood dominated system and any future modifications to the dredging scheme that need to be implemented;
- 3.4.19.4.5. Periodic beach profiles, as determined by a qualified specialist, of the river should be undertaken to monitor erosion of the banks of the Kromme River;
- 3.4.19.4.6. A detailed log of sediment discharge quantities must be maintained by the dredging contractor in order to track the exact volume of sediment that is removed from the estuary;
- 3.4.19.4.7. Extensive monitoring of the northern beaches for evidence of accelerated erosion; and
- 3.4.19.4.8. The monitoring regime included in the Estuarine Impact Assessment report (CES, 2019) must be incorporated.
- 3.4.19.5. Copies of all permits / licences issued to the KLM in relation to this project that have relevance to the environment;
- 3.4.19.6. Specific management of each phase of the project, divided into its relevant components, particularly the following:
- 3.4.19.6.1. An Access Management Plan to be drafted in conjunction with the appointed engineers and the contractor appointed in terms of Conditions 3.3.4.4 and 3.3.4.5 and submitted to the Department for consideration and endorsement. Such plan must indicate, but is not limited to, the following:
- 3.4.19.6.1.1. Restriction of access to the public during construction, including the provision of buffer areas/safety zones;
- 3.4.19.6.1.2. Phase-specific access arrangements for each Phase and erosion protection measures for each Phase;
- 3.4.19.6.1.3. The order in which work on each phase is to be undertaken, whether it is for beach nourishment, new construction, maintenance and/or repair work;
- 3.4.19.6.1.4. Specific description of how the trucks, dredging equipment etc. will be accommodated both on top of the spit and the beach areas, as well as on the access roads; and
- 3.4.19.6.1.5. Specific details regarding any access required for future maintenance including a full description of measures to be taken for such vehicles to access points via the beach for construction, repair or maintenance.
- 3.4.19.6.2. Engineering input on the design of the revetments for integration, especially where any terminations or tie-back areas into the dunes, as well as those required for the stub groynes where they will intersect/connect with the foredunes and/or revetments, including a detailed description of the efficacy of such design preventing scouring of sand from behind and around the groynes and revetments.

- 3.4.19.6.3. A Rehabilitation Plan to be drafted and submitted to the Department for approval prior to the commencement of construction, by a suitably qualified Rehabilitation Specialist for all disturbed areas, as well as erosion control measures, with the exception of those areas required for continued access for management and maintenance of the coastal protection scheme. All areas disturbed as a result of construction to be rehabilitated to a condition equivalent or better than that prior to construction, and dunes are to be rehabilitated with indigenous vegetation specific to the area.
- 3.4.19.7. General principles of environmental management as applicable to construction activities including environmental best practice, erosion prevention and control, minimization of dust, etc. as indicated in Condition 3.4.26 below;
- 3.4.19.8. Clear stipulations as to who is responsible and accountable for what actions; and
- 3.4.19.9. A general code of conduct for any contractor that might be carrying out any work on the development sites, including a fine system for any non-compliances committed by such contractor's and/or sub-contractors, as stipulated in Condition 3.3.4.5.
- 3.4.19.10. A clear description of the construction activities to be carried out on the site;
- 3.4.19.11. Details regarding storage of construction material on site;
- 3.4.19.12. A framework for all contracts associated with the construction phase of the development and the Environmental Method Statements that will be associated with such contracts; and
- 3.4.19.13. An alien vegetation management program for the areas affected by construction activities to be compiled and implemented and monitoring to take place annually for the lifetime of the development in order to ensure that no encroachment of alien vegetation occurs into sensitive areas including the estuary, spit and foredunes.
- 3.4.20. Disturbance of the beach and estuarine environment during project implementation must be minimised, and any disturbed areas appropriately rehabilitated. This includes disturbance due to the use of heavy plant machinery or vehicles accessing the estuary, the spit or the beach.
- 3.4.21. Further to Condition 3.4.20, vehicular usage during project implementation must be curtailed to what is absolutely necessary, and the holder of the authorisation is to be mindful of the general duty of care provision as articulated in Section 2 of the National Regulations for Control of Vehicles in the Coastal Zone (Government Notice No. 1399 of 21 December 2001). Cognizance must also be taken of tides and time needed for travel on the beach.
- 3.4.22. Vehicles must travel at a slow speed at all times and drive below the spring high water mark to encourage removal of all vehicular tracks along the beach between tidal cycles.
- 3.4.23. All reasonable measures are to be taken to ensure the safety of the general public on the beach during construction, inclusive of the restriction of access to the construction area.
- 3.4.24. Packing of rock material must take place in a manner which prevents, as far as possible, portions thereof becoming detached from the structure and entering the beach, estuary and / or surf zones. Such must be in accordance with the engineering specifications.
- 3.4.25. Furthermore, the packing of rock material and the design of the structures must be done in a manner which prevents the formation of coves, any erosion and scouring into the estuary or any sandy beach areas. This must be in accordance with the required engineering input for the application of the designs of both the revetments and groynes.

- 3.4.26. General principles of environmental management as included in Condition 3.4.19.7 must be adhered to, including, amongst others, the following:
- 3.4.26.1. No cement/concrete mixing (if any) to take place on the soil surface should it be required. Cement mixers to be placed on large trays to prevent accidental spills from coming into contact with the soil/sand surface;
 - 3.4.26.2. Concomitant to Condition 3.4.26.1, any cement mixing (if any) must take place above the high-water mark, preferably on an already tarred surface such as one of the car parks, and any wash water or spills onto the beach, into the estuary or the sea must be prevented at all costs and suitable emergency contingency plans must be put in place;
 - 3.4.26.3. Silt curtains are to be utilised in all phases of construction to prevent any destabilized sediment from entering the estuarine channel of the Marina, the Kromme Estuary or the sea;
 - 3.4.26.4. Generators and fuel supply, if needed during construction, must be placed on trays, which rest on clean sand. Once construction has been completed, this sand must be removed from site and disposed of at a registered waste disposal site;
 - 3.4.26.5. Any substrate contaminated by the spillage of hydrocarbons or other pollutants to be removed from the site and disposed of at a registered waste disposal site;
 - 3.4.26.6. No servicing of vehicles and other machinery to take place on site and no fuel or other hazardous material to be stored on site;
 - 3.4.26.7. All excess construction material and any waste generated during construction must be removed from site on an on-going basis and disposed of at a suitably registered waste disposal site;
 - 3.4.26.8. The contractor must provide adequate waste disposal and sanitation facilities and must ensure that these facilities are properly used and maintained; and
 - 3.4.26.9. Sufficient erosion control measures must be stipulated and adhered to.
- 3.4.27. The Kouga Municipality will be held liable in the event of non-compliance with any condition of this Authorisation Notice or any stipulation of the CEMPr by any contractor associated with this activity.
- 3.4.28. Non-compliance with any stipulation in the CEMPr or conditions of this Environmental Authorisation will be regarded as non-compliance in terms of this Environmental Authorisation.
- 3.4.29. All construction activities to be restricted to normal working hours being 08:00 to 17:00 on weekdays and 09h00- 15h00 over the weekends. No construction to take place on public holidays.
- 3.4.30. Rock material which needs to be imported to the site for construction of the groynes and revetments is to be obtained from a bona fide source and must be compatible in appearance with rock used for existing protection structures in the vicinity.
- 3.4.31. The South African Heritage Resources Agency (SAHRA) must be contacted immediately should any archaeological findings be discovered during the course of the development.
- 3.4.32. All AIS that may occur on site, are to be removed in a progressive manner, and any such species colonising disturbed ground are to be removed before reaching the seed formation stage.



4. Project-specific conditions relation to the operational management and maintenance of the coastal protection scheme

4.1. The OEMPr as contained in the consultant's FEIR, must be amended and submitted for approval by the Department prior to commencement of construction. The OEMPr must be implemented for the duration of the lifespan of the project. The OEMPr must be regarded as a working document to allow for information gained during the monitoring of activities on site to inform any changes necessary to the OEMPr. Should any changes be required, such must be submitted to the Department for approval prior to the implementation of such changes.

4.1.1. The OEMPr must include, amongst others:

4.1.1.1. A Maintenance Management Plan, to be overseen by the KLM EO, as well as an independent ECO, as included in Conditions 3.3.4.1 and 3.3.4.3 detailing the following:

4.1.1.1.1. Provision for a condition assessment of structures;

4.1.1.1.2. The specific works/actions which are envisaged to be undertaken;

4.1.1.1.3. Provision for individual maintenance events for which a specific method statement for that specific maintenance event is submitted to DEDEAT for approval prior to the commencement of such maintenance works;

4.1.1.1.4. The impacts of these proposed maintenance activities;

4.1.1.1.5. Mitigation and remedial measures to be undertaken;

4.1.1.1.6. Access management;

4.1.1.1.7. Time periods required for the different actions related to maintenance;

4.1.1.1.8. Provision for an alternative sand source such as that from Oyster Bay, should dredging be required to be suspended as per Condition 3.4.5 or if the Kromme Estuary prove to not provide sufficient sand for maintenance requirements; and

4.1.1.1.9. Method statements which form a baseline for contractor's/sub-contractors to adhere to.

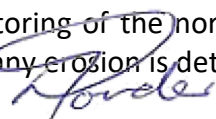
4.1.1.2. Should the structures sustain damage as a result of storm action or any other event, it must be restored to its original state within 90 (ninety) days, in accordance with all approved method statements in terms of the approved CEMPr and the MMP contemplated in Condition 4.1.1.1 above, and conditions related to emergency repairs/activities as included under Section 4.3 below;

4.1.1.3. A Rehabilitation Aftercare Plan drafted by a suitably qualified Rehabilitation Specialist for all disturbed areas, as well as erosion control measures, with the exception of those areas required for continued access for management and maintenance including beach nourishment and for the coastal protection structures.

4.1.1.4. The Rehabilitation Aftercare Plan must be implemented and monitored monthly by the appointed independent ECO for a period of 1 year from the date of completion of the Rehabilitation Plan undertaken in terms of Condition 3.4.19.6.3 of this Environmental Authorisation;

- 4.1.2. Specific provision, including financial provision, for continuous monitoring, management and maintenance of the beach, **inclusive of the northern beach**, the groynes and revetments and repairs to any damages due to storm surges or extreme weather and tidal events, inclusive of method statements for such;
 - 4.1.3. Specific provision, including financial provision, for continuous monitoring and maintenance of the areas that were disturbed specifically for the success of rehabilitation measures, as well as signs of erosion, including measures to rehabilitate any such erosion that may be found;
 - 4.1.4. Monitoring of alien vegetation re-growth in all disturbed areas on site and provision for consistent eradication measures;
 - 4.1.5. Provision of educational boards regarding dune sensitivity, the rehabilitation of the dune and spit areas as well as waste management and littering, as well as education regarding the requirements of the NEMA and the ICM Act for any activities in the coastal zone.
- 4.2. **Project specific conditions generally applicable to routine / planned maintenance activities**
- 4.2.1. The Department to be notified at least 30 days prior to any routine / planned maintenance activities being undertaken in terms of this Environmental Authorisation and the approved MMP.
 - 4.2.2. Details of the specific activity/ies to be undertaken to be provided to the Department for approval inclusive of a site plan and project specific method statements / specifications with the notice contemplated in Condition 4.2.1.
 - 4.2.3. The site plan referred to in Condition 4.2.2 must amongst others indicate the exact location and extent of the area where the routine / planned maintenance work will be undertaken.
 - 4.2.4. In cases where such routine / planned maintenance activities will be carried out by a contractor, a dedicated Environmental Control Officer to be appointed for that specific contract who shall report to the Environmental Officer appointed by the KLM.
 - 4.2.5. The individual footprints of any work to be carried out must be clearly demarcated and all activities to be confined to the area so demarcated inclusive of the storage of any construction material.
 - 4.2.6. The location of any construction camp site that may be required for any specific maintenance activity to be agreed to and approved by the Environmental Officer.
 - 4.2.7. All sand, gravel, stone or other building material to be used are to be obtained from a bona fide source and may not be sourced from the surrounding environment.
 - 4.2.8. The South African Heritage Resources Agency (SAHRA) must be contacted immediately should any archaeological findings be discovered during the course of any activities/work being undertaken.
- 4.3. **Project specific conditions generally applicable to emergency repairs / activities**
- 4.3.1. Any emergency repairs / activities to be undertaken in accordance with this Environmental Authorisation to be undertaken in accordance with the requirements and processes / procedures contained in the approved MMP inclusive of the environmental specifications / method statements contained / referenced therein

- 4.3.2. In the event where a contract is awarded for a specified period to a contractor that will be responsible to effect any emergency repairs that may be necessary within the specified period, the relevant environmental specifications / method statements as per the approved MMP to form part of any tender documents to be issued for appointment of such contractors.
- 4.3.3. Further to Condition 4.3.2 a dedicated Environmental Control Officer to be appointed for such specific contract who shall report to the Environmental Officer.
- 4.3.4. The Department to be notified within 24 hours of any such emergency being reported and such notice to include:
- 4.3.4.1. Details of the emergency incident;
 - 4.3.4.2. The nature of the emergency incident;
 - 4.3.4.3. Reasons why it is deemed to be an emergency incident;
 - 4.3.4.4. Actions undertaken or to be undertaken to address the emergency incident; and
 - 4.3.4.5. Details of the persons responsible for undertaking the necessary actions / work.
- 4.3.5. The individual footprints of any work to be carried out must be clearly demarcated and all activities to be confined to the area so demarcated inclusive of the storage of any construction material.
- 4.3.6. Removal of vegetation to be limited to the absolute minimum to enable the repairs to be completed and specific attention to be given to protected species and species of special concern that may occur within any area that may be necessary to be cleared (i.e. the fact that work to be carried out may be deemed to be an emergency does not warrant clearing of vegetation in excess of what would be the minimum required to carry out the work).
- 4.3.7. Work to be undertaken are to be overseen by the EO/ECO.
- 4.3.8. The Department to be provided with a comprehensive report within 96 hours of such emergency work being completed which report must include details with regard to compliance with the specifications / method statements during the duration of the activities that were undertaken.
- 4.4. The Kouga Municipality must take responsibility for appointing any of the contractors or sub-contractors for any maintenance required. The Department requires that such contractors are not appointed or employed by private individuals or any other outside parties. The Kouga Municipality will be held liable in the event of non-compliance with any condition of this Environmental Authorisation or any stipulation of the OEMPr by any contractor or sub-contractor associated with maintenance activities associated with the implementation of any maintenance works required.
- 4.5. A fine system for any transgressions of the OEMPr and this Environmental Authorisation to be implemented by the Kouga Municipality and their appointed ECO for any maintenance works.
- 4.6. Notwithstanding the provisions of any of these conditions, all recommendations, guidelines and standard conditions contained in the consultant's FEIR must be adhered to.
- 4.7. The coastal protection structures must be maintained in a manner which ensures continued functionality, integrity and satisfactory appearance.
- 4.8. Monitoring of the coastal protection structures to be undertaken monthly to ensure that no scouring or erosion is occurring, as well as monitoring of the northern beach, the rehabilitation efforts and alien invasive floral species control. If any erosion is detected, measures, as included in



the maintenance and management plans must be enacted within two weeks of the observation of such erosion such that further erosion is curtailed as soon as possible.

- 4.9. Should any decommissioning take place, a detailed report dealing with environmental impact management during decommissioning must be drawn up and submitted to the Department for approval.

5. Reasons for Decision

5.1. Information considered in making the decision

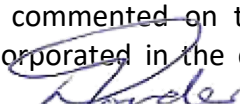
In reaching its decision, the Department took, *inter alia*, the following into consideration:

- 5.1.1. The information contained in the following documentation:
- 5.1.1.1. The complete application form received on 26 January 2021, inclusive of the screening tool report;
 - 5.1.1.2. The Draft Environmental Impact Assessment Report (DEIR) and associated appendices received on 10 February 2021; and
 - 5.1.1.3. The Final Environmental Impact Assessment Report titled "Proposed Coastal Protection Scheme, St Francis Bay, Kouga Local Municipality, Eastern Cape Province", dated May 2021 and received 03 May 2021 compiled by Coastal & Environmental Services (CES).
- 5.1.2. Numerous site visits have been undertaken in the past for previous applications. The conditions of the site remain with worsening erosion of the beach and spit continuing and the site photographs suitably capture this.
- 5.1.3. The EIA Regulations of 2014, as amended, and the objectives and requirements of relevant legislation, policies, and guidelines, including Section 2 of the National Environmental Management Act, Act 107 of 1998.

5.2. Key factors considered in making the decision

- 5.2.1. A previous Environmental Authorisation was issued on 01 June 2016 which was considered Phase 1 in the protection of the coastline and beach at St Francis Bay. This was for upgrading and construction of new revetment structures. Further emergency revetment works on the spit area were undertaken in 2020 due to the breaches that occurred in the spit, which threatened the dwellings and infrastructure of the marina. The scope of this Environmental Authorisation encompasses Phase 2 of the protection of the coastline.
- 5.2.2. There has been continued erosion of the beach at St Francis Bay, breaches of the spit and damage caused to existing revetments. Such erosion constitutes a threat to coastal public property, municipal infrastructure, as well as near-shore properties and the St Francis Marina. The width of the beach has been significantly decreased over the past few decades, which has impacted significantly on the recreational and tourism amenity of the beach, as well as decreased the coastal protection offered by wider beaches from wave activity. The high-water mark has retreated by 75 metres since 1945, and the spit has eroded to the extent that 4 breaches of the spit occurred in 2020. This second phase of the coastal protection scheme includes beach nourishment, the construction of groynes and revetments and the integration of existing revetments. The aim of this scheme is to increase the width of the beaches to approximately a 40-metre width, arrest the rapid erosion of the beach and provide protection from storm, sea level rise and continued erosion.
- 5.2.3. All authorised structures and interventions (i.e. the sand sourcing and beach nourishment) will occur within coastal public property and the Kouga Municipality is ultimately therefore the

applicant and the responsible party to ensure the implementation of all conditions of this Environmental Authorisation, the CEMPr, OEMPr and MMP in order to arrest this erosion and protect infrastructure in Public Open Space as well as Coastal Public Property.

- 5.2.4. A phased implementation of the abovementioned coastal beach protection infrastructure will likely be required due to financial constraints. The design of the scheme allows for each phase to be implemented as a standalone project, allowing for funding for additional phases to be sourced prior to their construction. The advantage associated with this phased approach is that the performance of the first interventions, i.e. the groyne/s can be assessed, and any necessary adjustments can be made to groynes constructed in the subsequent phases. This phased approach negates the risk associated with construction that could be interrupted due to financial constraints, and the subsequent environmental consequences of partially constructed infrastructure.
- 5.2.5. The FEIR did sufficiently take cognisance of various alternatives for both the sources of sand and the design of the groynes and revetment structures. This authorisation has required the continuation of the installation of rock revetments, as these have a known life span, known construction parameters and known performance for coastal protection. The Geotextile Sand Containers (GSC) option has inherent uncertainties as the technology is still relatively young, and design guidelines and codes are still in the process of being developed. As such there is an inherent risk associated with their use, and it is evident from previous attempts at using GSC bags on this shoreline that they are not particularly robust for the wave energy encountered. A composite revetment option was considered which incorporates both GSC bags and rock revetments. The composite option was costed slightly cheaper than a pure rock revetment, however, the composite option would require a longer construction duration, more maintenance will be required and the GSC bags are vulnerable to vandalism. As such, the Department has decided to authorise rock revetments as a risk-averse approach to this aspect of the coastal protection scheme, as it also provides a cost-effective option if properly designed and maintained. Groyne design has also taken into account public participation comments regarding the impact to the surfing waves, and hence the design has been changed somewhat to negate any negative impact on the surfing conditions. Comment was also made regarding possible sand sourcing from Oyster Bay and such has been incorporated in this EA in Conditions 3.4.5 and 4.1.1.1.8.
- 5.2.6. This coastal protection scheme, furthermore, is in line with various development plans, including the National Development Plan, Operation Phakisa, the National Coastal Management Programme, as well as Provincial, District and Local Development plans as they pertain to the coastal environment. The proposed project will assist in achieving objectives of these plans by “(a) decreasing the exposure of the beachfront and municipal infrastructure such as roads, access stairs and parking facilities to dynamic coastal processes, thereby increasing the safety and quality of the beachfront area; (b) decreasing the potential of shifting sand bars in the Kromme river, thereby increasing the navigation ability and safety of boaters; (c) increasing the width of the beaches, thereby promoting tourism and economic growth and development, and (d) preventing the loss of physical infrastructure in both the public and private sector by arresting the current rapid rate of beach erosion.” This also fulfils the requirements of the ICM Act, and as per the comment letter from DEFF: O & C, it will “ensure that coastal infrastructure, coastal public property, and people's properties are protected from the adverse impacts of coastal processes and climate change and in turn, ensure the realization of the duty of the State to ensure that coastal public property is used, managed, protected, conserved, and enhanced in the interests of the whole community”.
- 5.2.7. DEFF's Oceans and Coasts Directorate have commented on the proposed coastal protection scheme. Their comments have also been incorporated in the conditions of this Environmental Authorisation.
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- 5.2.8. Conditions contained within this Environmental Authorisation will ensure that implementation of this activity will not result in significant negative impacts on the biophysical environment as the proposed activity is aimed at protecting the area from erosion and sea level rise.
- 5.2.9. Provision is made in this Authorisation for the lifelong monitoring of all aspects of the coastal protection scheme, including impacts on the northern beaches, and maintenance remediation of any negative environmental impacts.
- 5.2.10. Any vegetation disturbed will be rehabilitated and in so doing will ensure the stability of the dunes.
- 5.2.11. Adequate measures will be in place to ensure the safety of the public during construction.
- 5.2.12. The project has been advertised and significant public comment has been submitted. There was an objection lodged against the proposed activity, however, the Department considers that all such comments have been addressed sufficiently in the FEIR and have been included in the conditions of this Environmental Authorisation.
- 5.2.13. In general, the environmental process followed is deemed to be satisfactory. It is the opinion of the Department that the information at hand is sufficient and adequate to make an informed decision. In this regard the Department is satisfied that, subject to compliance with the conditions contained in the Environmental Authorisation, the proposed activity will not conflict with the general objectives of Integrated Environmental Management laid down in Chapter 5 of the National Environmental Management Act, Act 107 of 1998, and that any potentially detrimental environmental impacts resulting from the proposed activities can be mitigated to acceptable levels.

6. Appeal of authorisation

In terms of Regulation 4(2) of the Environmental Impact Assessment Regulations, 2014, as amended, you are instructed to notify all registered interested and affected parties, in writing and within fourteen (14) days of the date of the Department's decision in respect of your application.

- 6.1. The written notification referred to above must –
 - 6.1.1. Specify the date on which the Environmental Authorisation was issued;
 - 6.1.2. Inform interested and affected parties of the appeal procedure provided for in terms of the National Appeal Regulations, 2014, as contained in GN R. 993 of 08 December 2014; and
 - 6.1.3. Advise interested and affected parties that a copy of the Environmental Authorisation and reasons for the decision will be furnished on request.
- 6.2. Any appeal against the decision contained in this Authorisation must be addressed in writing, to the MEC for Economic Development, Environmental Affairs & Tourism (hereinafter referred to as "the MEC") in terms of Regulation 4(1) of the NEMA Appeal Regulations 2014 and within 20 (twenty) days after the appellant has been notified in terms of paragraphs 5.1 and 5.2 of the decision.
- 6.3. An Appeal Submission must be made on a form obtainable from the Departmental Appeal Administrator and/or the Departmental website on www.dedea.gov.za or relevant Regional Office; and
- 6.4. The Appellant must also serve a copy of the appeal to the regional office that processed the application.

6.5. In the event that an appeal is lodged, copies of such appeal must be served on the applicant (if not the appellant), all registered interested and affected parties as well as juristic state departments (organ of state with interest in the matter) within 20 days of having been notified in accordance with the requirements stipulated in paragraphs 5.1 and 5.2 of the decision.

Only appeals on environmental grounds can be considered. All appeals should be accompanied by relevant supporting documentation.

5.6. The address to which the **originals** of any such appeal and any other documents pertaining to the appeal must be mailed is outlined below. Please note that originals may also be delivered per hand or courier.

Department	Economic Development, Environmental Affairs and Tourism
Attention	General Manager: Environmental Affairs
Postal Address	Private Bag X0054, BHISHO , 5605
By Hand	Old Safety and Liaison Building (Global Life Complex) Opposite Engen Garage, Bhisho, 5605
In order to facilitate efficient administration of appeals copies of the notice of intention to appeal and any subsequent appeal documentation must also be submitted as follows:	
Manager: Mr S. Gqalangile - Environmental Impact Management per e-mail:	Siyabonga.Gqalangile@dedea.gov.za
CC: Ms Phumeza Gxala – Admin support for Mr Gqalangile	Phumeza.Gxala@dedea.gov.za

5.7. In the event that an appeal is lodged with regard to this Environmental Authorisation, no listed activities as described in this Environmental Authorisation may commence prior to the resolution of the appeal and prior to the Department's written confirmation of compliance with all conditions that must be met before construction can commence, whichever event is the latter.



NICOLE GERBER

ENVIRONMENTAL OFFICER: EIM

CACADU REGION

DATE: 20 August 2021



DAYALAN GOVENDER

DEPUTY DIRECTOR: ENVIRONMENTAL AFFAIRS

CACADU REGION

DATE: 20 August 2021