



REFERENCE: 16/3/3/1/B2/31/1009/19
NEAS REFERENCE: WCP/EIA/0000531/2018
ENQUIRIES: Ms. S. Adams
DATE OF ISSUE: 08.08.2019

The Director: Road Design
Western Cape Government: Department of Transport and Public Works
Private Bag X9185
CAPE TOWN
8000

Attention: Ms. Melanie Hofmeyr

Tel: 021 483 3999
Fax: 021 483 2205

Dear Madam

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): FOR THE PROPOSED REDEVELOPMENT OF DIVISIONAL ROAD 1001 ("DR1001") INCLUDING THE UPGRADE OF PIPE CULVERTS, INSTALLATION OF A NEW CULVERT AND SUB-SOIL DRAINS ALONG DR1001, HANGKLIP, PRINGLE BAY

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation and **adopt** the Maintenance Management Plan, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014 (as amended), you are instructed to ensure, within 14 days of the date of the decision on the application, that all registered interested and affected parties ("I&APs") are provided with access to the decision and reasons for the decision, and that all registered I&APs are notified of their right to appeal.
3. Your attention is drawn to Chapter 2 of the Appeal Regulations, 2014, which prescribes the appeal procedure to be followed. This procedure is summarized in the attached Environmental Authorisation.

Yours faithfully

MR ZAAHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

Copies to:

1. Mr. C. Dippenaar (Guillaume Nel Environmental Consultants)
2. Ms. P. Aplon (Overstrand Municipality)
3. Ms. F. Kotze (Overberg District Municipality)
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ENVIRONMENTAL AUTHORISATION

APPLICATION FOR ENVIRONMENTAL AUTHORISATION AND THE ADOPTION OF A MAINTENANCE MANAGEMENT PLAN IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): FOR THE PROPOSED REDEVELOPMENT OF DIVISIONAL ROAD 1001 INCLUDING THE UPGRADE OF PIPE CULVERTS, INSTALLATION OF A NEW CULVERT AND SUB-SOIL DRAINS ALONG DIVISIONAL ROAD 1001, HANGKLIP, PRINGLE BAY

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

DECISION

By virtue of the powers conferred on it by the National Environmental Management Act, 1998 (Act No. 107 of 1998) ("NEMA") and the Environmental Impact Assessment ("EIA") Regulations, 2014, the Competent Authority herewith **grants Environmental Authorisation** to the applicant to undertake the listed activity specified in section B below with respect to the Preferred Alternative Design as described in the Basic Assessment Report ("BAR"), dated 26 April 2019.

In terms of the NEMA, viz, the EIA Regulations, 2014 (as amended) (in Government Gazette No. 40772 of 7 April 2017) the Competent Authority hereby **adopts the Maintenance Management Plan ("MMP")** for the maintenance of storm water infrastructure along Divisional Road 1001, Hangklip, Pringle Bay, included in the BAR dated 26 April 2019.

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

A. DETAILS OF THE APPLICANT FOR THIS ENVIRONMENTAL AUTHORISATION

Department of Transport and Public Works
Directorate: Road Design

c/o Ms. Melanie Hofmeyr
P. O. Box 9185
CAPE TOWN
8001

Tel: (021) 483 3999
Fax: (021) 483 2205

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

B. LIST OF ACTIVITIES AUTHORISED

Listed Activities	Project Description
<p>Listing Notice Activity Number: 19 <i>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 or more than 10 cubic metres from a watercourse;</i></p> <p><i>but excluding where such infilling, depositing, dredging, excavation, removal or moving-</i></p> <p>(a) <i>Will occur behind a development setback;</i> (b) <i>Is for maintenance purposes undertaken in accordance with a maintenance management plan;</i> (c) <i>Falls within the ambit of activity 21 in this Notice, in which case that activity applies.</i> (d) <i>Occurs within existing ports or harbours that will not increase the development footprint of the port or harbour; or</i> (e) <i>Where such development is related to the development of a port or harbor, in which case activity 26 in Listing Notice 2 of 2014 applies.</i></p>	<p>The upgrade of existing culverts and the construction of one additional culvert and five sub-soil drains will require the infilling of more than 10m³ of material within wetlands.</p>

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

The holder is herein authorised to undertake the following alternative:

1. The upgrade of the following existing degraded pipe culverts:
 - Pipe culvert at Km4.08 will be upgraded from one 450mm diameter pipe culvert to two 900mm diameter pipe culverts with new wing-walls and an apron slab;
 - Pipe culvert at Km5.31 will be upgraded from one 453mm diameter culvert to two 600mm diameter pipe culverts with new wing-walls and an apron slab;
 - Pipe culvert at Km7.07 will be upgraded from one 450mm diameter culvert to two 600mm diameter pipe culverts with new wing-walls and an apron slab; and

- Pipe culvert at Km7.42 will be upgraded from one 450mm diameter to one 900mm diameter pipe culvert with new wing-walls and an apron slab.
2. The installation of two **new** 900mm diameter pipe culverts with new wing-walls and an apron slab at Km6.34.
 3. The installation of five **new** 200mm diameter sub-soil drains with new wing-walls and apron slabs at:
 - Km6.36;
 - Km6.38;
 - Km6.40;
 - Km6.42; and
 - Km6.44.

C. SITE DESCRIPTION AND LOCATION

The authorised listed activity will be undertaken along Divisional Road 1001, Hangklip, Pringle Bay at the following co-ordinates:

No.	Infrastructure at km intervals	Latitude	Longitude
1	Existing Pipe Culvert to be upgraded at km4.07	34°21'26.13"S	18°49'14.41"E
2	Existing Pipe Culvert to be upgraded at km5.31	34°22'06.69"S	18°49'19.81"E
3	Existing Pipe Culvert to be upgraded at km7.07	34°22'26.46"S	18°50'18.83"E
4	Existing Pipe Culvert to be upgraded at km7.42	34°22'25.31"S	18°50'31.34"E
5	New Culvert to be installed at km6.34	34°22'27.90"S	18°49'50.29"E
6	New Sub-soil Drain to be installed at km6.36	34°22'27.88"S	18°49'51.31"E
7	New Sub-soil Drain to be installed at km6.38	34°22'27.82"S	18°49'52.15"E
8	New Sub-soil Drain to be installed at km6.40	34°22'27.68"S	18°49'53.04"E
9	New Sub-soil Drain to be installed at km6.42	34°22'27.72"S	18°49'53.99"E
10	New Sub-soil Drain to be installed at km6.44	34°22'27.73"S	18°49'54.82"E

Refer to Annexure 1: Locality Map: The locality map which indicates the culverts' and sub-soil drains' locations along Divisional Road 1001, Hangklip, Pringle Bay.

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

D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER

Guillaume Nel Environmental Consultants (Pty) Ltd.
c/o Christoff Dippenaar

P. O. Box 2632

PAARL

7620

Tel: (021) 870 1874

Fax: (021) 870 1873

E. CONDITIONS OF AUTHORISATION

Scope of authorisation

1. The holder is authorised to undertake the listed activity specified in Section B above in accordance with and restricted to the Preferred Alternative Design as described in the Basic Assessment Report ("BAR"), dated 26 April 2019 on the site as described in Section C above.
2. The Environmental Authorisation is valid for a period of **five years** from the date of issue within which commencement must occur.
3. The development must be concluded within **ten years** from the date of commencement of the listed activity.
4. The holder shall be responsible for ensuring compliance with the conditions by any person acting on his/her behalf, including an agent, sub-contractor, employee or any person rendering a service to the holder.
5. Any changes to, or deviations from the scope of the alternative described in section B above must be accepted or approved, in writing, by the Competent Authority before such changes or deviations may be implemented. In assessing whether to grant such acceptance/approval or not, the Competent Authority may request information in order to evaluate the significance and impacts of such changes or deviations, and it may be necessary for the holder to apply for further authorisation in terms of the applicable legislation.

Written notice to the Competent Authority

6. Seven calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities. The notice must:
 - 6.1 make clear reference to the site details and EIA Reference number given above; and
 - 6.2 also include proof of compliance with the following conditions described herein:

Conditions: 7, 8, 13 and 19

Notification and administration of appeal

7. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–
 - 7.1 notify all registered Interested and Affected Parties ("I&APs") of –
 - 7.1.1 the outcome of the application;
 - 7.1.2 the reasons for the decision as included in Annexure 3;
 - 7.1.3 the date of the decision; and

- 7.1.4 the date when the decision was issued;
- 7.2 draw the attention of all registered I&APs to the fact that an appeal may be lodged against the decision in terms of the National Appeals Regulations, 2014 detailed in Section F below;
- 7.3 draw the attention of all registered I&APs to the manner in which they may access the decision; and
- 7.4 provide the registered I&APs with:
 - 7.4.1 the name of the holder (entity) of this Environmental Authorisation;
 - 7.4.2 name of the responsible person for this Environmental Authorisation;
 - 7.4.3 postal address of the holder;
 - 7.4.4 telephonic and fax details of the holder;
 - 7.4.5 e-mail address, if any, of the holder; and
 - 7.4.6 the contact details (postal and/or physical address, contact number, facsimile and e-mail address) of the decision-maker and all registered I&APs in the event that an appeal is lodged in terms of the 2014 National Appeals Regulations.
- 8. The listed activities, including site preparation, may not commence within 20 (twenty) calendar days from the date of issue of this Environmental Authorisation. In the event that an appeal is lodged with the Appeal Authority, the effect of this Environmental Authorisation is suspended until the appeal is decided.

Management of activity

- 9. The draft Environmental Management Programme ("EMPr") submitted as part of the application for Environmental Authorisation is hereby approved and must be implemented.
- 10. The MMP adopted as part of this Environmental Authorisation must be implemented.
- 11. The Rehabilitation Report for the Proposed Site Camp On Farm Number 101/559, along Divisional Road 1001, Hangklip, Western Cape (hereinafter referred to the Rehabilitation Report), dated July 2018 must be implemented.
- 12. The EMPr, MMP and the Rehabilitation Report must be included in all contract documentation for all phases of implementation.

Monitoring

- 13. The holder must appoint a suitably experienced environmental control officer ("ECO"), or site agent where appropriate, before commencement of any land clearing or construction activities to ensure compliance with the provisions of the EMPr and the conditions contained herein.
- 14. A copy of the Environmental Authorisation, EMPr, audit reports and compliance monitoring reports must be kept at the site of the authorised activities, and must be made available to anyone on request, including a publicly accessible website.

15. Access to the site referred to in Section C above must be granted, and the environmental reports mentioned above must be produced, to any authorised official representing the Competent Authority who requests to see it for the purposes of assessing and/or monitoring compliance with the conditions contained herein.

Auditing

16. In terms of Regulation 34 of the NEMA EIA Regulations, 2014, the holder must conduct environmental audits to determine compliance with the conditions of the Environmental Authorisation, the EMPr and submit Environmental Audit Reports to the Competent Authority. The Environmental Audit Report must be prepared by an independent person and must contain all the information required in Appendix 7 of the NEMA EIA Regulations, 2014.

The holder must undertake an environmental audit quarterly for the duration of the construction phase and submit Environmental Audit Reports to the Competent Authority once every six months during the construction phase. The final Environmental Audit Report must be submitted to the Competent Authority within six months after operation commenced.

The holder must, within 7 days of the submission of each of the above-mentioned reports to the Competent Authority, notify all potential and registered I&APs of the submission and make the report available to anyone on request and on a publicly accessible website (if applicable).

Specific Conditions

17. Should any heritage remains be exposed during excavations or any other actions on the site, these must immediately be reported to the Provincial Heritage Resources Authority of the Western Cape, Heritage Western Cape. Heritage remains uncovered or disturbed during earthworks must not be further disturbed until the necessary approval has been obtained from Heritage Western Cape.

Heritage remains include: meteorites, archaeological and/or palaeontological remains (including fossil shells and trace fossils); coins; indigenous and/or colonial ceramics; any articles of value or antiquity; marine shell heaps; stone artifacts and bone remains; structures and other built features with heritage significance; rock art and rock engravings; and/or graves or unmarked human burials including grave goods and/or associated burial material.

18. A qualified archaeologist and/or palaeontologist must be contracted where necessary (at the expense of the holder) to remove any heritage remains. Heritage remains can only be disturbed by a suitably qualified heritage specialist working under a directive from the relevant heritage resources authority.
19. The construction footprint must be demarcated prior to the commencement of construction activities. Wetland features beyond the construction footprint must be demarcated as "no-go" areas.

F. GENERAL MATTERS

1. Notwithstanding this Environmental Authorisation, the holder must comply with any other statutory requirements that may be applicable when undertaking the listed activity.
2. Non-compliance with a condition of this Environmental Authorisation or EMPr may render the holder liable to criminal prosecution.
3. If the holder does not commence with a listed activity within the period referred to in Condition 2, this Environmental Authorisation shall lapse for that activity, and a new application for Environmental Authorisation must be submitted to the Competent Authority. If the holder wishes to extend the validity period of the Environmental Authorisation, an application for amendment in this regard must be made to the Competent Authority prior to the expiry date of the Environmental Authorisation.
4. The holder must submit an application for amendment of the Environmental Authorisation to the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated. If a new holder is proposed, an application for Amendment in terms of Part 1 of the EIA Regulations, 2014 must be submitted.

Please note that an amendment is not required if there is a change in the contact details of the holder. In this case, the Competent Authority must only be notified of such changes.

5. The manner and frequency for updating the EMPr is as follows:
Amendments to the EMPr must be done in accordance with Regulations 35 to 37 of the EIA Regulations 2014 or any relevant legislation that may be applicable at the time.

G. APPEALS

Appeals must comply with the provisions contained in the National Appeal Regulations 2014 (as amended).

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

- 2.2. Submit a copy of the appeal to the holder of the decision, any registered I&AP, any Organ of State with interest in the matter and the decision-maker i.e. the Competent Authority that issued the decision.
3. The holder of the decision (if not the appellant), the decision-maker that issued the decision, the registered I&AP and the Organ of State must submit their responding statements, if any, to the appeal authority and the appellant within 20 (twenty) calendar days from the date of receipt of the appeal submission.
4. The appeal and the responding statement must be submitted to the address listed below:

By post: Western Cape Ministry of Local Government, Environmental Affairs and
 Development Planning
 Private Bag X9186
 CAPE TOWN
 8000

By facsimile: (021) 483 4174; or

By hand: Attention: Mr Marius Venter (Tel: 021 483 2659)
 Room 809
 8th Floor Utilitas Building, 1 Dorp Street, Cape Town, 8001

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

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

H. DISCLAIMER

The Western Cape Government, the Local Authority, committees or any other public authority or organisation appointed in terms of the conditions of this Environmental Authorisation shall not be responsible for any damages or losses suffered by the holder, developer or his/her successor in any instance where construction or operation subsequent to construction is temporarily or permanently stopped for reasons of non-compliance with the conditions as set out herein or any other subsequent document or legal action emanating from this decision.

Your interest in the future of our environment is appreciated.

Yours faithfully



MR. ZAATHIR TOEFY

DIRECTOR: DEVELOPMENT MANAGEMENT (REGION 1)

DATE OF DECISION: 08/08/2019

Cc: (1) Mr. C. Dippenaar (Guillaume Nel Environmental Consultants)
(2) Ms. P. Aplon (Overstrand Municipality)
(3) Ms. F. Kotze (Overberg District Municipality)
(5) Ms. V. Ligudu (BGCMA)
(6) Ms. C Rampartab (CapeNature)

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ANNEXURE 1: LOCALITY MAP

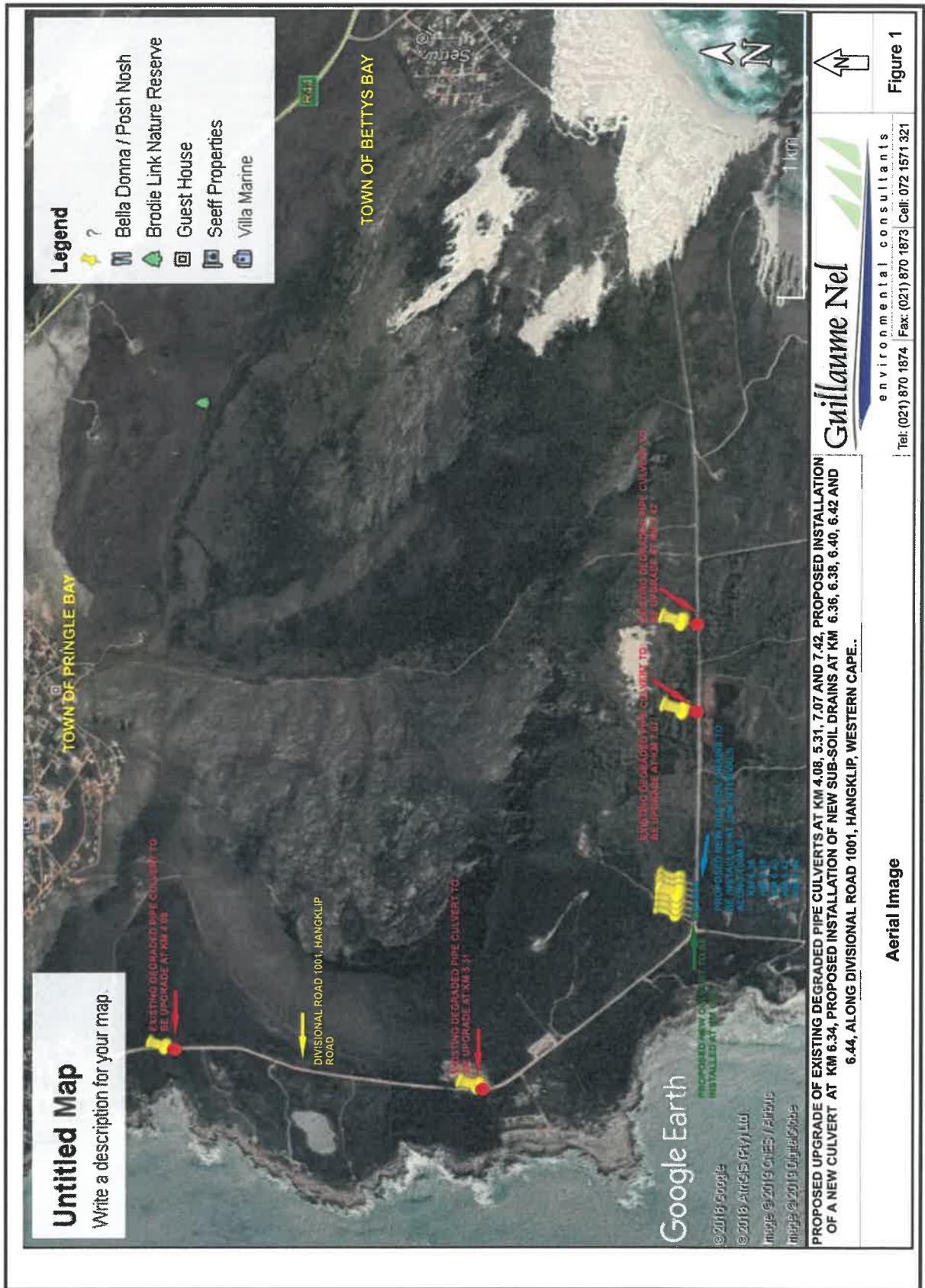


Figure 1: The locality map which indicates the culverts' and sub-soil drains' locations along Divisional Road 1001, Hangklip, Pringle Bay.

ANNEXURE 2: REASONS FOR THE DECISION

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

- a) The information contained in the Application Form dated 1 March 2019, the draft Basic Assessment Report ("BAR") submitted on 15 March 2019, the final BAR submitted on 26 April 2019 and the EMPr and MMP submitted together with the final BAR;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation and Alternatives (dated March 2013);
- c) The objectives and requirements of relevant legislation, policies and guidelines, including section 2 of the National Environmental Management Act, 1998 (Act No. 107 of 1998);
- d) The comments received from I&APs and responses to these, included in the final BAR received on 26 April 2019; and
- e) The balancing of negative and positive impacts and proposed mitigation measures.

No site visits were conducted. The Competent Authority had sufficient information before it to make an informed decision without conducting a site visit.

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

1. Public Participation

The public participation process included:

- identification of and engagement with I&AP's;
- the placing of a newspaper advertisement in the '*Overstrand Herald*' on 10 May 2018;
- three notice boards were placed along the route where the listed activity is to be undertaken on 11 May 2018;
- giving written notice to the owners and occupiers of land adjacent along the route where the listed activities are to be undertaken, the municipality and ward councilor, and the various organs of state having jurisdiction in respect of any aspect of the listed activities on 10 May 2018, 11 May 2018, 12 March 2019 and 15 March 2019; and
- making the draft BAR available to I&APs for public review on 11 May 2018 and 15 March 2019.

The Department is satisfied that the Public Participation Process that was followed met the minimum legal requirements and all the comments raised and responses thereto were included in the comments and response report.

Specific alternatives, management and mitigation measures have been considered in this Environmental Authorisation and EMPr to adequately address the concerns raised.

2. Alternatives

The proposal entails:

- The upgrade of the following existing degraded pipe culverts:

- Pipe culvert at Km4.08 will be upgraded from one 450mm diameter pipe culvert to two 900mm diameter pipe culverts with new wing-walls and an apron slab;
 - Pipe culvert at Km5.31 will be upgraded from one 453mm diameter culvert to two 600mm diameter pipe culverts with new wing-walls and an apron slab;
 - Pipe culvert at Km7.07 will be upgraded from one 450mm diameter culvert to two 600mm diameter pipe culverts with new wing-walls and an apron slab; and
 - Pipe culvert at Km7.42 will be upgraded from one 450mm diameter to one 900mm diameter pipe culvert with new wing-walls and an apron slab.
- The installation of two new 900mm diameter pipe culverts with new wing-walls and an apron slabs at Km6.34.
 - The installation of five new 200mm diameter sub-soil drains with new wing-walls and apron slabs at:
 - Km6.36;
 - Km6.38;
 - Km6.40;
 - Km6.42; and
 - Km6.44.

Design Alternatives

Two design alternatives were investigated and are discussed below:

- Preferred Alternative Design (herewith approved)

This alternative entails the construction of impermeable concrete wing-walls at the upstream side of the road.

This alternative is preferred as impermeable concrete wing-walls are able to channel storm water more effectively during high rainfall events. This will ensure that the structural integrity of the road, the culvert and the embankment will be better protected against the structural impacts caused by the flow of storm water and erosion.

- Alternative Design:

This alternative entails deconstruction of permeable gabion wing-walls at the upstream side of the road.

This alternative design is not preferred as it will compromise the structural integrity of the road, the culvert and the embankment. Even though, the gabions will assist with groundwater flow, the permeable nature of the gabions may exacerbate the erosion of the embankments and area at the wing-walls.

Site Camp Location Alternative

Two location alternatives were considered for the establishment of a site camp.

An area of 2784 m² on Farm No. 101/559, Hangklip, Pringle Bay is the preferred alternative for the following reasons:

- The site falls outside Critical Biodiversity Areas.
- The site falls within the previously disturbed and degraded road reserve.
- The site is highly infested with invasive vegetation and will be rehabilitated.
- Access to the site is existing.

- The owner of the property as well as Overstrand Municipality and Overberg Municipality gave consent.

The No-Go Option

The option not to upgrade the current road and existing culverts and not to construct a new culvert and sub-soil drains will result in the road remaining unsafe for motorists, the continued inability of the current culverts to convey storm water during high rainfall events and the hydrological connectivity of the peat wetland being compromised due to insufficient water dispersal across this hydrogeomorphic unit. This option is therefore not preferred.

3. Impact Assessment and Mitigation measures

3.1 Activity need and desirability

The degradation of the culverts along Divisional Road 1001, Hangklip, Pringle Bay poses a safety hazard to motorists using this road, therefore necessitating the proposed upgrades as well as the construction of an additional culvert and five sub-soil drains. The upgrade of the existing culverts, the construction of the aforementioned additional structures, as well as the subsequent rehabilitation of the wetlands will ensure for the safer utilisation of the road for motorists, improved storm water flow and the improvement of the ecological state of the affected areas through the re-introduction of endemic species to the affected areas.

3.2 Biophysical Impacts

Even though the storm water infrastructure upgrade and construction falls within Ecological Support Areas (according to the Western Cape Biodiversity Spatial Plan), and ecosystems classified as critically endangered and endangered in terms of Section 52 of the National Environmental Biodiversity Act, 2004 (Act no. 10 of 2004) (Koggelberg Sandstone Fynbos and Hangklip Sand Fynbos, respectively), all work will be undertaken within the road reserve. The road reserve has been disturbed by construction and maintenance of the road. The Botanical Assessment dated March 2018 compiled by Bergwind Botanical Surveys and Tours (Paul Emms) indicates that the upgrade to the culverts as well as the construction of additional storm water structure will result in the loss of some natural vegetation and recommends that an Environmental Control Officer (included as Condition 13 of this Environmental Authorisation) should be present during construction activities to ensure that no indigenous vegetation is unnecessarily cleared. Through the implementation of the EMPr, inclusive of a rehabilitation plan for the areas at the culverts (accepted in Section E: Condition 9), the Rehabilitation Report for the site camp (included as Condition 11 of this Environmental Authorisation) and the recommendations made by the botanical specialist, impacts will be avoided or mitigated to an acceptable level and the ecological state of the wetlands will be improved.

Based on the Freshwater Ecosystems Impact Assessment Report, dated 8 May 2018, compiled by Deal Ollis from Freshwater Consulting, it is noted that the most significant freshwater ecosystem in the study area that could be affected by the proposed upgrade is a Freshwater Ecosystem Priority Area ("FEPA") wetland that has been mapped along the road and through which the road traverses (referred to as Assessment Unit 1 in the Freshwater Ecosystems Impact Assessment Report). Additional seep wetlands were identified along the northern edge of the section of Divisional Road 1001. The main impacts on the wetlands are hydrological alterations caused by the existing road and the encroachment of invasive alien plants into the wetlands. The wetlands were all assessed to all be in a relatively good condition and two of the larger wetlands were rated to be of higher conservation importance. According to the letter dated 12 March 2019, from Kim Marais from Scientific Aquatic Services, the development of the five new

sub-soil drains at Km6.36, Km 6.38, Km6.40, Km6.42 and Km6.44 along Divisional Road 1001 will be sufficient to ensure efficient hydrological connectivity of the downstream peat wetland as the flow of water will not be impeded between the northern and southern portion of the delineated wetland feature. Through the implementation of the EMPr, inclusive of a rehabilitation plan for the areas at the culverts, (accepted in Section E: Condition 9) and the recommendations made by the specialists, impacts on the wetlands will be mitigated and the hydrological functioning of the wetlands will be improved.

A Water Use Licence Application ("WULA") in terms of the National Water Act, 1998 (Act 38 of 1998) has been submitted to the Department of Water and Sanitation with regard to construction works within a wetland.

A MMP has been compiled to address future maintenance activities taking place in the affected wetlands. The maintenance of the structures authorised in this Environmental Authorisation forms part of this MMP. It must be noted that the accepted maintenance activities only relate to the activities described in the MMP. Should any new activities and associated infrastructure, not included in the MMP, require maintenance and if any of the applicable listed activities are triggered, an Environmental Authorisation must be obtained prior to the undertaking of such activities. It remains the responsibility of the proponent to determine if any other listed activities are triggered and to ensure that the necessary Environmental Authorisation is obtained.

The fact that the MMP is adopted by the Competent Authority does not absolve the applicant from its general "duty of care" set out in Section 28(1) of the NEMA, which states that *"Every person who causes, has caused or may cause significant pollution or degradation of the environment must take reasonable measures to prevent such pollution or degradation from occurring, continuing or recurring, or, in so far as such harm to the environment is authorised by law or cannot reasonably be avoided or stopped, to minimise and rectify such pollution or degradation of the environment."* (Note: When interpreting the "duty of care" responsibility, cognisance must be taken of the principles of sustainability contained in Section 2 of NEMA).

The development will result in both negative and positive impacts.

Negative Impacts:

- The development will result in impacts such as noise, dust and traffic delays during the construction phase.
- Impacts on wetland is anticipated but will be mitigated to an acceptable level and managed in terms of the EMPr.

Positive Impacts:

- The safety of the road for motorists will be improved.
- The upgrade of the culverts and construction of new storm water infrastructure will allow the channelling of storm water more effectively.
- The wetlands hydrological functioning will be improved.
- Through the rehabilitation at the culverts and sub-soil drains, the ecological and visual value of the affected areas will improve.

4. National Environmental Management Act Principles

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

- the effects of decisions on all aspects of the environment to be taken into account;
- the consideration, assessment and evaluation of the social, economic and environmental impacts of activities (disadvantages and benefits), and for decisions to be appropriate in the light of such consideration and assessment;
- the co-ordination and harmonisation of policies, legislation and actions relating to the environment;
- the resolving of actual or potential conflicts of interest between organs of state through conflict resolution procedures; and
- the selection of the best practicable environmental option.

5. Conclusion

In view of the above, the NEMA principles, compliance with the conditions stipulated in this Environmental Authorisation, and compliance with the EMPr, the Competent Authority is satisfied that the proposed listed activity will not conflict with the general objectives of integrated environmental management stipulated in Chapter 5 of the National Environmental Management Act, 1998 (Act No. 107 of 1998) and that any potentially detrimental environmental impacts resulting from the listed activity can be mitigated to acceptable levels.

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