



**REFERENCE: 16/3/3/1/D2/8/0007/17**  
**ENQUIRIES: MAR-LARNE LESCH**  
**DATE OF ISSUE: 2018 -04- 26**

The Head of Department  
Western Cape Government:  
Department of Transport and Public Works  
PO Box 2603  
CAPE TOWN  
8000

**Attention: Mr. Johannes Neethling**

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Fax: (021) 483 2205  
E-mail: [Johannes.Neethling2@westerncape.gov.za](mailto:Johannes.Neethling2@westerncape.gov.za)

Dear Sir

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014 (AS AMENDED): PROPOSED RIVER EROSION PROTECTION MEASURES FOR THE TR 34 ROAD EMBANKMENT, SWART RIVER BRIDGE ON FARM 211 WOLWEKRAAL, SWART RIVER, NORTH OF PRINCE ALBERT**

1. With reference to the above application, the Department hereby notifies you of its decision to **grant** Environmental Authorisation, attached herewith, together with the reasons for the decision.
2. In terms of Regulation 4 of the Environmental Impact Assessment Regulations, 2014, you are instructed to ensure, within 14 days of the date of the Environmental Authorisation, that all registered interested and affected parties ("I&APs") are provided with access to 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. GAVIN BENJAMIN**

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION3)**

CC: (1) SLR Consulting (South Africa) Pty Ltd. (EAP)  
(2) Prince Albert Municipality Municipality  
(3) Breede Gourits Catchment Management Agency (BGCMA)

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**REFERENCE:** 16/3/3/1/D2/8/0007/17  
**NEAS REFERENCE:** WCP/EIA/0000342/2017  
**ENQUIRIES:** Marianne Lesch  
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## ENVIRONMENTAL AUTHORISATION

**APPLICATION FOR ENVIRONMENTAL AUTHORISATION IN TERMS OF THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (ACT 107 OF 1998) AND THE ENVIRONMENTAL IMPACT ASSESSMENT REGULATIONS, 2014: PROPOSED RIVER EROSION PROTECTION MEASURES FOR THE TR 34 ROAD EMBANKMENT, SWART RIVER BRIDGE ON FARM 211 WOLWEKRAAL, SWART RIVER, NORTH OF PRINCE ALBERT**

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 activities specified in section B below with respect to the preferred Design & Layout Alternative described in the Final Basic Assessment Report ("BAR"), dated January 2018 as prepared and submitted by the environmental assessment practitioner, SLR Consulting (South Africa) Pty) Ltd.

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

The Head of Department  
Western Cape Government: Department of Transport and Public Works  
c/o Mr. Johannes Neethling  
PO Box 2603  
**CAPE TOWN**  
8000

Tel: (021) 483 20537  
 Fax: (021) 483 2205  
 E-mail: Johannes.Neethling2@westerncape.gov.za

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	Activity/Project Description
<b>Environmental Impact Assessment Regulations Listing Notice 1 of 2014</b> (Government Notice No. 983 of 4 December 2014)	
<b>Activity Number: 12</b> Activity Description: The development of - (ii) infrastructure or structures with a physical footprint of 100 square metres or more; where such development occurs - (c) if no development setback exists, within 32 metres of a watercourse, measured from the edge of a watercourse.	The proposed river erosion protection measures (groynes) would be located within the Swart River and have a physical footprint larger than 100 m <sup>2</sup> .
<b>Activity Number: 19</b> Activity Description: The infilling or depositing of any material of more than 10 m <sup>3</sup> into, or the dredging, excavation, removal or moving of soil, sand, shells, shell grit, pebbles or rock of more than 10 m <sup>3</sup> from: (a) (i) a watercourse.	The construction of the proposed groynes would result in more than 10 m <sup>3</sup> of material being removed / deposited from the Swart River.

The abovementioned list is hereinafter referred to as “**the listed activities**”.

The holder is herein authorised to undertake the following alternative that includes the listed activities as it relates to the development:

Preferred Design and Layout Alternative:

The proposal entails river erosion protection works just upstream of where the Trunk Road (TR) 34 crosses the Swart River. The erosion protection entails the construction of four groynes (two on either side of the river) to be placed to the east of the TR 34 bridge to deflect most of the destructive river flow away from the southern riverbank, thereby limiting subsequent damage to the road embankment. The proposed groynes will have a total footprint of approximately 3 192 m<sup>2</sup>.

### **C. SITE DESCRIPTION AND LOCATION**

The aforementioned listed activities will be undertaken on the following portions of land: The TR 34 Road Embankment, Swart River Bridge on Farm 211 Wolwekraal, Swart River, North of Prince Albert.

The southern boundary of the Farm Wolwekraal 211 is located approximately 2 km north of the town of Prince Albert. The proposed groynes will be located on the northern boundary of the farm, approximately 7 km north of Prince Albert. The proposed groynes would be located on the banks and within the Swart River to the east of the TR 34.

The SG digit code for the relevant properties is: C06100000000021100000.

Latitude (S): 33° 9' 53.94"      Longitude (E): 21° 58' 58.40"

Refer to Annexure 1: Locality Plan and Annexure 2: Site Plan(s).

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

### **D. DETAILS OF THE ENVIRONMENTAL ASSESSMENT PRACTITIONER**

SLR Consulting (South Africa) (Pty) Ltd  
% Mr Nicholas Arnott / Jonathan Crowther  
P.O. Box 10145  
Caledon Square  
7905

Tel: (021) 461 1118/9

Fax: (021) 461 1120

E-Mail: [narnott@slrconsulting.com](mailto:narnott@slrconsulting.com) / [jcrowther@slrconsulting.com](mailto:jcrowther@slrconsulting.com)

### **E. CONDITIONS OF AUTHORISATION**

#### **Scope of authorisation**

1. The holder is authorised to undertake the listed activities specified in Section B above in accordance with and restricted to the following preferred Design Alternative as described in Section B above:

The construction of four groynes (two on either side of the river) to the east of the TR 34 bridge to deflect most of the destructive river flow away from the southern riverbank, thereby limiting subsequent damage to the road embankment. The proposed groynes will have a total footprint of approximately 3 192 m<sup>2</sup>.

2. The non-operational component of the Environmental Authorisation is subject to the following:
  - 2.1. The holder must commence with all the listed activities and conclude the development activities (construction phase) within a period of **five (5) years** from the date of issue of this Environmental Authorisation; and
  - 2.2. The post construction rehabilitation and monitoring requirements must be finalised within a period of 12-months from the date the development activities (construction phase) are concluded.
3. The operational aspects of this Environmental Authorisation and EMPr are granted until **31 May 2028** or until the activity is decommissioned prior to said date, during which period all rehabilitation and monitoring requirements and final environmental auditing and reporting must be finalised.

Where “decommission” means to take out of active service permanently or dismantle partly or wholly, or closure of a facility to the extent that it cannot be readily re-commissioned.”

**Note:** The holder may on written application, prior to the validity period lapsing, apply to the relevant competent authority to extend the validity period for which the operational aspects have been granted.
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. The holder of the environmental authorisation must provide the Competent Authority proof of compliance with the following specified conditions of authorisation within **sixty (60)** calendar days of the date of issue of this decision:

Conditions: **8** and **9**

7. **Seven (7)** calendar days' notice, in writing, must be given to the Competent Authority before commencement of construction activities.

The notice must also include proof of compliance with the following conditions described herein:

Conditions: **11** and **13**

**Note:** All notices to the Competent Authority must make clear reference to the site details and EIA Reference number given above.

### **Notification and administration of appeal**

8. The holder must in writing, within 14 (fourteen) calendar days of the date of this decision–

8.1. notify all registered Interested and Affected Parties (“I&APs”) of –

8.1.1. the decision reached on the application;

8.1.2. the reasons for the decision as included in Annexure 3;

8.1.3. the date of the decision; and

8.1.4. the date when the decision was issued.

8.2. 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 Appeal Regulations, 2014 (as amended) detailed in Section G below;

8.3. draw the attention of all registered I&APs to the manner in which they may access the decision;

8.4. provide the registered I&APs with the:

8.4.1. name of the holder (entity) of this Environmental Authorisation,

8.4.2. name of the responsible person for this Environmental Authorisation,

8.4.3. postal address of the holder,

8.4.4. telephonic and fax details of the holder,

8.4.5. e-mail address, if any, of the holder,

8.4.6. 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 (as amended).

9. The listed activities, including site preparation, must not commence within thirty-nine (39) 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 (i.e. the listed activities, including site preparation, must not commence until the appeal is decided).

## **Management of activity**

10. The activities must be implemented in accordance with an approved Environmental Management Programme (“EMPr”).
11. The draft EMPr submitted as part of the application for Environmental Authorisation must be amended to address the following aspects, and re-submitted to the Competent Authority for approval, prior to commencement of construction activities.  
  
The amended EMPr must—
  - 11.1. meet the requirements outlined in Section 24N (2) & (3) of the National Environmental Management Act, 1998 (Act no 107 of 1998, as amended) and Appendix 4 of the Environmental Impact Assessment Regulations, 2014 (Government Notice R.982 of 4 December 2014, as amended);
  - 11.2. incorporate all the conditions given in this Environmental Authorisation;
  - 11.3. provide a clear distinction between the portions of the EMPr that deal with operational and non-operational aspects;
  - 11.4. include all final designs for the proposed development;
  - 11.5. detail the functions of the ECO and frequency of site inspections and reporting;
  - 11.6. detail an implementation programme which sets out the construction phase of the proposed development and specifies the period required to conclude the respective activities (a date on which the activity will be deemed to have been concluded should be derived from such a programme);
  - 11.7. detail the operational aspects which must be monitored. Including a monitoring and reporting programme for such operational aspects as well as the roles and responsibilities regarding such programme;
  - 11.8. detail an indigenous plant “search and rescue” methodology to identify all indigenous plant species and organisms found to occur at the property within the development footprint. Plant material must be collected and be utilised later in supplementary planting and landscaping, where appropriate, at the property;
  - 11.9. incorporate an environmental auditing and monitoring schedule detailing the frequency of auditing compliance with environmental authorisation and environmental management programme and submission of environmental audit reports to the Competent Authority during the construction and operational phase.
  - 11.10. it is recommended that the EMPr include a Maintenance Management Plan.
12. The final approved EMPr 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") before commencement of any land clearing or construction activities to ensure compliance with the EMPr and the provisions contained herein.
14. The ECO must–
  - 14.1. be appointed prior to commencement of any vegetation clearing or construction activities commencing;
  - 14.2. ensure compliance with the EMPr and the conditions contained herein;
  - 14.3. keep record of all activities on site; problems identified; transgressions noted and a task schedule of tasks undertaken by the ECO;
  - 14.4. remain employed until all development activities are concluded and the post construction rehabilitation and monitoring requirements are finalised.
15. 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 (if applicable).
16. Access to the site referred to in Section C 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.
17. The holder must, for the period during which the environmental authorisation and EMPr remain valid monitor the operational aspects of the development.

## Auditing

18. The holder must, for the period during which the environmental authorisation and EMPr remain valid ensure the compliance with the conditions of the environmental authorisation and the EMPr, is audited.
19. The environmental audit report must be prepared and submitted to the Competent Authority, by an independent person with the relevant environmental auditing expertise.

The holder must, **within 7 days** of the submission of the environmental audit report 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).
20. The Environmental Audit Report must contain all the information required in **Appendix 7** of the Environmental Impact Assessment Regulations, 2014.



21. During the construction phase, the holder must undertake annual environmental audit(s) and submit these Environmental Audit Report(s) to the Competent Authority.
- The final construction phase Environmental Audit Report(s) must be submitted to the Competent Authority within six (6) months of completion of construction;
22. During the operation phase, the holder must ensure that environmental audit(s) are performed as specified in the approved EMPr and submit these Environmental Audit Report(s) to the Competent Authority.
- During the operational phase the frequency of the auditing of compliance with the conditions of the environmental authorisation and of compliance with the EMPr may not exceed intervals of 5 years;

### **Specific Conditions**

23. 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 artefacts 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.
24. 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.

### **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 activities.
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 conclude an authorised listed activity within the period referred to in Par 3.2 of Section G, this Environmental Authorisation shall lapse for that activity,

and a new application for Environmental Authorisation must be submitted to the relevant Competent Authority.

If the holder wishes to extend a validity period specified in the Environmental Authorisation, an application for amendment in this regard must be made to the relevant Competent Authority prior to the expiry date of such a period.

**Note:**

- (a) Failure to lodge an application for amendment prior to the expiry of the validity period of the Environmental Authorisation will result in the lapsing of the Environmental Authorisation.
- (b) It is an offence in terms of Section 49A(1)(a) of NEMA for a person to commence with a listed activity if the competent authority has not granted an Environmental Authorisation for the undertaking of the activity.

4. The holder is required to notify the Competent Authority where any detail with respect to the Environmental Authorisation must be amended, added, substituted, corrected, removed or updated.

In assessing whether it requires an amendment of the EA, 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.

The onus is on the holder to verify whether such changes to the environmental authorisation must be approved in writing by the relevant competent authority prior to the implementation thereof.

5. The manner and frequency for updating the EMPr is as follows:

- (a) Any further amendments to the EMPr, other than those mentioned above, must be approved in writing by the relevant competent authority.
- (b) An application for amendment to the EMPr must be submitted to the Competent Authority if any amendments are to be made to the impact management outcomes of the EMPr. Such amendment(s) may only be implemented once the amended EMP has been approved by the competent authority.

The onus is however on the holder to confirm the legislative process requirements for the above scenarios at that time.

6. Where an amendment to the impact management outcomes of an EMPr is required before an environmental audit is required in terms of the environmental authorisation, an EMPr may be amended on application by the holder of the environmental authorisation.

**Compliance with Environmental Authorisation and EMPr**

7. Non-compliance with a condition of this environmental authorisation or EMPr is an offence in terms of Section 49A(1)(c) of the National Environmental Management Act, 1998 (Act no. 107 of 1998, as amended).
8. In the event that the Environmental Authorisation should lapse, it is an offence in terms of Section 49A(1)(a) of NEMA for a person to commence with a listed activity, unless the competent authority has granted an Environmental Authorisation for the undertaking of the activity.
9. Offences in terms of the NEMA and the Environmental Impact Assessment Regulations, 2010, will render the offender liable for criminal prosecution.

## **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 Jaap de Villiers (Tel: 021 483 3721)  
Room 809  
8<sup>th</sup> 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 Jaap.DeVilliers@westerncape.gov.za.

5. A prescribed appeal form as well as assistance regarding the appeal processes is obtainable from Appeal Authority at: Tel. (021) 483 3721, E-mail Jaap.DeVilliers@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. GAVIN BENJAMIN**

**DIRECTOR: DEVELOPMENT MANAGEMENT (REGION3)**

DATE OF DECISION: 26/04/2018

**FOR OFFICIAL USE ONLY:**

**EIA REFERENCE NUMBER:** 16/3/3/1/D2/8/0007/17  
**NEAS EIA REFERENCE NUMBER:** WCP/EIA/0000342/2017

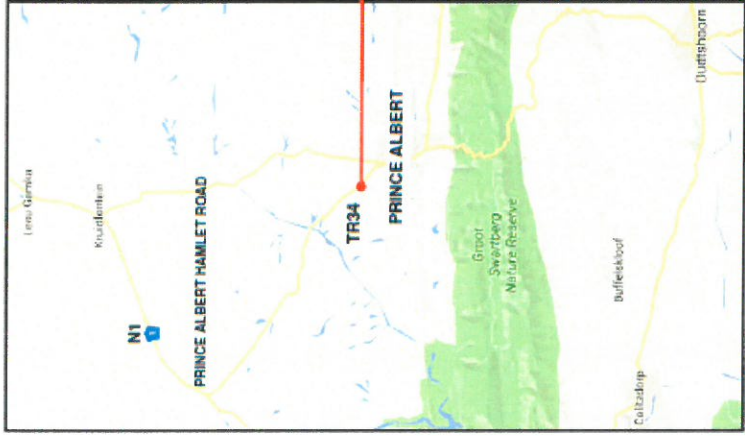
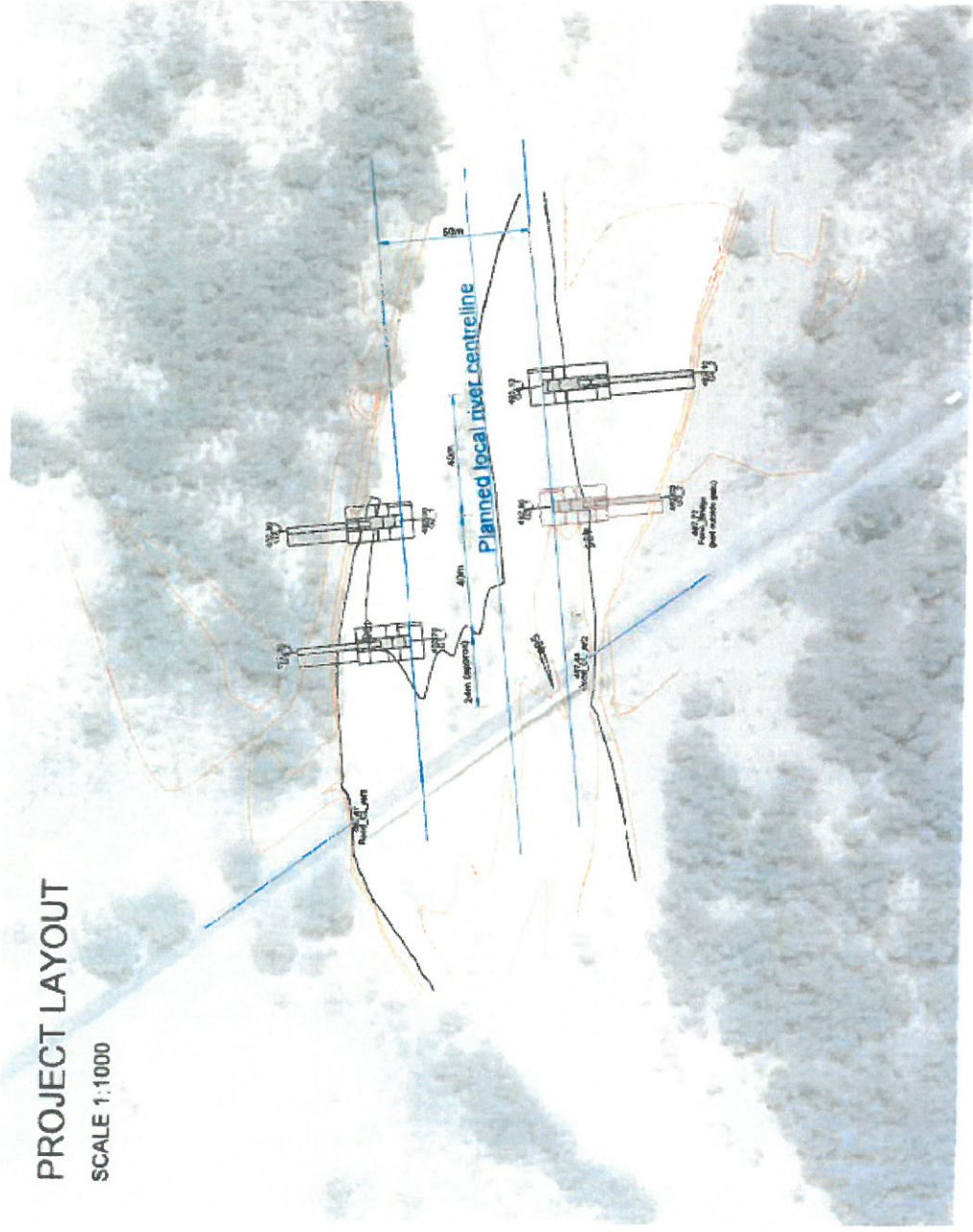


Figure A1: Google map and Google Earth Image showing the location of the proposed river erosion protection works at the Swart River.

## ANNEXURE 2: PROJECT LAYOUT

### PROJECT LAYOUT

SCALE 1:1000



## ANNEXURE 3: REASONS FOR THE DECISION

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

- a) The information contained in the Application Form received by the competent authority on 20 September 2017, the Basic Assessment Report dated January 2018 and the EMPR submitted together with the aforementioned FBAR;
- b) Relevant information contained in the Departmental information base, including the Guidelines on Public Participation, 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 BAR dated January 2018;

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 is regarded to fulfil the process requirements of the Environmental Impact Assessment Regulations, 2014.

Site notices notifying potential I&APs of the proposed application were placed at two locations on site, and at various locations within Prince Albert and an advert was placed in "Die Burger" on 19 July 2017 notifying the public of the EIA process and providing an opportunity for Interested and Affected Parties (I&APs) to register and participate. A public open day was held on 2 August 2017 at the Sydwell Williams Centre in Prince Albert where attendees were provided the opportunity to raise any issues or concerns regarding the proposed project

A Notice of Intent to Develop (NID) was submitted to Heritage Western Cape (HWC) on 17 November 2017. HWC responded that no further action under Section 38 of the NHRA is required.

Following consultation between SLR Consulting (Environmental Assessment Practitioner) and the Breede Gouritz Catchment Management Agency ("BGCMA ") it was determined that a General Authorisation is required for the proposal. The General Authorisation was issued by the BGCMA on 19 December 2017.

All the concerns raised by I&APs were responded to and adequately addressed during the public participation process. Specific management and mitigation measures have been considered in this Environmental Authorisation and in the EMPr to adequately address the concerns raised.

The Competent Authority concurs with the Environmental Assessment Practitioner's responses to the issues raised during the public participation process and has included appropriate conditions in this Environmental Authorisation and in the EMPr.

## **2. Alternatives**

(a) Property and location/site alternatives

The proposed river erosion protection works is required at the specified location adjacent to where the TR 34 crosses the Swart River and therefore no other site alternatives were considered.

(b) Activity alternatives:

Activity alternatives in addition to the construction of the proposed groynes that were considered, included the following:

1. General landscaping and planting of vegetation along the banks of the Swart River at the project site in order to stabilise the banks and limit erosion during flood events; and
2. Construction of retaining walls (with concrete, rock filled gabions or rip-rap) along the river banks as erosion protection and train the river to flow through the existing bridge opening.

The proposal to landscape and revegetate the river bank was not considered to be feasible as the regional climatic conditions are not conducive for the establishment of the deep rooted vegetation required to stabilise river banks. The vegetation, furthermore would take some time to establish and the risk of further erosion of the road embankment would persist.

The construction of retaining walls was also not deemed a suitable alternative to the proposed groynes as this would result in the loss of the natural connection between the river bed and flood plain.

(c) Design or layout alternatives (Preferred Alternative)

The alternative relating to the use of groynes appeared to be the most suitable option as the river should be taken into account in order to ensure that natural processes in the river are not adversely affected and that the groynes contribute to controlling the evolution of the river without obstructing it. Furthermore, the groynes must protect the river bank and not destabilise the river causing erosion or unnatural flooding at another site.

(d) "No-Go" Alternative

The No-Go option would mean the status quo remains which could eventually lead to the collapse of the road section adjacent to the Swart River under future flood conditions as the riverbanks adjacent to the bridge would be prone to ongoing erosion.

### 3. Impact Assessment and Mitigation measures

#### 3.1 Activity need and desirability

According to the BAR the 2012-2017 Draft Integrated Development Plan (IDP) for the Prince Albert Local Municipality sets out the strategic objectives developed to address the challenges identified during the IDP development process. One of the developmental objectives of the municipality is to maintain and extend the life span of all streets and storm water assets.



The embankments of the TR 34 have been eroded by past Swart River flood events and the need to protect them from future flooding has been identified. The TR 34 is an important component of the provincial road infrastructure as it ensures access between Prince Albert and other main centres within the province.

The proposed river erosion protection works are considered to be crucial as the proposed works would protect the road from possible future river erosion damage and is deemed consistent with the IDP.

### 3.2 Biophysical

The BAR submits that according to the National Vegetation Map (Mucina and Rutherford, 2012) the riparian vegetation of the Swart River is the Southern Karoo Riviere vegetation type. This vegetation type is dominated by sweet thorn (*Vachellia karoo*) and/or tamarisk (*Tamarix usneoides*) thickets fringed by shrublands. The adjacent terrestrial vegetation is mapped as the Prince Albert Succulent Karoo vegetation type. Both vegetation types are considered to be 'Least Threatened'.

In terms of the 2017 Western Cape Biodiversity Spatial Plan (WCBSP), the Swart River is mapped as an aquatic Critical Biodiversity Area (CBA1) feature. The Management Objectives for the feature are listed as: "*Maintain in a natural or near-natural state, with no further loss of natural habitat. Degraded areas should be rehabilitated. Only low-impact, biodiversity-sensitive land uses are appropriate*".

The total area of the mapped CBA feature is approximately 87 ha and the footprint of the proposed project is approximately 3 192 m<sup>2</sup> which is only 0.37 % of the total areas of the mapped CBA feature. The aquatic specialist concluded that the expected impacts of the proposed groynes on the river ecosystem would likely be of low significance and largely limited to the site of the proposed groynes.

### 3.3 Regional/ planning context

According to the BAR this project is not specifically addressed in the Prince Albert Local Municipality Spatial Development Framework (SDF) given the small-scale nature of the proposed erosion protection works. The SDF broadly identifies various development objectives for the municipality and proposes various strategies to ensure that these objectives are met.

The BAR submits that one such strategy is to "ensure the provision of service infrastructure in accordance with spatial requirements". As the proposed project entails protecting existing infrastructure from future damage, it is considered to be consistent with the IDP.

### 3.4 Socio-economic

According to the BAR agricultural activities are the main source of local income and the maintenance of robust rural transport infrastructure is deemed essential to ensure that these activities can be successfully operated.

It is anticipated that employment opportunities would be available to a limited number of people from the local communities during the construction phase. The Contractor would also contribute to the local economy for the duration of the contract period.

## 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 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 provisions of the final EMP, the Competent Authority is satisfied that the proposed listed activities 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 activities can be mitigated to acceptable levels.

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